# EN\_Internet Booking Engine (Sirena-Travel) API documentation

Document version	v2.3.110 (Sirena)
	2.3 - recommended API version
	110 – sprint number where recent changes were introduced
Supported API versions	v2.2, v2.3

# **Table of Contents**

EN_Inte	rnet Booking Engine (Sirena-Travel)	1
API docı	umentation	1
Ta	ble of Contents	2
Ch	nange history	4
Gl	ossary	17
Ge	neral provision	.18
Ge	eneral information about API methods	19
	API Versions	.19
	HTTP(S)-headers v2.x	.19
	IBE API services query	20
	IBE API services response codes	20
Во	oking flow description	.20
	General booking flow	
	Description of partners services upsale process after payment	22
AF	PI methods description	.23
	Obtain session service	23
	Obtain flights service: api/flights	25
	Booking management service: api/reservation	.65
	Auxiliary services management service: api/services, api/catalogue	132
	Service for obtaining a cataolog of services without PNR	
	Retrieve aircraft seatmap service	163
	Retrieve aircraft seatmap service without PNR	168
	Cancellation service	175
	Partial cancellation service	178
	Auxiliary partner's services management service	180
	Ticket void service	189
	Services for working with queues (for agents)	192
	Obtain recommendations for rebook /api/Exchange/Search v2.3	202
	Exchange cancellation service	209
	Involuntary ticket refund service for agents using	224
	Voluntary tickets and services refund service	226
	Online check-in services api/checkin	243
	Change passenger's data service	270
	Contact info add service Reservation/AddContactInfo (for agents)	276
	Service for retrieving SSR and remarks information /api/version/Reservation/Advan	ced
	(for agents)	278
	Service for add SSR to reservation /api/version/Reservation/AddSSR (for agents) 2	294
	Service of tickets rebook /api/Exchange (for agents)	297
9	Service for getting the information about the status of creation of a subsidized reservat	
	v2.3	321
	Services to sort and display additional services v2.3	328

Service for submitting attachments when creating a subsidy application for I	Kaliningrad,
the Far Eastern Federal District, and Pensioners/Youth	329
Service for adding passenger without seat (INF) to already issu	ued booking
api/Reservation/AddNewPassenger v2.3	332
Service for retrieving information about ticket issuance quotas /api/Ticket	:/Quota339
Serivce API methods description	342
Retrieve subsidy routes list service	342
Attachments	344
Attachment: Dictionaries	344
Attachment: Main IBE error codes	367
Attachment: Partner's services	370
Attachment: Service SSR	373

# Change history

Date (dd.mm.yy)	Version	Changelog	Author
05.05.2025	2.3.110	<ul> <li>Currency parameter added in the response to the GET api/Reservation to display the actual currency used for payment</li> <li>New method Exchange/Cancel for cancelling the ticket exchange process</li> <li>Currency parameter added in the response to the GET api/flights and GET api/partners/[ID]</li> </ul>	Lebedeva A. T.
19.03.2025	2.3.109	<ul> <li>New GET api/Ticket/Quota method for retrieving up-to-date information on ticket issuance quotas.</li> <li>New GET system/Statistics method for obtaining statistics on bookings, tickets, and services for a specified time period.</li> <li>POST payment/IssueFree/Partial method for issuing EMD tickets for free services/tickets (e.g., for infants without seats on domestic flights).</li> <li>New service type UPQE (upgrade service). The serviceCategories array is included in the response of the GET api/Catalogue v2.3 request. The services [] array is included in the response of the POST api/Services and GET api/Reservation requests.</li> <li>passengerReferences parameter added to the POST /api/payment request array for paying for tickets/services for specific passengers.</li> <li>Updated:</li> <li>The method for removing services has been replaced: POST /api/v2.3/Services/Remove is now POST /api/v2.3/Services/RemoveByReferences.</li> <li>The PUT api/passenger method has been replaced with POST api/passenger.</li> </ul>	Orlova A.S.

		The POST api/Passenger/AddFiles method is now used for submitting attachments to process subsidies for Pensioners/Youth.	
29.11.2024	2.3.108	<ul> <li>the subsidies_type parameter in the GET api/Flights request array to search for subsidized flight options.</li> <li>the subsidiesType parameter in the response to the POST api/Reservation of the booking creation request to match the type of subsidy and the passenger category.</li> <li>the isCheckinWithoutPseudo parameter in the GET api/Reservation response and in the POST api/Reservation response array for the possibility to work with the seatmap during open registration.</li> <li>the isIssuedByRefundableOffice parameter in the response of the GET api/Reservation request the POST api/Reservation response array for processing services and tickets that cannot be refunded.</li> <li>the isExchangePermitted parameter in the POST api/Reservation response for the possibility or prohibition of ticket exchange.</li> <li>a new type of FST (FarEast) subsidies for the Far Eastern Federal District.</li> <li>a new type of meals with SSR = CDML</li> <li>error 401033 SirenaSoapPassengerAgentTransitBortChanging for processing and transmitting in the response of GET api/Checkin request to determine online registration arrangements.</li> </ul>	Lebedeva A. T.
		<ul> <li>the service for sending attachments together with an application to CRM to confirm the right to a subsidy of the Far Eastern Federal District (FarEast), POST api/Passenger/AddFiles.</li> <li>using the GET api/SubsidiesConfirmationSession</li> </ul>	

		method to check the status of a subsidy application for the Far Eastern Federal District (FarEast)	
		Added:     a service to get flight recommendations from Yandex Webmaster by GET      (G) 14 (1) 14 (2) 15 (2)	
22.10.2024	2.3.107	<ul> <li>api/flight/meta/search request v2.3.</li> <li>Changed: <ul> <li>a process of realizing for Voluntary refund by POST api/Refund/Partial. In a case when the process of refunding a ticket and additional services gets an error, will be used automatically</li> </ul> </li> </ul>	Usolkin R.A.
		<ul> <li>annulling seats by POST api/Annul from the booking before creating a request to CRM.</li> <li>a process of realizing for Involuntary refund by POST api/InvoluntaryRefund. The process was added for automatically annulling seats by POST api/Annul from the booking before creating a request to CRM.</li> </ul>	
		Added:	
04.09.2024	2.3.106	<ul> <li>a new option type ISMS (SMS Notification Service). Appears in ServiceCategorie array in a response to GET api/Catalogue v2.3. Additionaly ISMS is used in POST api/Services v2.3, GET api/Reservation in services [] array.</li> <li>a relatedAdultReferenceNumber parameter to the array of the request POST api/Reservation, identifying the chosen adult (ADT) passenger to be linked to children (CHD/INS/INF) passengers in the reservation.</li> </ul>	Lebedeva A. T.
		Changed:	
		<ul> <li>PUT api/Passenger method for updating passengers data with the possibility to change values in parameters: birthDate, sex, documentNumber, documentExpiryDate ( for international flights).</li> </ul>	

	1	1	
		<ul> <li>a certificateText parameter into an array in a request for creating a Certificate at POST api/Certificate, for sending a message, that will be added to an email notification with the Certificate.</li> <li>a service of Sending attachments for a request to the CRM for getting an approvement for using</li> </ul>	
31.07.2024	2.3.105	_	Usolkin R.A.
		Changed:	
		STR (adult) passenger type is re-used for getting flight recommendations and creating bookings via special Kaliningrad's subsidy.	

		<ul> <li>PUT api/Passenger method for updating passengers data at: FirstName, Surname, MiddleName parameters.</li> <li>DisabilityDocumentNumber parameter is changed to SubsidyDocumentNumber at passengers [] array for requests GET, POST api/Reservation</li> <li>using method GET api/SubsidiesConfirmationSession for checking a current state of requst for Kaliningrad's subsidy</li> </ul>	
13.06.2024	2.3.104	<ul> <li>the serviceOptionLabels array containing type and order of labels appearing at additional service cards received in GET /api/apiVersion/Catalogue method response;</li> <li>the sortedInCategories array containing the sorting of services within the categories of additional services received in GET /api/apiVersion/Catalogue/GetServiceCategories Order response;</li> <li>the isEmailPayment parameter used as the tag for generating a payment link passed in the PUT /api/apiVersion/Passenger request;</li> <li>a service of receiving subsidized tariff routes in GET /api/v2.3/Airports/SubsidiesDirections response.</li> </ul>	Lebedeva A.T.
	2.3.103	<ul> <li>Added:</li> <li>the searchIndirectFlights parameter indicates the search for flights to exchange with transfers in the POST api/exchange/search method request;</li> <li>the relatedPnrNumbers parameter of the array of related bookings received as a result of a partial exchange in response to the api/reservation method;</li> <li>in the Attachments: Partner's services new BUSINESSOW Aeroexpress fare "Business" and BUSINESSRT Aeroexpress fare "Business: Round-Trip".</li> </ul>	Gudumak S.E.
20.03.2024	2.3.102	Added:	Gudumak S.E.

		<ul> <li>the offsetUtc parameter of difference between local airport time and UTC time to the GET api/airports method response;</li> <li>passengerAmounts array with information about the amount for the partner service in the context of the passenger to the response of GET api/partners/{Id} method;</li> <li>the isBoardingPassAvailable parameter of the boarding pass availability for the passenger to the response of the GET api/Checkin method;</li> <li>the boardingPassRestrictedBySegment object with information about the restrictions on obtaining a boarding pass by segment to the response of POST/GET api/Reservation v2.3 method;</li> <li>the summToPayForExchange parameter is the amount to be paid for a voluntary exchange to the response of GET and POST api/Reservation v2.3 method;</li> <li>in the Attachments: Partner's services new FAMILYRT Aeroexpress fare "Family: Round trip".</li> </ul>	
24.01.2024	2.3.101	<ul> <li>a new type of passengers mmi (Ministry of Defence)</li> <li>a parameter as mmi at a request for GET flights</li> <li>an array</li> <li>the serviceCategoryLabels[] array at a response by GET Catalogue which is existed a list of Labels for appearing at additional option cards.</li> <li>a parameter as searchPeriod at a request for POST Exchange/Search</li> <li>a parameter as originalFlightReferenceNumber at the flights[] array at a response by POST Exchange/Search.</li> <li>a service of adding a Loyalty program card number to issued booking by POST Reservation/AddLoyaltyCard v2.3 request.</li> <li>a parameter as socialSecurityNumber to the passengers[] array for POST Reservation request.</li> </ul>	Usolkin R.A.

		<ul> <li>changed:</li> <li>a service of searching recomendations for voluntary exchanging flight segments at the booking.</li> <li>at the Attachments: The dictionary of available meals; The dectionary of passenger types; The glossary of the partner services.</li> <li>disabled an ability for creating a booking with subsidised fares via agents. POST Reservation.</li> </ul>	
22.11.2023	2.3.100	<ul> <li>accompanimentBookingInfo[] array in POST Reservation request</li> <li>accompanimentBookingsInfo[] array in POST/GET Reservation(/Advanced) response</li> <li>parameters outboundBonus, returnBonus in the POST/GET Reservation(/Advanced) response</li> <li>outboundBonus, returnBonus parameters in GET flights response (v2.3)</li> <li>parameters mil, mir, mnn, mns, mml in the GET flights request</li> <li>fareCode parameter in the GET flights response in the BaggageAllowances array</li> <li>fareCode parameter in POST/GET Reservation response (/Advanced)</li> <li>flightsWithOpenDateCount parameter in POST/GET Reservation response (v2.3)</li> <li>separatePrice, separateDiscount parameters in POST/GET Reservation (/Advanced) responses</li> <li>separateFareFamilies, separateFlights, separateFareFamilies, separateFlights, separateDuration, separateBaggageAllowances arrays in POST/GET Reservation (/Advanced) responses</li> <li>new types of passengers MIR (RF Ministry of Internal Affairs), MNN (military child), MNS (military baby), MIL (RF Ministry of Internal Affairs, in development), MML (flying with a military man, in development)</li> </ul>	Savin A.A.
03.10.2023	03.10.202	Added:  • array of informationalServices[] in the api/Reservation response	Mikhaylo v M.F.

		<ul> <li>parameters Code share and Code share Flight Number in the api/flights and api/Reservation response to determine the flight codeshare</li> <li>validation of the number of characters for the full name has been changed, from 20 characters for each parameter to 43 characters for the sum of the full name</li> </ul>	
03.08.2023	2.3.98	<ul> <li>A FlightReference [] array into response post api/Partners/id into array PreselectedOption [] for indicating a flight segment with preselected additional option.</li> <li>A RelatedChildrenReferenceNumbers [] array into responses: post and get api/Reservation; get api/Reservation/Advanced v2.3; post api/Reservation/AddSSR v2.3, to indicate child passengers which are travelling with an Adult.</li> <li>A baseFarePricesBySegment [] array into responses: get and post api/Reservation v2.3; get api/Reservation/Advanced v2.3; post api/Reservation/AddSSR v2.3, with an information of base fare price for segments.</li> <li>A refundOnlyWithTicket parameter into post api/Refund/Calculate; api/Refund/Partial; api/InvoluntaryRefund/Moneyless; api/InvoluntaryRefund which are indicating a responsibility to refund an additional option without a ticket.</li> <li>A recommendations [] array was extended 'outboundDiscount' and 'returnDiscount' values for every valid combinations of flight segments for booking.</li> </ul>	Usolkin R.A.
30.06.2023	2.3.97	Added:  • code parameter to the recommendations[].outboundFareAndAmountDe tails[] and recommendations[].returnFareAndAmountDetail s[] arrays of GET api/flights service response, determines which fare brand the segment belongs to;  • check-in services;	Gudumak S.E.

		<ul> <li>service of checking of participation of passengers in the loyalty program POST api/searchContact (unavailable for agents);</li> <li>optimized method of removing services from the reservation POST api/services/removeByReferences;</li> <li>preselectedSeats array of pre-added seats to the GET api/seatmap service response for the main IBE application;</li> <li>to the Attachment: Dictionaries description of statuses of seats on checkin.</li> <li>Changed:</li> <li>description of the documentNumber parameter in the GET api/reservation service response - masked according to the specified rules number of document of passenger;</li> <li>deleted taskId parameter (task Id in CRM) from the POST api/receipt service response.</li> </ul>	
24.05.2023	2.3.96	<ul> <li>Added:</li> <li>relatedInfantWithSeatId parameter for POST         SeatmapStandalone, POST CatalogueStandalone         services</li> <li>InfantsWithSeats parameter for POST Discounts,         POST Reservation services</li> <li>ins parameter for GET Flight service</li> <li>an array for contacts not related to a passenger         for POST Resrvation service</li> <li>flightNumber parameter type changed from string         to integer</li> </ul>	Savin A.A.
12.04.2023	2.3.95	<ul> <li>Added:</li> <li>services for registration POST         Checkin/reservation, POST Checkin/register,         POST Checkin/cancel, GET Seatmap/checkin</li> <li>updated method GET Checkin</li> <li>boarding pass receipt service GET BoardingPass</li> <li>services for working with certificates GET         certificate/CheckCertificate/Advanced and POST</li> </ul>	Mikhaylo v M.F

		Certificate/Refund  the country of South Ossetia has been added to the Attachment: Directories of countries	
09.03.2023	2.3.94	<ul> <li>the isGiftCertificate parameter in POST api/certificate/apply and POST api/certificate services responses, which indicates whether the certificate being applied is a gift certificate or not;</li> <li>the appliedCertificates array in GET api/reservation response with information about applied certificates;</li> <li>the quotas array in GET api/catalogue v2.3 and POST api/catalogueStandalone responses with information about available quotas for the service (currently this parameter is returned only for the service with the PETC code);</li> <li>to the Attachment: Dictionaries of document types added other type of document with documentType = 3.</li> </ul>	Gudumak S.E.
13.02.2023	2.3.93	Added:  • services for operating with certificates GET, POST, DELETE certificate, POST certificate/apply, GET certificate/CheckCertificate	Savin A.A.
22.12.2022	2.3.92	<ul> <li>Added:</li> <li>the tourCode parameter in the POST reservation creation service;</li> <li>service for the voluntary rebook of tickets on the ADP environment;</li> <li>added expirationUtc parameter for the services GET reservation, GET reservation;</li> <li>ability to create reservation with unaccompanied child.</li> </ul>	Savin A.A.
17.11.2022	2.3.91	<ul> <li>Changed:         <ul> <li>mandatory of query-parameters in GET api/seatmap request: only the referenceNumber</li> </ul> </li> </ul>	Gudumak S.E.

		of flight is required parameter; • format of loyaltyCard parameter in POST api/reservation request.	
03.10.2022	2.3.90	<ul> <li>parameters checkedIn, checkInHasStarted are supported and parameters checkedInSegment, checkInHasStartedSegment are added in GET api/reservation and GET api/reservation/advanced;</li> <li>parameters couponStatuses, couponStatusesBySegment in GET api/reservation and GET api/reservation and GET api/reservation and GET api/reservation in arrays baseFarePrices and tickets;</li> <li>parameters flightReferences are added in GET reservation in arrays baseFarePrices and tickets;</li> <li>MMI, INS passenger types are added;</li> <li>DELETE api/reservation method to delete unpaid reservations was added;</li> <li>the ability to pass PNR and lastName parameters in Cyrillic in GET api/reservation method;</li> <li>description of SSR with SPAX type to Attachment: Service SSR;</li> <li>ability to open reservation in BMM via ticketNumber;</li> <li>booking payment service api/payment;</li> <li>online checkin service api/checkin;</li> <li>change passenger's data service api/passenger;</li> <li>contact info add service api/Reservation/AddContactInfo;</li> <li>service for retrieving SSR and remarks information api/version/Reservation/Advanced;</li> <li>service for add SSR to the reservation /Reservation/AddSSR.</li> </ul>	Sheremet T.Y. Gudumak S.E. Savin A.A. Mikhaylo v M.F.
01.09.2022	2.3.89.1	Changed the title and description for ADP method POST api/InvoluntaryRefund/moneyless.	Gudumak S.E.
29.08.2022	2.3.89	<ul> <li>Added:</li> <li>services for working with queues on ADP environment;</li> <li>STR, JNN passenger types are added to the EN_8_1_Attachment: Dictionaries;</li> </ul>	Gudumak S.E. Savin A.A.

		<ul> <li>service for obtaining recommendations for exchange;</li> <li>accountCode parameter is supported in GET api/calendar, GET api/flights, POST api/reservation;</li> <li>endorsements array is supported in POST api/reservation and GET api/reservation;</li> <li>added the ability to receive discounts on flight via conventional and promocode discounts;</li> <li>added the ability to receive TFC (Tariff Application Conditions) in POST/flights/conditions;</li> <li>to the response of GET api/reservation method information about spent bonuses: spentBonuses and spentBonusesByPassengers;</li> <li>the parameters of loyaltyCard and loyaltyCardValidTo to the POST api/reservation request;</li> <li>POST api/InvoluntaryRefund/moneyless method for ADP which let to refund tickets without returning money;</li> <li>POST api/refund/Calculate and POST api/refund/partial methods - standard methods for calculating and performing voluntary refund;</li> <li>GET api/refund method for getting information about already performed refunds;</li> <li>the Attachment: Service SSR;</li> <li>POST api/user method.</li> </ul>	Sheremet T.Y.
26.07.2022	2.3.88	Added the ability to create reservations for subsidized passengers:  - src, yth parameters are supported in GET api/calendar, GET api/flights; - the isSubsidized parameter is supported in POST api/reservation; - the attachment dictionaries of passenger types has been updated.  The possibility of payment in different currencies has been implemented: - the currency parameter is supported in GET	Gudumak S.E. Savin A.A. Sheremet T.Y.

		api/flights; the currency parameter is not used when creating a reservation in the POST api/reservation, a note has been added.  The expectedPrice and searchPrice parameters are not used when creating a reservation.  Added the ability to cancel seats  Added the ability to partially cancel a booking  Added the ability to add partner service to a booking  Added the ability to void tickets and additional services	
07.07.2022 2.3.87		<ul> <li>Initial version of the documentation.</li> <li>Important changes after integration with Sirenaz-Travel:</li> <li>changed GDS;</li> <li>changed booking process that now it is available only in one step without advanced reservation;</li> <li>to the responses of POST/GET api/reservation added new parameters relatedAdultReferenceNumber and relatedInfantReferenceNumber;</li> <li>in the response of POST/GET api/reservation changed the description of engineType parameter;</li> <li>added the second way of getting the itinerary receipt;</li> <li>services statuses Dictionary was added to Attachment 8_1.</li> <li>Note: some services and parameters are under development, so they are marked accordingly.</li> </ul>	Gudumak S.E. Savin A.A.

# Glossary

U6	Ural Airlines company
IBE, booking engine	Internet Booking Engine, U6 new ticket booking system. IBE API is described in this document.
Sirena	Global ticket booking system (GDS)
SIG	Integrator(vendor) of searching solutions from different GDS.
CRM	Customer management system integrated with IBE
BPC	Booking payment system integrated with IBE
WSAP	Web Service Access Point
PNR	Passenger name record on Sirena side. Contains information regarding flights, passenger data, auxiliary services, discounts etc.
SSR	Special Service Request. In current documentation almost always treated as "separate record in PNR". Record might contain information about passenger, services and other.
TST	Transitional Stored Ticket, part of Sirena document with information regarding tariff options in PNR.
TSM	Transitional Stored Miscellaneous, part of Sirena document with information regarding auxiliary services, added in PNR.

## **General provision**

Purpose of this document is to provide IBE API methods description and its usage samples for 3rd party developers.

IBE API represents REST API which allows to search tickets and prices, book tickets on different flight directions, add auxiliary services and perform payment.

IBE API appears to be an interlayer between Sirena/SIG/CRM/BPC systems, other partners services and end-user client applications.

#### General information about API methods

#### **API Versions**

Recommended API version: v2.3

Recommended to use for all kind of requests.

Queries without specifying of API version is prohibited (exception: api/health service);

Supported versions: v2.2, v2.3

General information about API v2.x methods

Main differences between v 2.x and v 1.x:

Added possibility of using unique API-key instead of token. It allows to request flights and calendar information without necessity to create a session.

It this information needs to be stored in booking context then you should create a booking session via api/v2.x/session method and pass session ID in X-Session header. X-Api-Key header should be also be passed.

#### HTTP(S)-headers v2.x

For IBE API v2.x queries following HTTP(S) headers should be used:

Header name	Value	Purpose	Exceptions
X-Api-Key	xApiKey - key value. Depends on app type (arcadia, axmor, skyscanner)	authorization API- key	Service API methods
	sessionKey — value, retrieved from API Session query	Session management via HTTP header	POST session method
			GET flights method
X-Session			GET calendar method
			GET reservation method

			GET receipt without parameters
			Services methods except problemNotification.
Content- Type	application/json	General	No

#### **IBE API services query**

IBE API query string in common case (except service API methods) looks like: http://host/api/apiVersion/serviceName

where host – server, where booking engine is deployed

api – constant,

apiVersion – necessary IBE API version in «v2.x» format

serviceName – IBE API service name, for ex. «session» or «flights»

#### **IBE API services response codes**

IBE API handles exception situations thrown during service query execution. Following responses might be returned:

200 OK – both success and failed. In case of failed response, success field in response will be set to false. Error codes array will contain error code and description.

400 Bad Request – in case if query string was incorrect. Response model might differ from one used for correct service response.

401 Unauthorized – in case if API-кеу was not passed

Also codes specific for particular service might be returned.

### **Booking flow description**

#### **General booking flow**

Booking flow consists of following API v2.x queries:

N₂	API Method	Description
1	POST api/session	Retrieving of unique booking session. Booking context is stored in session.
2	GET api/flights	Retrieving information about flights, tariffs and prices.
3	POST api/reservation	Booking creation:  1. Adding flights information 2. Adding passenger's data 3. Adding tariff's data  Can be done in one way: single query passing all data.
4	GET api/catalogue	Optional.  Obtaining list of auxiliary services (U6 and partners) and its prices
5	GET api/seatmap Optional. Obtaining plane's seatmap and seat prices	
6	POST api/services	Optional  Adding auxiliary services (u6's or partner's) to booking
7	GET api/partners/types	Optional  Retrieve list of available partners.
8	GET api/partners/[id]	Optional  Retrieve list of services available for specific partner. Where id is partner's number (presented in attachment)
9	POST api/partners	Optional.  Adding of partner's service to booking.
10	POST api/payment	Obtaining link for redirection to payment page

	Optional	
11	Retrieving information about paid booking (issued tickets etc)	

## **Description of partners services upsale process after payment**

Starting form API 2.2 version IBE supports possibility to upsale auxiliary services in context of new session

N₂	API Method	Description
1	-	Booking creation and payment according process described above.
2	POST api/session	Obtaining of new session which will be used for services upsale
3	GET api/reservation	X-Session header is mandatory  Loading of payed booking context into session
4	GET api/catalogue	Obtaining list of auxiliary services (U6 and partners) and its prices
5	GET api/seatmap	Optional.  Obtaining plane's seatmap and seat prices.
6	POST api/services Adding auxiliary services (u6's or partner's) to booking	
7	POST api/payment	Obtaining link for redirection to payment page

## **API** methods description

#### **Obtain session service**

API service	session
Short description	Allows to obtain session for storing booking context
Supported HTTP(S)-methods	POST
Conterminous systems methods used	no

#### **POST session method**

**Description**: new session creation

At present session expires in 60 minutes each API query automatically prolongates it.

Request format /api/apiVersion/session

#### Request header

X-Api-Key - unique GUID of system using IBE API.

#### **Request paramaters**

No parameters

#### **Response format**

```
{
    "sessionKey": "string",
    "sessionId": "string"
}
```

#### **Response parameters**

Parameter	Description
	Session key
sessionKey	Used for storing of booking context

i-mId	Id session
sessionId	service field

#### **Response sample**

```
{
    "sessionKey": "ad712a62-3d18-4d3a-bd3b-6d883d111aaf",
    "sessionId": "654cc0ec-c857-955f-af82-792a239675b6"
}
```

#### Obtain flights service: api/flights

#### Obtain flights service v2.2

API service	flights	
Short description Obtain list of available flights for specified dates and recommendations with ticket prices  Supported HTTP(S)- methods GET		
Conterminous systems methods used	SIG: SIG_AirShop	
	CRM: CalculateDiscount	

#### **GET flights method**

**Description**: obtain list of flights and flight's prices

**Request format**: /api/apiVersion/flights

#### **Request samples**

One way flight:

/api/apiVersion/flights

? orig=LED & dest=MOW & dep=20220710 & mode=Mono & adt=1 & chd=0 & inf=0 & src=0 & yth=0 & umnr=0 & str=0 & jnn=0 & gcf=0 & jcb=0

Two way flight:

/api/apiVersion/flights

#### **Request parameters**

**IMPORTANT:** non-subsidised (ADT/CHD/INF) set of passengers types should be used in request; to receive recommendations for round trip reservation need to use mode=Mono parameter

Parameter	Type	Description	Value samples	Notes
orig	string	Original airport IATA-code	LED	
dest	string	Destination airport IATA-code	DME	
			Format yyyyMMdd	
dep	date	Departure date	Example:	
			20180801	
			Format yyyyMMdd	
ret	date	Return date	Example:	
			20180905	
adt	integer	number of Adult passengers	Integer number in interval [0; 9]. Overall	
chd	integer	number of Child passengers	number of passengers must not exceed 9	
inf	integer	number of Infant passengers		
ins	integer	number of Infant with seats passengers		
src	integer	number of Senior citizen passengers		Not suitable passenger type for issuing a booking via Agents
yth	integer	number of Youth passengers		Not suitable passenger type for issuing a booking via Agents

cnn	integer	number of passengers type children which are traveling with subsidised passenger type	
str	integer	number of passengers of subsidized adult for the Far East	Not suitable passenger type for issuing a booking via Agents
jnn	integer	number of passengers of subsidized children for the Far East	Not suitable passenger type for issuing a booking via Agents
gcf	integer	number of passengers of subsidized pensioner for the Far East	In developing
jcb	integer	number of passengers of subsidized youth passengers for the Far East	In developing
mil	integer	Number of passengers of the type "Ministry of Defence of the Russian Federation"	
mmi	integer	number of passengers by Ministry of Defence	
mir	integer	Number of passengers of the type "Ministry of Internal Affairs of the Russian Federation"	
mnn	integer	Number of passengers of the "military children"	

		type		
mne   integer		Number of "infant with seat" passengers		
mml	integer	Number of passengers flying with a military man		
mode string		Search mode (optional parameter, affects search via SIG)	mono - only mono- recommendations are requested, for example, PR there and PR back;  full - all recommendations are requested.	For the Sirena search now it uses mode=Mono, full - in developing
ofn string		Array of one-way flight numbers (optional parameter, affects search via SIG)	60	In developing
rfn string		Array of return flight numbers (optional, affects search via SIG)	371,392	In developing
accountCode	string	Personal account client code (optional parameter)	ACCadd005	
meta	boolean	Sign of metasearch.		In developing
CHTCHCV CTTHO		Currency of recommendations.	EUR	
cabin	string	Class of service	Economy, Business	In developing
SearchAllBrands	bool	Search for all brands		In developing
subsidies_type	string	Type of subsidies	Numeric value from 0 to 3:  Disability = 0, Kaliningrad = 1,	

FarEast = 2, Age = 3.	
String value:	
Disability = people with disabilities, Kaliningrad = Kaliningrad, FarEast = Far Eastern District, Age = Age subsidies.	

#### **Response format**

```
{
     "data": {
          "airShopSessionId": string,
          "currency": string,
          "outboundFlights": [flightGroup],
"returnFlights": [flightGroup],
"fareFamilies": [{
                     "fareFamilyId": integer,
                     "code": string,
                    "shortCode": string,
"category": string,
                     "isSubsidized": boolean,
                    "order": integer,
                     "commercialFamily": string,
                    "canRefund": boolean,
"hasUpsale": boolean "options": [{
                               "code": string,
                               "category": string,
"order": integer,
                               "showInPopup": boolean,
                               "showInSummary": boolean,
                               "showInUpsell": boolean,
                               "showInFareIncluded": boolean,
                               "showForAdult": boolean,
                               "showForInfant": boolean
                          }
                    ]
               }
          ],
"foodOnBoards": [{
    "departure/
                     "departureAirport": string,
```

```
"arrivalAirport": string,
         "flightNumber": integer,
                          "commercialFamily": string,
         "translation": {
              "ru": string,
              "en": string,
              "zh": string
         }
    }
],
"alternativeFlights": [{
    "departure": string,
         "arrival": string
],
"discountConstraints": [{
    "GasoFamilies": [{
         "fareFamilies": [string],
         "flights": [string],
         "excludedFlights": [{
                  "flightNumber": integer,
                  "departureAirport": string,
                  "arrivalAirport": string
              }
         ]
    }
"recommendations": [{
         "outboundFlightGroupId": integer,
         "outboundFareFamilyId": integer,
         "returnFlightGroupId": integer,
         "returnFareFamilyId": integer,
         "outboundFlightGroupHash": string,
         "returnFlightGroupHash": string,
         "outboundFareFamilyCode": string,
         "returnFareFamilyCode": string,
         "outboundPrice": integer,
         "outboundTaxes": integer,
"returnPrice": integer,
"returnTaxes": integer,
         "outboundSeatsLeft": integer,
         "returnSeatsLeft": integer,
         "totalPrice": integer,
                          "outboundFareAndAmountDetails": [{
                  "bookingCode": string,
                  "fareBasis": string,
                  "isBreakpoint": boolean,
                  "paxType": integer,
                  "paxCount": integer,
                  "taxAmount": integer,
                  "totalAmount": integer,
                  "isSale": boolean,
                                           "code": string
             }
         1,
```

```
"returnFareAndAmountDetails": [{
         "bookingCode": string,
         "fareBasis": string,
         "isBreakpoint": boolean,
         "paxType": integer,
         "paxCount": integer,
         "taxAmount": integer,
         "taxAmount": integer,
"code": string
    }
],
"outboundBaggageAllowances": [{
         "quantity": integer,
         "weight": integer,
         "passengerType": integer,
                                 "fareCode": string
    }
],
"returnBaggageAllowances": [{
         "quantity": integer,
         "weight": integer,
         "passengerType": integer,
                                "fareCode": string
    }
],
"discount": {
    '"' str
    "id": string,
    "name": string,
    "amount": integer,
    "discountType": integer,
    "usageType": integer,
    "startDate": datetime,
    "endDate": datetime
},
"promotion": {
    ">"mher": ;
    "number": string,
    "amount": integer,
    "promotionStatus": string,
    "promotionType": string,
    "description": string,
    "startFlightDate": datetime,
    "endFlightDate": datetime,
    "startDate": datetime,
    "endDate": datetime,
    "isUnique": boolean,
    "campaignId": string,
    "directions": [{
             "id": string,
             "origin": string,
             "destination": string
         }
    ],
"services": [{
    "code"
             "code": string
```

```
}
                      ],
"families": [{
    "code"
                                "code": string
                      "excludedFlights": [{
                                "flightNumber": integer,
                                "departureAirport": string,
"arrivalAirport": string
                           }
                       ]
                  }
             }
         ],
"moneyWallCoefficient": integer,
"TatarnationalFlights":
         "containsInternationalFlights": bool
    },
"errors": [{
    "ibe(
              "ibeCode": integer,
              "description": string,
             }
              ]
         }
    ],
"success": boolean
}
```

#### flightGroup object

```
{
  "flightGroupId": integer,
  "flights": [{
      "flightId": integer,
      "departureAirport": string,
      "arrivalAirport": string,
      "arrivalTerminal": string,
      "departureDateTime": datetime,
      "excludedNationalities": [
            string
]
      "arrivalDateTime": datetime,
      "aircraft": string,
      "aircraftIataCode": string,
      "techStops": [{
            "arrivalDateTime": datetime,
      "techStops": [{
            "arrivalDateTime": datetime,
      "arrivalDat
```

```
"departureDateTime": datetime,
    "airportCode": string,
    "stopDuration": string,
    "flightDurationUntilNextStop": string
}

// "flightDuration": string,
    "flightDurationUntilNextStop": string,
    "stopDuration": string,
    "flightNumber": integer,
    "marketingCarrier": string,
    "operatingCarrier": string,
    "codeshare": string,
    "codeshareFlightNumber": string
    "hash": string
}

// "flightGroupDuration": string,
    "hash": string
}
```

#### Response format if there are no flights for the requested dates (round trip)

```
{
  "data": {
    "outboundFlights": [],
    "returnFlights": [],
    "fareFamilies": [],
    "recommendations": [],
    "outboundNextNearestFlightDate": datetime,
    "returnNextNearestFlightDate": datetime,
    "foodOnBoards": [],
    "currency": string,
    "airShopSessionId": string,
    "moneyWallCoefficient": integer
  },
   "errors": [],
   "success": boolean
}
```

#### **Response parameters**

Parameter	Description	Notes
	Sign of query execution success.	
success	If errors array is empty, field value will be	

	set to true
data	Returned data
airShopSessionId	SIG search session ID
currency	currency in which prices are represented
moneyWallCoefficient	Coefficient for calculating the monthly installment payment
containsInternationalFlights	Sign that one of the airports is located outside the territory of the RF
outboundFlights	Array of flightGroup objects with information about outbound flights
returnFlights	Array of flightGroup objects with information about return flights.
	For one way flight array will be empty
fareFamilies	Array of objects with information about fare families
fareFamilyId	Fare family ID
	Fare family code, for ex:
code	ECOLIGHTRU/ECOFLEXRU/ECOPRE MRU etc.
	Shortened code for fare family identification
shortCode	for example for fare families mentioned above:
	PR/EC/FL etc.
	Fare family category, for ex:
category	ECOLIGHT/ECOFLEX/ECOPREM
	Possible values: see Attachment 2, Main fare family categories
order	fare families display order

	· 1p. ·1	fare family type for ex:	
	commercialFamily	U6ECONOMY or U6BUSINESS	
	isSubsidized	Sign of subsidised tariff	
	canRefund	Sign of refundable tariff	For Sirena: in developin g
	hasUpsale	Sign indentifying whether present tariff can be upgraded to next one in price category.	
		Used for management of Upsale block display in frontend.	
		Array of fareFamiliesOptions objects with information about tariff options.	
	options	Possible values: see Attachment 2, tariff options	
o	utboundNextNearestFlightDate	The nearest departure date for one-way flight, if there are no flights on the requested date	For Sirena: in developin g
re	eturnNextNearestFlightDate	The closest date of departure back, if the flight is RT and there are no flights for the requested dates	For Sirena: in developin g
fe	oodOnBoards	Array of objects with information about meals available on the flight	
	departureAirport	Airport of departure	
	arrivalAirport	Airport of arrival	
	flightNumber	Flight number	
	commercialFamily	Fare family type (different type of meals for economy and business can be available for one flight)	
	translation	Object with translation options	

		ru	Options translation to russian	
		en	Options translation to english	
		zh	Option translation chinese	
a	alternativeFlights		Alternative destinations (returned from CRM if no flights were found on the selected date)	
	dej	parture	Departure airport of alternative direction	
	arr	rival	Arrival airport of alternative destination	
d	lisco	ountConstraints	Array of objects with information about exceptions in discounts	
	far	reFamilies	Array of fare families for which discount should be applied	
	flights		Array of flight numbers for which discount should be applied  If at least one of transfers of the flight is not present in array, discount should not be applied	
	exc	cludedFlights	Array of objects with information about flight number exceptions	
		flightNumber	Flight number	
		departureAirport	Airport of departure	
		arrivalAirport	Airport of arrival	
r	ecoi	nmendations	Array of recommendations objects for flights	
	outboundFlightGroupId		outbound flight number, matches one of outboundFlights.flightGroupId numbers	
	outboundFareFamilyId		outbound fare family number, matches one of fareFamilies.fareFamilyId numbers	
	ret	urnFlightGroupId	return flight number, matches one of returnFlights.flightGroupId numbers	
	ret	urnFareFamilyId	return fare family number, matches one of fareFamilies.fareFamilyId numbers	

outboundFlightGroupHash	Flight group hash there	
returnFlightGroupHash	Flight group hash back	
outboundFareFamilyCode	Fare family code for outbound travel Matches fareFamilies.code	
	Return Fare Family Code	
returnFareFamilyCode	Matches fareFamilies.code	
outboundPrice	outbound ticket's price	
outboundTaxes	outbound ticket's tariffs and fees	
returnPrice	return ticket's price	
returnTaxes	return ticket's tariffs and fees	
outboundSeatsLeft	Amount of remaining seats for present outbound recommendation	
returnSeatsLeft	Amount of remaining seats for present return recommendation	
totalDiscount	Amount of discount	For Sirena: in developin g
totalBaseFare	Total amount of base fare	
totalPrice	Total ticket price including all applied discounts	
outboundFareAndAmountDetail s	An array of fareDetails objects containing detailed information about fares for the "there" direction	
returnFareAndAmountDetails	An array of fareDetails objects containing detailed information about fares for the "return" route	
outboundBaggageAllowances	An array of objects containing detailed information about baggage allowances for the "there" route	
returnBaggageAllowances	An array of objects containing detailed information about baggage allowances for the "return" route	

discount		Information about discount available for present flight  Discount may absent for certain flight they are in the list of exceptions. Exceptions stored on CRM and IBE side.
	id	Discount campaign id in CRM
	name	Discount campaign title
	amount	Discount amount
	discountType	Discount type, possible values $0 - Percent$ $1 - Roubles$
	uiscount i ype	It is recommended to check discount type against its value. For ex for type 0 amount should be within [0;100] interval.
	usageType	Discount application type, possible values: $0 - Fare$ $1 - Order$
	startDate	Discount interval start date
	endDate	Discount interval end date
pro	omotion	Information about the promo code applied for this flight.
	number	Promo code
	amount	Discount amount by promo code
	promotionStatus	Promo code status  Possible values: dictionary of promo codes statuses
	promotionType	Promo code type  0 - promotional code for the flight

		1 - promotional code for an additional service	
	description	Description of the promo code campaign	
	startFlightDate	Start date of the period of flights with a promo code	
	endFlightDate	End date of the period of flights with a promo code	
	startDate	Start date of the promo code validity period	
	endDate	End date of the promo code validity period	
	isUnique	A sign of the uniqueness of a promo code	
	campaignId	Promo code campaign ID	
	directions	Directions of exclusions / inclusions	
	origin	Departure airport	
	destination	Arrival airport	
	services	An array of objects with information about the services that the promo code applies to	
	code	Service code  Possible values: dictionary of additional services (except insurance)	
	excludedFlights	Common exclusions - flights for which discounts are not indicated	
	flightNumber	Flight number	
	departureAirport	Departure airport	
	arrivalAirport	Arrival airport	
	hasConflict	Sign of success in adding a promotional code to a booking  False if errors occurred while adding the	
erroi	rs	Information about errors appeared during query execution.	

ibeCode	Error code	
description	Code description	
messages	Array of objects, containing errors from Sirena/SIG response. Array can be empty, it is recommended to analyse errors by ibeCode.	
code	Sirena/SIG error code	
text	Sirena/SIG error text	

# Object flightGroup

Contains information about flights

data.outboundFlights or data.returnFlights		
flightGroupId	index number used in recommendations	
flightGroupDuration	Total flight time: summed up of duration values of each <u>transfer</u> and technical stop.	
hash	Service field	
flights	Array of objects with information	
flightId	Flight id	
departureAirport	Airport of departure	
departureTerminal	Terminal in airport of departure	
arrivalAirport	Airport of arrival	
arrivalTerminal	Terminal in airport of arrival	
	Departure date and time	
departureDateTime	Format: yyyy-MM-ddTHH:mm:ss	
	Example: 2018-05-27T17:25:00	
excludedNationalities	Array with information about passenger nationalities prohibited for transportation on present flight	

	Example: ISR (for flights 3837 and 3838)
	Arrival date and time
arrivalDateTime	Format: yyyy-MM-ddTHH:mm:ss
	Example: 2018-05-27T20:50:00
	Full aircraft title
aircraft	For ex.: Airbus A320
aircraftIataCode	IATA aircraft code
flightDuration	Duration of flight
flightDurationUntilNextStop	Flight duration until <u>first</u> technical stop
stopDuration	Technical stop duration
flightNumber	flight number
	Marketing carrier
marketingCarrier	Example: U6, S7
	Operating carrier (one actually performed flight)
operatingCarrier	Example: U6, OK
	Full aviacompany title performing code-share flight
codeshare	Example: Czech Airlines for operatingCarrier = OK
	For operatingCarrier = U6, present field is empty
codeshareFlightNumber	The flight number of the airline that operates the codeshare flight.
hash	service field
techStops	Array of objects with information about technical stops
	Date and time of arrival to airport where technical stop is performed
arrivalDateTime	Format: yyyy-MM-ddTHH:mm:ss
	Example: 2018-05-26T05:30:00

	departureDateTime	Date and time of departure from airport where technical stop is performed
		Format: yyyy-MM-ddTHH:mm:ss
		Example: 2018-05-26T08:00:00
	airportCode	Airport code
	stopDuration	Technical stop duration
	flightDurationUntilNextStop	Flight duration until next stop

## **Object fareFamiliesOptions**

Contains information about tariff options. Used for tariff option display in IBE website.

data.fareFamilies.options		
1	Tariff option code	
code	Example: upTo5bonuses, refundExchangeProhibited, mealsOnBoard etc.	
gatagawa	Option category code	
category	Example: bonus, ffServices etc.	
order	Index number of option display	
showInPopup	flag determining whether option should be displayed in "your options" pop-up	
showInSummary	flag determining whether option should be displayed on Summary page.	
showInUpsell	flag determining whether option should be displayed in tariff upgrade information block	
showInFareIncluded	flag determining whether option should be displayed when filter is selected	
showForAdult	flag determining whether option should be displayed for adult passenger.	
showForInfant	flag determining whether option should be displayed for infant.	

# Object fareDetails

Contains information about tariff details

$data. recommendations. outbound Fare Details\ or\ data. recommendations. return Fare Details$		
bookingCode	In general case it is first symbol in fareBasis	
	Base tariff title	
fareBasis	Example: WPROW or WECOW	
isBreakpoint	Flag identifying whether tariff ends on present segment.	
	Passenger type.	
paxType	Possible values: Attachments, passenger types	
paxCount	Amount of passengers of specific type	
taxAmount	Tariffs and fees	
totalAmount	Full ticket price including tariffs and fees	
isSale	A parameter that defines the sales rate	
code	The parameter that determines which fare brand the segment belongs to.	

## **Object BaggageAllowances**

Contains information about baggage allowances

data.recommendations.outboundBaggageAllowances or data.recommendations.returnBaggageAllowances		
quantity	count of baggage	
weight	weight of baggage	
passengerType	passenger type	
fareCode	fare family for which baggage is returned	

## totalPrice field value examples

One way flight, no discounts

totalPrice is equal to value outboundPrice



*Two way flight:* 

totalPrice = outboundPrice + returnPrice

totalPrice = 998 + 140 = 1138



#### Methods available for version 2.3

**Method POST flights/conditions** 

**Description:** Aallows to get the TFC (Tariff Application Conditions).

**Request format** /api/apiVersion/flights/conditions

## **Request body**

## **Request parameters**

Parameter		Description
rulesKeys		Array of objects with information about the keys of the TFC
	key	Key TFC

### Request body example

```
"rulesKeys": [
      "key":
"eJxdjlEKwjAQRK8yFxB2N5uk7SUUf/odpGBAFKr44a8XKHhh042VKpkEJp08WRFchzGnU36kW76c
uy6Nh2O+D2AFIZZNYKcsGiDYcLHlULAniOTQekiAR7/bb3s4+1JXAyERani54AhVaPPNmNibqfnc+
alwoY0ssVhYi1X/Ele0eVSh2AbyzgjGWIvr+BVTtPD/nlU5PKfXG/geN0w="
      "key":
"eJxdjlEKwjAQRK8yFxB2N5uk7SUUf/odpGBAFKr44a8XKHhh042VKpkEJp08WRFchzGnU36kW76c
uy6Nh2O+D2AFIZZNYKcsGiDYcLHlULAniOTQekiAR7/bb3s4+1JXAyERani54AhVaPPNmNibqfnc+
alwoY0ssVhYi1X/Ele0eVSh2AbyzgjGWIvr+BVTtPD/nlU5PKfXG/geN0w="
  ]
}
Response body
  "data": {
    "faresRules": [
```

```
"key": string,
      "fareConditions": [
           "number": integer,
           "title": string,
           "description": string
      1
    }
  ]
},
"errors": [
  {
    "ibeCode": string,
    "description": string,
    "messages": [
         "code": string,
         "text": string
    ]
  }
"success": boolean
```

## Response parameters

Parameter		Parameter	Description
data	data		The data returned by the request
	faresRules		Array of objects with information about rules
		key	Key TFC
		fareConditions	Array of objects with rules for the key
		number	Number of the rule
		title	Title of the rule
		description	Description of the rule
erro	errors		Information about errors appeared during query execution
	ibeCode		Error code, see EN_Attachment 1. IBE error codes
	description		Code description, see. EN_Attachment 1. IBE error codes
	messages		Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode
		code	Sirena error code
		text	Sirena error text
			Sign of the success of the request
suco	success		If the errors array is empty, then the field value will be true

## $Method\ GET\ flights/allFlightStatusesFor Day$

**Description:** allows to get all flights for directions on specific date

 $\textbf{Request format:} \ / api/apiVersion/flights/allFlightStatusesForDay$ 

#### **Request parameters**

Parameter	Description
date	Flight date
departureAirport	Departure airport
arrivalAirport	Arrival airport

### Request example

/api/v2.3/flights/allFlightStatusesForDay?departureAirport=DME&arrivalAirport=SVX&date=2021-10-27

### Response body

```
"data": {
  "flightStatuses": [
      "fnNumber": integer,
      "fnSuffix": string,
      "fnCarrier": string,
      "dayOfOrigin": datetime,
      "departureAirportActual": string,
      "arrivalAirportActual": string,
      "legState": string,
      "legType": string,
      "aircraftRegistration": string,
      "aircraftType": string,
      "departureAirportSched": string,
      "arrivalAirportSched": string,
      "departureDTSchedUTC": datetime,
      "arrivalDTSchedUTC": datetime,
      "departureDTSchedLocal": datetime,
"arrivalDTSchedLocal": datetime,
      "estimatedArrivalDate": datetime,
      "offBlockDT": datetime,
      "airborneDT": datetime,
      "landingDT": datetime,
      "onBlockDT": datetime,
      "updateDT": datetime,
"checkinSinceDTUTC": datetime,
      "checkinUntilDTUTC": datetime,
      "checkinSinceDTLocal": datetime,
      "checkinUntilDTLocal": datetime,
```

## **Response parameters**

Parameter	Description
data	The data returned by the request
flightStatuses	Array of objects with information about flights
fnNumber	Flight number
fnSuffix	Flight suffix
fnCarrier	Airline operating the flight
dayOfOrigin	Departure date of the scheduled flight
departureAirportActual	IATA code of the airport of departure - actual
arrivalAirportActual	IATA-code of the airport of arrival - actual
legState	Flight status
legType	Flight type
aircraftRegistration	Aircraft registration
aircraftType	IATA aircraft type code
departureAirportSched	IATA code of the scheduled departure airport

	arrivalAirportSched	IATA code of the scheduled arrival airport
	departureDTSchedUTC	Scheduled departure time UTC
	arrivalDTSchedUTC	Scheduled arrival time UTC
	departureDTSchedLocal	Scheduled departure time Local
	arrivalDTSchedLocal	Scheduled arrival time Local
	estimatedArrivalDate	Estimated time of arrival
	offBlockDT	Departure time from gate
	airborneDT	Take off time
	landingDT	Boarding time
	onBlockDT	Time of arrival at the parking lot
	updateDT	Date of last update of flight information
	checkinSinceDTUTC	Check-in start for the flight UTC
	checkinUntilDTUTC	Check-in end for the flight UTC
	checkinSinceDTLocal	Check-in start for the flight UTC
	checkinUntilDTLocal	Check-in end for the flight UTC
	departureDTUTC	Departure time UTC
	departureDTLocal	Departure time Local
	arrivalDTUTC	Arrival time UTC
	arrivalDTLocal	Arrival time Local
	isFlightDelayed	Flight delay sign
erı	rors	Information about errors that occurred during the operation of the service.
	ibeCode	Error code, see Attachments 1. IBE error codes
	description	Error description, see Attachments 1. IBE error codes
	messages	Array of objects containing errors from the partner's response. The array may be empty, it is recommended to analyze the error by the ibeCode field.

		text	Error text
			Sign of the success of the request.
S	ucc	ess	If the errors array is empty, then the field value will be true.

## Response body example

```
"data": {
    "flightStatuses": [
        "fnNumber": 273, "fnSuffix": " ",
        "fnCarrier": "U6",
        "dayOfOrigin": "2021-10-27T00:00:00",
        "departureAirportActual": "DME",
        "arrivalAirportActual": "SVX",
        "legState": "SKD",
"legType": "J",
        "aircraftRegistration": "XXXXX",
        "aircraftType": "7M8",
        "departureAirportSched": "DME",
        "arrivalAirportSched": "SVX",
        "departureDTSchedUTC": "2021-10-27T05:25:00",
        "arrivalDTSchedUTC": "2021-10-27T07:40:00",
        "estimatedArrivalDate": "2021-10-27T07:40:00",
        "offBlockDT": "0001-01-01T00:00:00",
        "airborneDT": "0001-01-01T00:00:00",
        "landingDT": "0001-01-01T00:00:00",
        "onBlockDT": "0001-01-01T00:00:00"
        "updateDT": "2021-03-23T06:57:00",
        "checkinSinceDTUTC": "2021-10-25T05:25:00",
        "checkinUntilDTUTC": "2021-10-27T04:45:00",
        "checkinSinceDTLocal": "2021-10-25T08:25:00",
        "checkinUntilDTLocal": "2021-10-27T07:45:00",
        "departureDTUTC": "2021-10-27T05:25:00"
        "departureDTLocal": "2021-10-27T08:25:00",
        "arrivalDTUTC": "2021-10-27T07:40:00",
        "arrivalDTLocal": "2021-10-27T12:40:00",
        "isFlightDelayed": false
      }
    ]
 },
  "errors": [],
  "success": true
}
```

## Method POST flights/particularFlightsStatuses

**Description:** allows to get information about the flight

Request format /api/apiVersion/flights/particularFlightsStatuses

## **Request body**

## **Request body parameters**

	Parameter	Description
reque	sts	
	departureAirport	Departure airport
	arrivalAirport	Arrival airport
	date	Departure date
	flightNumber	Flight number
	dateTimeRange	If send D, the search will be carried out one day from the start time

## Request body example

```
{
    "requests": [
```

```
{
    "departureAirport": "DME",
    "arrivalAirport": "SVX",
    "date": "2021-08-03",
    "flightNumber": 261
    }
]
```

The response of this method matches the response of GET flights/allFlightStatusesForDay method

#### **Method GET Flights**

**Description:** It lets to get flights which are available for booking and are matching with specific parameters of the request.

Discounts parameters by routes are included to the response.

**Request format** /api/apiVersion/flights

**Request parameters:** It has the same realisation as for get api/Flights v2.2

## Changes in the api/apiVersion/flights version 2.3:

A new parameter subsidies\_type is submitted in the search for subsidized flight options. Both string and numeric values can be given - subsidies\_type: 2 / subsidies\_type: FarEast

#### **Request example:**

One way flight:

/api/apiVersion/flights?orig=LED&dest=MOW&dep=20220710&mode=Mono&adt=1&chd=0&inf=0&src=0&yth=0&umnr=0&str=0&jnn=0&gcf=0&jcb=0

#### **Response body**

```
"category": string,
         "isSubsidized": boolean,
         "order": integer,
"commercialFamily": string,
         "canRefund": boolean,
"hasUpsale": boolean "options": [{
                  "code": string,
                  "category": string,
                  "order": integer,
                  "showInPopup": boolean,
"showInSummary": boolean,
                  "showInUpsell": boolean,
                  "showInFareIncluded": boolean,
                  "showForAdult": boolean,
                  "showForInfant": boolean
         ]
],
"foodOnBoards": [{
"foodOnBoards": [
         "departureAirport": string,
         "arrivalAirport": string,
         "flightNumber": integer,
         "commercialFamily": string,
         "translation": {
              "ru": string,
              "en": string,
              "zh": string
         }
    }
],
"alternativeFlights": [{
    "departure": stri
         "departure": string,
         "arrival": string
     }
"flights": [string],
         "excludedFlights": [{
                  "flightNumber": integer,
                  "departureAirport": string,
                  "arrivalAirport": string
              }
         ]
    }
],
"recommendations": [{
    "authoundFlight"
         "outboundFlightGroupId": integer,
         "outboundFareFamilyId": integer,
         "returnFlightGroupId": integer,
         "returnFareFamilyId": integer,
         "outboundFlightGroupHash": string,
         "returnFlightGroupHash": string,
```

```
"outboundFareFamilyCode": string,
"returnFareFamilyCode": string,
"outboundPrice": integer,
"outboundTaxes": integer,
                 "outboundDiscount": integer,
"returnPrice": integer,
"returnTaxes": integer,
                 "returnDiscount": integer,
"outboundSeatsLeft": integer,
"returnSeatsLeft": integer,
"totalPrice": integer,
"totalBaseFare": integer,
"totalDiscount": integer,
"outboundFareAndAmountDetails": [{
         "bookingCode": string,
         "fareBasis": string,
         "isBreakpoint": boolean,
         "paxType": integer,
         "paxCount": integer,
         "taxAmount": integer,
         "totalAmount": integer,
         "isSale": boolean,
         "code": string
"totalBaseFare": integer,
"totalDiscount": integer,
"returnFareAndAmountDetails": [{
         "bookingCode": string,
         "fareBasis": string,
         "isBreakpoint": boolean,
         "paxType": integer,
         "paxCount": integer,
         "taxAmount": integer,
         "totalAmount": integer,
         "code": string
}
],
"outboundBaggageAllowances": [{
    "quantity": integer,
    "tager.
         "weight": integer,
         "passengerType": integer,
                                  "fareCode": string
     }
"returnBaggageAllowances": [{
    " " " integer,
          "quantity": integer,
         "weight": integer,
         "passengerType": integer,
                                  "fareCode": string
     }
],
                 "outboundBonus": {
         "bonus": "string",
```

```
"replacedBonus": "string"
                               },
                      "returnBonus":
                                        {
"bonus": "string",
"replacedBonus": "string"
                               },
              "discount": {
                   "id": string,
                  "name": string,
                  "amount": integer,
                  "discountType": integer,
                   "usageType": integer,
                   "startDate": datetime,
                   "endDate": datetime
             },
"promotion": {
                  "number": string,
"amount": integer,
                   "promotionStatus": string,
                  "promotionType": string,
                  "description": string,
                  "startFlightDate": datetime,
                   "endFlightDate": datetime,
                  "startDate": datetime,
"endDate": datetime,
                   "isUnique": boolean,
                   "campaignId": string,
                   "directions": [{
                            "id": string,
                            "origin": string,
                            "destination": string
                       }
                  "services": [{
    "code";
                            "code": string
                       }
                  ],
"families": [{
    "code"
                            "code": string
                  "hasConflict": boolean,
""stationts": [{
                   "excludedFlights": [{
                            "flightNumber": integer,
                            "departureAirport": string,
                            "arrivalAirport": string
                       }
                  ]
              }
         }
    ],
"moneyWallCoefficient": integer,
    "containsInternationalFlights": bool
},
```

## **Response parameters (at the short form)**

A description of parameters are the same as for get api/Flights v2.2 The recommendations [] array are extended by parameters for any available combination of booking:

recommendations Array of recomm		Array of recommendations objects for flights	
outbou	undDiscount	An amount of discount for "There" route	
return	returnDiscount An amount of discount for "From" route		
outboundBonus The number of bonuses awarded for a flight "there"			
bonu	us	Current number of bonuses awarded for the flight	
repla	acedBonus	Outdated number of bonuses awarded per flight	
return	nBonus	The number of bonuses awarded for a return flight	
bonu	us	Current number of bonuses awarded for the flight	
repla	acedBonus	Outdated number of bonuses awarded per flight	
Parameter		Description	Notes

#### Method GET Flights/meta/search

**Description:** realizing option to get flight recommendations by Yandex Webmaster with related parameters of searching.

**Request format:** /api/apiVersion/flights/meta/search/api/apiVersion/flights/meta/search

### **Request parameters:**

Required authorization by Login and password (Basic Auth with encoding via Base64) for receiving a response by the request.

Parameter	Description	
departure	Location of departing (IATA code)	
arrival	Location of arriving (IATA code)	
date_forward	Planned date of departure (format: yyyy-mm-dd)	
date_backward	Planned date of arrival (optional)	
class	Class of service (Available options: Economy; Business)	
adults	adults An amount of Adults, 12 years old and more.	
children An amount of Childs with seats. 2 years old until 11 years old.		
infants	An amount of Infants without seats. Under 2 years old.	

**Notice**: An amount for passengers with seats should be can 9 in total or less; a request used the 'infants' passenger type has required rule - Adults amount >= Infants amount; a request used the 'children' passenger type has required rule - adults amount >=1.

## **Request example:**

OW flight: /api/apiVersion/search?departure=MOW&date\_forward=2024-10-30&date\_backward=2024-11-10&adults=1&children=1&arrival=SVX&class=business

### **Response boy:**

```
{
    "variant": [
        {
            "url": string,
            "price": {
                "value": integer,
                "currency": string,
                "tariff_adult": integer,
```

```
"tariff_child": integer,
  "tariff_infant": integer,
  "refundable": boolean,
  "seats_remaining": integer
},
"route_forward": [
  {
    "flight_number": string,
    "carrier_name": string,
    "marketing_carrier": string,
    "operating_flight_number": string,
    "operating_carrier": string,
    "validating_carrier": string,
    "departure_airport_code": string,
    "arrival_airport_code": string,
    "departure_datetime": datetime,
    "arrival_datetime": datetime,
    "fare_code": string,
    "fare_family": string,
    "class": string,
    "charter": boolean,
    "selfconnect": boolean,
    "technical_stop": boolean,
    "luggage": {
      "included": bolean,
      "pieces": integer,
      "weight": integer,
      "units": string,
      "dimensions": {
        "length": integer,
        "width": integer,
        "height": integer,
        "sum": integer
      }
    "included": boolean,
      "pieces": integer,
"weight": integer,
      "units": string,
      "dimensions": {
        "length": integer,
        "width": integer,
        "height": integer,
        "sum": integer
    }
  }
],
"route_backward": [
  {
    "flight_number": string,
    "carrier_name": string,
    "marketing_carrier": string,
```

```
"operating_flight_number": string,
          "operating_carrier": string,
          "validating_carrier": string,
          "departure_airport_code": string,
          "arrival_airport_code": string,
          "departure_datetime": datetime,
          "arrival_datetime": datetime,
          "fare_code": string,
          "fare_family": string,
          "class": string,
          "charter": boolean,
          "selfconnect": boolean,
          "technical_stop": boolean,
          "luggage": {
            "included": boolean,
             "pieces": integer,
            "weight": integer,
"units": string,
             "dimensions": {
               "length": integer,
              "width": integer,
              "height": integer,
               "sum": integer
            }
          "hand_luggage": {
            "included": boolean,
            "pieces": integer,
            "weight": integer,
             "units": string,
             "dimensions": {
               "length": integer,
               "width": integer,
               "height": integer,
               "sum": integer
  } } }
 ]
}
```

#### **Response parameters:**

Parameter	Description	Notes
variant	Available combination of flight segments for booking	

url	A link to the 2nd booking step at the IBE by the Connector. The link includes parameters flight segments and the Agent key.	
price	An array of value and amount available seats	
value	A total amount price for whole existed passengers.	
currency	Recommendation currency.	
tariff_adult	A total amount price for whole existed Adult passengers.	
tariff_child	A total amount price for whole existed passengers like 'Children'.	
tariff_infant	A total amount price for whole existed infant passengers without seats.	
refundable	Available of refunding the booking.	
seats_remaining	A total amount of seats by the current price.	
route_forward	An array of parameters data for 'Forward' flight.	
flight_number	Airline code and flight number.	
carrier_name	Full name of carrier Airline.	
marketing_carrier	Selling ticket Airline code.	
operating_flight_number	Flight number by the Airline.	
operating_carrier	Carrier code.	
validating_carrier	Carrier code Issuing ticket.	
departure_airport_code	Departure airport code.	
arrival_airport_code	Arrival airport code.	
departure_datetime	Departing date time (local time)	
arrival_datetime	Arriving date time (local time)	
fare_code	Fare code	

fare_family	Fare category	
class	Class of service	Available values: BUSINESS; ECONOMY
charter	Charter tariff parameter	
selfconnect	A parameter of Self connecting flight segments for transfer flights and issuing unique tickets for every flight segment at the booking.	
technical_stop	Existing tech stop until the flight parameter	
luggage	An array of data for luggage parameters	
included	A Parameter of existing a luggage at the tariff	
pieces	An amount of luggage included at the tariff	
weight	Available weight of one luggage piece included at the tariff.	
units	A unit of measurement for luggage weight.	
dimensions	An array of physical parameters data for a luggage	
length	Available length of luggage	
width	Available width of luggage	
height	Available height of luggage	
sum	Available sum of three luggage parameters in total	
hand_luggage	An array of data for hand luggage parameters	
included	A Parameter of existing a hand luggage at the tariff	
pieces	An amount of hand luggage included at the tariff	

	weight	Available weight of one hand luggage piece included at the tariff.	
	units	A unit of measurement for hand luggage weight.	
	dimensions	An array of physical parameters data for a hand luggage	
	length	Available length of hand luggage	
	width	Available width of hand luggage	
	height	Available height of hand luggage	
	sum	Available sum of three hand luggage parameters in total	
r	oute_backward	An array of parameters data for 'Backward' flight.	
	flight_number	Airline code and flight number.	
	carrier_name	Full name of carrier Airline.	
	marketing_carrier	Selling ticket Airline code.	
	operating_flight_number	Flight number by the Airline.	
	operating_carrier	Carrier code.	
	validating_carrier	Carrier code Issuing ticket.	
	departure_airport_code	Departure airport code.	
	arrival_airport_code	Arrival airport code.	
	departure_datetime	Departing date time (local time)	
	arrival_datetime	Arriving date time (local time)	
	fare_code	Fare code	
	fare_family	Fare category	
	class	Class of service	Available values: BUSINESS; ECONOMY
	charter	Charter tariff parameter	
	selfconnect	A parameter of Self connecting flight segments for transfer flights	

	and issuing unique tickets for every flight segment at the booking.
technical_stop	Existing tech stop until the flight parameter
luggage	An array of data for luggage parameters
included	A Parameter of existing a luggage at the tariff
pieces	An amount of luggage included at the tariff
weight	Available weight of one luggage piece included at the tariff.
units	A unit of measurement for luggage weight.
dimensions	An array of physical parameters data for a luggage
length	Available length of luggage
width	Available width of luggage
height	Available height of luggage
sum	Available sum of three luggage parameters in total
hand_luggage	An array of data for hand luggage parameters
included	A Parameter of existing a hand luggage at the tariff
pieces	An amount of hand luggage included at the tariff
weight	Available weight of one hand luggage piece included at the tariff.
units	A unit of measurement for hand luggage weight.
dimensions	An array of physical parameters data for a hand luggage

		length	Available length of hand luggage	
		width	Available width of hand luggage	
		height	Available height of hand luggage	
		sum	Available sum of three hand luggage parameters in total	

## Booking management service: api/reservation

## Booking management service v2.2

API service	reservation	
Short description	The service allows to manage booking:  - add information to the booking (data on flights, passengers and fares);  - receive information about the reservation;	
	- delete unpaid reservations.	
Supported HTTP(S)- methods	GET, POST, DELETE	
	Sirena:	
	Create booking - booking	
Used methods of related	Getting information on booking - order, pnr_status	
systems	Getting information about coupon statuses - view_flown_status	
	Cancel booking - booking-cancel	

#### **Method POST reservation**

**Description:** creating a booking, adding information about flights, passengers and fares.

**Inportant:** There is only one option for creating a booking without advanced booking when all parameters for flights, fares and passengers are passed in one request.

Disabled an ability for creating a booking with subsidised fares via agents.

Request format /api/apiVersion/reservation

## **Request body**

```
{
  "flights": {
```

```
"outboundFlights": [reservationFlight],
   "returnFlights": [reservationFlight],
   "adults": integer,
   "children": integer,
   "infants": integer,
       "infantsWithSeats": integer,
   "pensioners": integer,
   "youths": integer,
   "subsidizedChildren": integer,
   "origin": string,
   "destination": string,
   "passengersCount": integer
 "passengers": {
   "passengers": [passengerData],
   "userAgreement": boolean
},
"fares": {
   "accountCode": "string",
   "tourCode": "string",
   "outboundFareFamily": {
     "code": string,
     "category": string,
     "isSubsidized": boolean
  "code": string,
     "category": string,
     "isSubsidized": boolean
  },
"fares": [{
       "passengerType": "Adult",
       "flightIndex": integer,
       "flightDirection": integer,
       "fareBasis": string,
       "isBreakpoint": boolean
     }
   ],
"sessionMarker": string,
      "currency": string
},
"expectedPrice": ingeger,
ingeger,
 "searchPrice": ingeger,
 "airShopSessionId": string,
 "reservationContacts"[
       "email": string,
       "phone": string
   }
 ],
      "subsidiesType": "Disability"
}
```

### reservationFlight object

```
{
  "origin": string,
  "destination": string,
  "departureDate": datetime,
  "flightNumber": string,
  "classOfService": string
}
```

The relatedAdultReferenceNumber parameter is added to the passengers[] array for CHD/INS/INF . The parameter is not available for other types of passengers.

## passengerData object

```
"id": integer,
"firstName": string,
"middleName": string,
"surname": string,
"passengerType": integer,
"birthDate": datetime,
"sex": integer,
"nationality": string,
"documentNumber": string,
"documentExpiryDate": datetime,
"loyaltyCard": string,
"loyaltyCardValidTo": datetime,
"serviceClassUpOrdered": boolean,
"email": string,
"phone": string,
"documentType": integer,
"relatedAdultReferenceNumber": string,
"disability": {
  "isDeaf": boolean,
  "isBlind": boolean,
  "hasGuideDog": boolean,
  "assistanceType": integer,
  "wheelchairType": integer,
  "commentary": string
"socialSecurityNumber": string,
"endorsements": [{
   "endorsement": boolean,
  "isDisability": boolean,
  "endorsementDocNumber": string,
  "endorsementDocDate": datetime,
  "loyaltyPartnerCard": string
  }
"accompanimentBookingInfo": [{
  "endorsement": boolean,
```

```
"isDisability": boolean
}
],
"accompaniedPassengerId": number,
"SubsidyDocumentNumber": string
}
```

## **Request parameters**

Parameter	Description	Notes
flights	Object with information about flights	
outboundFlights	Array of reservationFlight objects with information about flights in the "outbound" direction	
returnFlights	Array of reservationFlight objects with information about flights in the "return" direction	
adults, children,		
infants, infantsWithSeats pensioners,	Count of passengers of each type	
youths, subsidizedChildren		
origin	Departure airport	
destination	Destination airport	
passengersCount	Total count of passengers with the seat	
passengers	Object with information about passengers	
passengers	An array of passengerData objects with passengers information	
	Sign of sending consent to the newsletter	
userAgreement	Consent is sent to CRM for all added passengers	
fares	Object with information about tariffs	
accountCode	Account Code	
tourCode	Tour Code	
outboundFareFamily	Object with information on fares for "there" direction	

		Fare family code	
	code	Data is taken from the response api/flights: data.fareFamilies.code	
	category	Fare family category	
	category	Data is taken from the response api/flights: data.fareFamilies.category	
	isSubsidized	Sign of a subsidized tariff	Optional parameter
re	turnFareFamily	Object with information about fare family tariffs for return flight	
		Fare family code	
	code	Data is taken from the response api/flights: data.fareFamilies.code	
		Fare family category	
	category	Data is taken from the response api/flights: data.fareFamilies.category	
	isSubsidized	Sign of a subsidized tariff	Optional parameter
fa	res	An array with information about tariffs for directions "outbound" and "return"	
		Base tariff title	
		Data is taken from the response api/flights:	
	fareBasis	data.recommendations.outboundFareDetails.fareBasis and	
		data.recommendations.returnFareDetails.fareBasis	
		Flag identifying whether tariff ends on present segment.	
	isBreakpoint	Data is taken from the response api/flights:	
		data.recommendations.outboundFareDetails.isBreakpoint	

		and		
data.recommendations.returnFareDe			data.recommendations.returnFareDetails.isBreakpoint	
	passengerType		Passenger type	
			Possible values: see <u>Attachment 2. Passenger types</u>	
			Flight direction	
		flightDirection	0 - outbound, 1 - return	
		flightIndex Flight index for a specific flight		
	se	ssionMarker	Aviasales session marker	
	cu	ırrency	Reservation currency	This parameter is not used to create a booking in Sirena, because for offices, the default currency is set in the settings.
expectedPrice		ectedPrice	The expected price of the booking, taken from the api/flights	This parameter is not used to create a booking.
searchPrice		chPrice	The price that was received in the search request, taken from the api/flights or api/flights/search	This parameter is not used to create a booking

airShopSessionId		SIG search session ID, taken from the api/flights response	
reser	vationContacts	Contacts that are not related to the passengers	
	email	Email	
	phone	Phone	
subsidiesType		Type of subsidies	

## reservation Flight

Parameter	Description	
origin	Departure airport	
destination	Destination airport	
	Date and time of departure  The data is taken from the api/flights response:	
departureDate	data.outboundFlights.flights.departureDateTime  or  data.returnFlights.flights.departureDateTime	
	Format: yyyy-MM-ddTHH:mm:ss  Example: 2018-06-20T01:00:00	
flightNumber	Flight number.  The data is taken from the api/flights response:  data.outboundFlights.flightNumber  or	
classOfService	data.returnFlights.flights.flightNumber  Information about the selected tariff  The data is taken from the api/flights response:	

data.recommendations.outboundFareDetails.bookingCode
or
data.recommendations.returnFareDetails.bookingCode

# passengerData Request object

Parameter	Description	Format	Notes
id	Passenger's serial number (numbered from 1)		
firstName	Passenger's name	[A-Z], from two characters	The sum of the full name is no more than 43 characters
middleName	Passenger's patronymic (may be absent)	[A-Z], from one character	The sum of the full name is no more than 43 characters
surname	Passenger's surname	[A-Z], from two characters	The sum of the full name is no more than 43 characters
passengerType	Passenger type		
birthDate	Date of birth		
sex	Passenger gender  Possible values: see dictionary "gender of passengers"		
nationality	Nationality (country)		

	Possible values: dictionary of countries		
documentNumber	Document number	For different document types there is different format rules:  Passport of Russian Federation: 10 chars; Foreign passport of Russian Federation: 9 chars; Birth certificate of Russian Federation: \[IVX]+([A-\(\text{Ma-\(\pi\)}]{2,4})\\d\{6}\)\$.  For documents of other countries there is no special format rules.	
documentType	Document type		
documentExpiryDate	Date until which the document is valid  Mandatory only for a foreign passport of Russian Federation and national passports of other countries. For other documents, it is automatically set by Sirena.		

lc	yaltyCard	Loyalty card number "Wings"	10 numbers	
loyaltyCardValidTo		Expiration date of the "Wings" loyalty card (transmitted only if serviceClassUpOrdered = true)		
Se	erviceClassUpOrdered	Flag indicating that the owner of the "Wings" gold card wants to upgrade the service class		In developing
eı	nail	Email		
p.	none	Phone		
re	elatedAdultReferenceNumber	Identifier of the adult attached to children		Only used for passenger types CHD/INS/INF
d	isability	Information about people with disabilities		
	isDeaf	Hearing impairment		
	isBlind	Visual impairment		
	hasGuideDog	A guide dog must be accompanied, must be sent only together with the isBlind sign		
	assistanceType	Passenger assistance type  Possible values: dictionary of assistance types		
	wheelchairType	Wheelchair type Possible values: dictionary of wheelchair type		

	commentary	Comment (optional)		
SC	ocialSecurityNumber	A specific numer of SNILS (optional)	10 digits	
eı	ndorsements	Array with information about documents to buy tickets on the subsidized fares or to apply discounts on partner loyalty cards.		
	endorsement	The sign that an endorsement is adding to booking.		
	isDisability	Disability endorsements.		
	endorsementDocNumber	Subsidy document number.  E.g disability certificate, ID number or other document confirming the status of a large family.		
	endorsementDocDate	Subsidy document issue date.		
	loyaltyPartnerCard	Loyalty partner card number.		
a	ccompanimentBookingInfo	Information about the reservation containing an accompanying passenger		Currently used when creating reservations for MNN, MNS
	number	PNR of a booking containing an accompanying passenger		
	surname	Last name of the accompanying		

	passenger	
accompaniedPassengerId	Id number of accompanted passenger (related with subsidized booking by Disability subsidies)	
SubsidyDocumentNumber	Document number for confirming a right to get a subsidy (related for subsidized booking by Disability subsidies or Kaliningrad's subsidy)	

## **Response format**

```
"data": {
  "journey": {
    "outboundFlights": [fullReservationFlight],
"returnFlights": [fullReservationFlight],
    "outboundFareFamily": {
      "code": string,
    },
"returnFareFamily": {
      "code": string,
        "separateFareFamilies": {
       "code": string,
    },
"origin": string,
    "destination": string,
    "departureDate": datetime,
    "returnDate": datetime
 },
"number": string,
"ationDate"
  "reservationDate": datetime,
  "passengers": [{
      "id": integer,
       "hasInfant": boolean,
       "referenceNumber": string,
"relatedAdultReferenceNumber": string,
               "relatedInfantReferenceNumber": string,
               "relatedChildrenReferenceNumbers": [
         "string"
      ],
"firstName": string,
       "middleName": string,
```

```
"surname": string,
         "passengerType": string,
         "birthDate": datetime,
         "sex": integer,
         "nationality": string,
         "documentNumber": string,
         "documentExpiryDate": datetime,
         "email": string,
         "phone": string,
         "documentType": integer,
         "isAdult": boolean,
         "isChanged": boolean,
         "checkedIn": {
                         couponReference: boolean
                 "checkInHasStarted": {
                         couponReference: boolean
         "checkedInSegment": {
             flightReference: boolean
         "checkInHasStartedSegment": {
             flightReference: boolean
                 "hasPassengersDataErrors": boolean,
         "passengerDataErrors": [{
             "key": string,
             "value": string
        }],
"endorsements": [{
    "er
                           "endorsement": boolean,
                           "isDisability": boolean,
                           "loyaltyPartnerCard": string
                      },
                           "endorsement": boolean,
                           "isDisability": boolean,
                           "endorsementDocNumber":
string, passengerDataErrors
                                                   "endorsementDocDate": datetime
                      }]
            }
    ],
"outboundBonus": {
    ": "strir
        "bonus": "string",
"replacedBonus": "string"
    },
"returnBonus": {
    "bonus": "string",
    "replacedBonus": "string"
    "seats": [],
    "insurance": {},
```

```
"luggageSeats": [{
        "referenceNumber": string,
        "passengerReference": string
    ],
        "partnerProducts": [],
    "ticketFares": [{
        "baseAmount": integer,
        "passengerReferences": [{
             "referenceNumber": string,
             "referenceQualifier": string
        "passengerType": integer,
        "referenceNumber": string,
        "referenceQualifier": string,
        "totalAmount": integer,
                "currency": string
    "baseAmount": integer,
        "passengerReferences": [{
             "referenceNumber": string,
             "referenceQualifier": string
        }],
        "passengerType": integer,
        "referenceNumber": string,
        "referenceQualifier": string,
        "totalAmount": integer,
                "currency": string
    }],
"hasSpecialConditions": boolean,
''artichle": boolean,
    "isRefundAvailable": boolean,
    "annulUnavailabilityReason": integer,
    "isAnnulAvailable": boolean
},
  "errors": [{
      "ibeCode": string,
      "description": string,
      "messages": [{
    "code": string,
          "text": string
      ]
    }
  "success": boolean
```

#### fullReservationFlight object

{

```
"aircraft": string,
    "aircraftIataCode": string,
    "referenceNumber": string,
    "origin": string,
    "destination": string,
    "departureDate": datetime,
    "arrivalDate": datetime,
    "arrivalDateUtc": datetime,
    "departureDateUtc": datetime,
    "flightNumber": string,
    "classOfService": string,
    "marketingCarrier": string,
    "operatingCarrier": string,
    "flightDuration": string,
    "stopDuration": string,
    "techStops": [{
            "arrivalDateTime": datetime,
            "departureDateTime": datetime,
            "airportCode": string,
            "stopDuration": string,
            "flightDurationUntilNextStop": string
        }
    ],
"flightDurationUntilNextStop": string,
    "arrivalTerminal": string,
    "departureTerminal": string,
    "hash": string,
    "statuses": [
            string
    "codeshare": string,
    "codeshareFlightNumber": string
    "isCancelledByAirline": boolean,
        "isCheckinWithoutPseudo": boolean
}
```

#### **Response parameters**

Parameter		Description	Notes
		Sign of the success of the request.	
5	success	If the errors array is empty, then the field value will be true.	
•	data	The data returned by the request.	
	number	Unique booking number (PNR).	

Parameter		Description	Notes
		Date and time of booking creation	
rese	ervationDate	Format: yyyy-MM-ddTHH:mm:ss	
		Example: 2018-06-20T15:44:00	
pas	sengers	An array of the passengerData objects with passenger information	
out	boundBonus	The number of bonuses awarded for a flight "there"	
	bonus	Current number of bonuses awarded for the flight	
	replacedBonus	Outdated number of bonuses awarded per flight	
retı	ırnBonus	The number of bonuses awarded for a return flight	
	bonus	Current number of bonuses awarded for the flight	
	replacedBonus	Outdated number of bonuses awarded per flight	
serv	vices	An array of objects with information about additional services. Filled in when using the api/services service and will be described below	
seat	ts	An array of objects with information about the selected locations. Filled in when using the api/services service and will be described below	
insı	urance	Object with information about the selected insurance. Filled in when using the api/services service and will be described below	In developing
lug	gageSeats	An array of objects with information about luggage with separate air ticket and ssr CBBG.	In developing
re	eferenceNumber	The reference to CBBG luggage.	

Parameter	Description	Notes
passengerReference	The reference to passenger who added CBBG luggage. Associated with field data → passengers[n] → referenceNumber.	
partnerProducts	An array of objects with information about partner services. Filled in when using the api/services service and will be described below	
journey	Flight information for current booking	
outboundFlights	An array of the fullReservationFlight objects with details of outbound flights	
outboundFareFamily	Service field, contains the fareFamily code	
returnFlights	An array of fullReservationFlight objects with detailed information about the "return" flights	
returnFareFamily	Service field containing fareFamily code	
separateFlights	An array of fullReservationFlight objects with detailed information about flights without reference to direction	
separateFareFamilies	Service field containing fareFamily code	
origin	Initial airport of departure	
destination	Initial airport of destination	
departureDate	Departure date	
returnDate	Return date	
ticketFares	An array of objects with information about tariffs after applying the discount	
baseAmount	Base rate	
passengerReferences	An array of objects with links to passengers	
referenceNumber	Reference number	
referenceQualifier	Link type, for example "PA"	

Parameter	Description	Notes
passengerType	Passenger type Possible values: see <u>Attachment 2. Passenger</u>	
	types  Pafarana a manakan	
referenceNumber	Reference number	
referenceQualifier	Link type, for example "TST"	
totalAmount	The total amount of the tariff	
currency	Reservation currency	
ticketFaresWithoutZapOff	An array of objects with information about tariffs without applying a discount	
baseAmount	Base rate	
passengerReferences	An array of objects with links to passengers	
referenceNumber	Reference number	
referenceQualifier	Link type, for example "PA"	
	Passenger type	
passengerType	Possible values: see <u>Attachment 2. Passenger</u> <u>types</u>	
referenceNumber	Reference number	
referenceQualifier	Link type, for example "TST"	
totalAmount	The total amount of the tariff	
currency	Reservation currency	
hasSpecialConditions	Sign of the additional conditions	
isRefundAvailable	Sign of the availability of the return	
annulUnavailabilityReason	Reason for unavailability of booking cancellation	
isAnnulAvailable	Indication of availability of booking cancellation	
errors	Information about errors that occurred during the operation of the service	

Parameter		meter	Description	Notes
	ib	peCode	Error code	
	de	escription	Error description	
	m	nessages	An array of objects containing errors. The array may be empty, it is recommended to analyze the error by the ibeCode field	
		code	Error code	
		text	Error text	

## full Reservation Flight

Parameter	Description	Notes
aircraftIataCode	IATA aircraft code	
referenceNumber	Reference to the current flight segment	
origin	Departure airport for the current segment	
destination	Destination airport for the current segment	
departureDate	Departure date and time for the current segment	
arrivalDate	Arrival date and time for the current segment	
arrivalDateUtc	Date and time of arrival for the current segment in UTC	
departureDateUtc	Departure date and time for the current segment in UTC	
flightNumber	Flight number	
classOfService	Information about the selected tariff	
marketingCarrier	Marketing airline	

Parameter	Description	Notes
	For example: U6, S7	
operatingCarrier	The airline actually performing the flight	
	For example: U6, OK	
techStops	An array with information about technical landings	
arrivalDateTime	Date and time of arrival at the pick-up point	
departureDateTime	Date and time of departure from the pick-up point	
airportCode	Airport code of the stop	
stopDuration	Duration of the stop	
flightDurationUntilNextStop	Duration of the flight to the next stop	
flightDurationUntilNextStop	Duration of the flight to the next stop	
arrivalTerminal	Terminal number at the point of arrival	
departureTerminal	Terminal number at the point of departure	
hash	Unique hash of the flight	
statuses	Array with information about segment statuses	
	The full name of the airline that operates the codeshare flight.	
codeshare	For example: Czech Airlines for operating Carrier = OK	
	For operatingCarrier = U6, this field is not filled in	

Parameter	Description	Notes
codeshareFlightNumber	The flight number of the airline that operates the codeshare flight.	
isCancelledByAirline	Sign of cancellation of flights by the airline	
isCheckinWithoutPseudo	Sign of hiding a pseudo- booking at the checkin	

# passengerData Response object

Parameter	Description	Notes
id	Passenger's serial number (numbered from 1)	
hasInfant	An sign that this passenger has a baby	
related Adult Reference Number	Reference to the adult passenger in the booking with whom the child or infant flies (it returns only for children and infants)	
relatedInfantReferenceNumber	Reference to the infant passenger in the booking with whom the adult flies (it returns only for adult)	
relatedChildrenReferenceNumbers	An array of links to child passengers which are travelling with an Adult (the array will be received only for an Adult with a children in the same booking)	
referenceNumber	Reference to this	

Parameter	Description	Notes
	passenger in the booking	
firstName	Passenger's name	
middleName	Passenger's patronymic (may be absent)	
surname	Passenger's surname	
passengerType	Passenger type	
	Whether the passenger is an adult	
isAdult	true for ADT/SRC/YTH type passengers	
	false for CHD/INF type passengers	
birthDate	Date of birth	
	Passenger gender	
sex	Possible values: see dictionary "gender of passengers"	
	Nationality (country)	
nationality	Possible values: dictionary of countries	
documentNumber	Document number	
	Document type	
documentType	Possible values: dictionary of document types	
documentExpiryDate	Date until which the document is valid	
	Mandatory only for a	

	Parameter	Description	Notes
		foreign passport. For other documents, +10 years from the current date is automatically set	
email		Email	
phone		Phone	
check	edIn	Passenger check-in on flight coupon	
check	edInSegment	Passenger check-in on flights	
check	InHasStarted	Starting check-in on flight coupon	
check	InHasStartedSegment	Starting check-in on flights	
hasPa	ssengersDataErrors	The sign of errors in passengers data.	
passei	ngerDataErrors	Array with detailed information of errors in passengers data.	
	key	The key.	
	value	The value.	
accon	npanimentBookingsInfo	An array containing information about bookings with accompanying passengers	For MIR, contains information about linked MNN and MNS bookings For MNN, MNS contains information about the booking from the MIR to which the current booking is linked

Parameter	Description	Notes
number	PNR booking with accompanying passenger	
surname	Last name of the accompanying passenger	

1. Creation of one-way booking, direct.



Take a specific recommendation from the api / flights response: data -> recommendations:

```
Recommendation:
                                         Using the outboundFlightGroupId field, determine
                                         the flight number that needs to be added and take
                                         information on it from the api/flights response,
  "outboundFlightGroupId": 0,
                                         data -> outboundFlights:
  "outboundFareFamilyId": 2,
  "outboundFlightGroupHash":
"07/16/2022 00:45:00-192-LED-DME",
                                            "flightGroupId": 0,
  "outboundFareFamilyCode": "PR",
                                            "flights": [{
  "outboundPrice": 998.00,
                                                "flightId": 0,
                                                "departureAirport": "LED",
  "outboundTaxes": 978.00,
                                                "departureTerminal": "1",
  "outboundSeatsLeft": 9,
  "outboundFareAndAmountDetails": [{
                                                 "arrivalAirport": "DME",
       "bookingCode": "W",
                                                "departureDateTime": "2022-07-
       "fareBasis": "WPROW",
                                         16T00:45:00",
                                                "arrivalDateTime": "2022-07-
       "isBreakpoint": true,
       "paxType": 0,
                                         16T02:20:00",
       "paxCount": 1,
                                                "aircraft": "Airbus A321",
       "taxAmount": 978.00,
                                                "aircraftIataCode": "321",
       "totalAmount": 998.00,
                                                "flightDuration": "1:35",
                                                "flightNumber": "192",
       "flightIndex": 0,
                                                "marketingCarrier": "U6",
       "isSale": false,
       "ruleKey": "U6.BRAND.Y.1.PR"
                                                "operatingCarrier": "U6",
    }
                                                "hash": "07/16/2022 00:45:00-192-LED-
                                         DME"
  "returnFareAndAmountDetails": [],
                                              }
```

```
"outboundBaggageAllowances": [{
                                          "flightGroupDuration": "1:35",
    "quantity": 1,
                                          "hash": "07/16/2022 00:45:00-192-LED-DME"
    "weight": 0,
    "passengerType": 0
],
"returnBaggageAllowances": [],
"totalPrice": 998.00,
                                        Substitute the highlighted values, for the flights
"totalDiscount": 0.0,
                                        array and get:
"totalBaseFare": 20.00
                                        "flights": {
                                           "outboundFlights": [{
                                               "origin": "LED",
                                               "destination": "DME",
                                               "departureDate": "2022-07-
                                        16T00:45:00.000Z",
                                               "flightNumber": "192",
                                               "classOfService": "W"
                                             }
                                          ],
                                           "passengersCount": 1
                                        The classOfService value matches the
                                        bookingCode from the recommendation.
                                        The passengersCount value depends on the
                                        number of passengers added to the booking.
                                        Using the outboundFareFamilyId field, determine
                                        the number of the fare that will need to be added
                                        and take information on it from the api/flights
                                        response, data -> fareFamilies:
                                          "fareFamilyId": 2,
                                          "code": "PR",
                                          "category": "ECOLIGHT",
                                           "isSubsidized": false,
                                          "options": [...],
                                          "order": 150,
                                          "commercialFamily": "U6ECONOMY",
```

```
"canRefund": true,
  "hasUpsale": true,
  "isLowCost": false
Substitute the highlighted values, for the fares
array and get:
"fares": {
  "outboundFareFamily": {
     "category": "ECOLIGHT",
     "code": "PR",
     "isSubsidized": false
  "returnFareFamily": null,
  "fares": [{
       "fareBasis": "WPROW",
       "isBreakpoint": true,
       "passengerType": 0,
       "flightDirection": 0,
       "flightIndex": 0
  ],
  "sessionMarker": null
```

Also need to add valid passenger's data in request.

2. Creation of a booking in both directions, one transfer on the "return" segment.

Direction outbound



Direction return



```
Recommendation:
                                                  Using the outboundFlightGroupId and
                                                 returnFlightGroupId fields, we determine
                                                 the flight numbers and take information on
                                                 them from the api/flights response, data ->
  "outboundFlightGroupId": 0,
                                                 outboundFlights and data -> returnFlights,
  "outboundFareFamilyId": 1,
                                                 respectively.
  "returnFlightGroupId": 3,
  "returnFareFamilyId": 1,
  "outboundFlightGroupHash": "2022-07-13
06:30:00-123-LED-AER",
  "returnFlightGroupHash": "2022-07-20
                                                 Flight outbound:
08:20:00-524-AER-SVX,2022-07-20 15:30:00-
256-SVX-LED",
                                                  {
  "outboundFareFamilyCode": "PR",
                                                    "flightGroupId": 0,
  "returnFareFamilyCode": "PR",
                                                    "flights": [{
  "outboundPrice": 705.00,
                                                         "flightId": 0,
  "outboundTaxes": 700.00,
                                                         "departureAirport": "LED",
                                                         "departureTerminal": "1",
  "returnPrice": 1331.00,
  "returnTaxes": 66.00,
                                                         "arrivalAirport": "AER",
                                                         "departureDateTime": "2022-
  "outboundSeatsLeft": 9,
  "returnSeatsLeft": 9,
                                                 07-13T06:30:00",
  "outboundFareAndAmountDetails": [{
                                                         "arrivalDateTime": "2022-07-
       "bookingCode": "O",
                                                 13T11:30:00",
       "fareBasis": "OPROW",
                                                         "aircraft": "Airbus A321",
       "isBreakpoint": true,
                                                         "aircraftIataCode": "321",
                                                         "flightDuration": "5:00",
       "paxType": 0,
                                                         "flightNumber": "123",
       "paxCount": 1,
       "taxAmount": 700.00,
                                                         "marketingCarrier": "U6",
       "totalAmount": 705.00,
                                                         "operatingCarrier": "U6",
                                                         "hash": "2022-07-13 06:30:00-
       "flightIndex": 0,
       "isSale": false,
                                                  123-LED-AER"
       "ruleKey": "U6.BRAND.Y.1.PR"
                                                    1,
                                                    "flightGroupDuration": "5:00",
  "returnFareAndAmountDetails": [{
                                                    "hash": "2022-07-13 06:30:00-123-
       "bookingCode": "W",
                                                 LED-AER"
       "fareBasis": "WPROW",
       "isBreakpoint": true,
       "paxType": 0,
       "paxCount": 1,
       "taxAmount": 0.0,
                                                 Flights return:
       "totalAmount": 1265.00,
       "flightIndex": 0,
       "isSale": false,
                                                    "flightGroupId": 3,
       "ruleKey": "U6.BRAND.Y.1.PR"
                                                    "flights": [{
```

```
"flightId": 0,
                                                       "departureAirport": "AER",
     "bookingCode": "N",
    "fareBasis": "N",
                                                       "arrivalAirport": "SVX",
                                                       "departureDateTime": "2022-
    "isBreakpoint": true,
    "paxType": 0,
                                                07-20T08:20:00",
    "paxCount": 1,
                                                       "arrivalDateTime": "2022-07-
    "taxAmount": 66.00,
                                                20T13:50:00",
    "totalAmount": 66.00,
                                                       "aircraft": "Airbus A320",
    "flightIndex": 1,
                                                       "aircraftIataCode": "320",
    "isSale": false
                                                       "flightDuration": "3:30",
  }
                                                       "stopDuration": "1:40",
                                                       "flightNumber": "524",
                                                       "marketingCarrier": "U6",
"outboundBaggageAllowances": [{
                                                       "operatingCarrier": "U6",
    "quantity": 1,
    "weight": 0,
                                                       "hash": "2022-07-20 08:20:00-
    "passengerType": 0
                                                524-AER-SVX"
                                                    }, {
                                                       "flightId": 1,
"returnBaggageAllowances": [{
                                                       "departureAirport": "SVX",
    "quantity": 1,
                                                       "arrivalAirport": "LED",
                                                       "arrivalTerminal": "1",
    "weight": 23,
    "passengerType": 0
                                                       "departureDateTime": "2022-
  }
                                                07-20T15:30:00",
                                                       "arrivalDateTime": "2022-07-
],
"totalPrice": 2036.00,
                                                20T16:20:00",
"totalDiscount": 0.0,
                                                       "aircraft": "Airbus A320",
"totalBaseFare": 1270.00
                                                       "aircraftIataCode": "320",
                                                       "flightDuration": "2:50",
                                                       "flightNumber": "256",
                                                       "marketingCarrier": "U6",
                                                       "operatingCarrier": "U6",
                                                       "hash": "2022-07-20 15:30:00-
                                                256-SVX-LED"
                                                    }
                                                  "flightGroupDuration": "8:00",
                                                  "hash": "2022-07-20 08:20:00-524-
                                                AER-SVX,2022-07-20 15:30:00-256-
                                                SVX-LED"
                                                Substitute the highlighted values, for
                                                the flights array and get:
```

```
"flights": {
  "outboundFlights": [{
       "origin": "LED",
       "destination": "AER",
       "departureDate": "2022-07-
13T06:30:00.000Z",
       "flightNumber": "123",
       "classOfService": "O"
    }
  ],
  "returnFlights": [{
       "origin": "AER",
       "destination": "SVX",
       "departureDate": "2022-07-
20T08:20:00.000Z",
       "flightNumber": "524",
       "classOfService": "W"
    }, {
       "origin": "SVX",
       "destination": "LED",
       "departureDate": "2022-07-
20T15:30:00.000Z",
       "flightNumber": "256",
       "classOfService": "N"
     }
  ],
  "adults": 1,
  "children": 0,
  "infants": 0,
  "infantsWithSeats": 0,
  "pensioners": 0,
  "youths": 0,
  "unaccompaniedMinors": 0,
  "strAdults": 0,
  "jnnChildren": 0,
  "origin": "LED",
  "jcbYouths": 0,
  "gcfAdults": 0,
  "destination": "AER",
  "passengersCount": 1
```

}

The classOfService value matches the bookingCode from the recommendation.

The passengersCount value depends on the number of passengers added to the booking.

Using the outboundFareFamilyId and returnFareFamilyId fields, we determine the fare numbers that need to be added and take information on them from the api/flights response, data -> fareFamilies:

# Substitute the highlighted values, for the flights fares and get:

```
"fares": {
  "outboundFareFamily": {
    "category": "ECOLIGHT",
    "code": "PR",
    "isSubsidized": false
  },
  "returnFareFamily": {
    "category": "ECOLIGHT",
    "code": "PR",
    "isSubsidized": false
  },
  "fares": [{
       "fareBasis": "OPROW",
       "isBreakpoint": true,
       "passengerType": 0,
       "flightDirection": 0,
       "flightIndex": 0
    }, {
       "fareBasis": "WPROW",
       "isBreakpoint": true,
       "passengerType": 0,
       "flightDirection": 1,
       "flightIndex": 0
    }, {
```

```
"fareBasis": "N",
    "isBreakpoint": true,
    "passengerType": 0,
    "flightDirection": 1,
    "flightIndex": 1
    }
    ],
    "sessionMarker": null
}
The fareBasis values are taken from the recommendation.
```

Tariff information should be sent as follows:

```
"fares": {
       "outboundFareFamily": {
    "category": "SUBSIDIZED",
    "code": "SUBSIDIZED",
             "isSubsidized": true
},
       "returnFareFamily": {
    "category": "ECOLIGHT",
    "code": "ECOLIGHTRU",
             "isSubsidized": true
},
       "fares": [
            {
                  "fareBasis": "RBDRTCD",
"isBreakpoint": true,
                  "passengerType": 1,
                  "flightDirection": 0,
                  "flightIndex": 0
},
             {
                  "fareBasis": "RBDRTZZ",
"isBreakpoint": true,
                  "passengerType": 2,
                  "flightDirection": 0,
                  "flightIndex": 0
},
             {
                  "fareBasis": "RBDRTCH",
                  "isBreakpoint": true,
```

```
"passengerType": 5,
                "flightDirection": 0,
                "flightIndex": 0
},
           {
                "fareBasis": "EPROW",
               "isBreakpoint": true,
                "passengerType": 1,
                "flightDirection": 1,
                "flightIndex": 0
},
           {
               "fareBasis": "EPRRT",
"isBreakpoint": true,
                "passengerType": 1,
                "flightDirection": 1,
                "flightIndex": 1
},
           {
               "fareBasis": "EPROW",
"isBreakpoint": true,
"passengerType": 2,
                "flightDirection": 1,
                "flightIndex": 0
},
           {
               "fareBasis": "EPRRT",
"isBreakpoint": true,
                "passengerType": 2,
                "flightDirection": 1,
                "flightIndex": 1
},
           {
               "fareBasis": "EPROW",
"isBreakpoint": true,
                "passengerType": 5,
                "flightDirection": 1,
                "flightIndex": 0
},
           {
                "fareBasis": "EPRRT",
               "isBreakpoint": true,
                "passengerType": 5,
                "flightDirection": 1,
                "flightIndex": 1
}
    ],
```

```
"sessionMarker": null
}
```

#### **Method GET reservation**

**Description:** allows to get information about a reservation that has already been created.

**Request format** /api/apiVersion/reservation

#### **Examples of requests**

/api/apiVersion/reservation?pnrNumber=AAEW5D&lastName=IVANOV

/api/apiVersion/reservationl?ticketNumber=2622471403682&lastName=PETROV

#### **Request parameters**

Parameter	Description	Notes
pnrNumber	PNR number for which information is needed	It can be transmitted both in Latin and in Cyrillic.
ticketNumber	Issued ticket number.  The ticket number must be 13 digits, for example: 2622438214047 or 2622438214046.	
lastName	Last name of one of the passengers added to the booking.  The parameter is passed in Latin. IBE will return an error if the surname is not in the PNR.	The surname is transmitted in Latin or Cyrillic, depending on how it was indicated when creating the booking.

*Note:* when requesting information about an order by ticket number, the ticketNumber and lastName fields must refer to the same passenger.

## **Response format**

```
{
  "data": {
    "tickets": [{
        "flightReferences": [
            "string"
        ],
        "number": string,
```

```
"passengerReference": string,
    "isInfantTicket": boolean,
    "issueDate": datetime
"outboundFareFamily": fareFamilyObject,
"returnFareFamily": fareFamilyObject,
    "separateFareFamily": fareFamilyObject,
"tsmData": [{
    "passengerReference": string,
    "price": number,
    "referenceType": string,
    "referenceNumber": string
  }
],
    "outboundBonus": {
  "bonus": "string",
"replacedBonus": "string"
    "returnBonus": {
  "bonus": "string",
"replacedBonus": "string"
},
"appliedDiscounts": [{
    "??*abtPeference":
    "flightReference": string,
    "amount": integer,
    "discountAmount": decimal,
    "id": string,
    "type": string,
    "passengerReference": string,
    "serviceCode": string,
    "promoNumber": string,
    "serviceReference": string,
    "usageType": integer,
    "promotionType": integer
  }
"currency": string,
    "flightReferences": [
      "string"
    ],
"passengerReference": string,
    "isInfantFare": boolean,
"totalPrice": number,
    "basePrice": number,
            "separatePrice": number,
            "outboundDiscount": integer,
            "returnDiscount": integer,
            "separateDiscount": integer,
    "priceHidden": boolean,
            "taxDetailsInformation": [{
                     "taxCategory": string,
                     "taxDetails": [{
```

```
"rate": string,
                             "currencyCode": string,
                             "type": string
                             }
                            ]
                             }
                            ]
                    }
],
"foodOnBoards": [{
    "departureAirport": string,
    "arrivalAirport": string,
    "flightNumber": string
    "commercialFamily": string,
    "ru": string,
    "en": string,
    "zh": string
}],
"reservationRetrieveStatus": integer,
"ticketCouponStatuses": [{
    "ticketNumber": string,
         "couponStatuses": {
             couponReference: boolean
             },
         "couponStatusesBySegment": {
             flightReference: boolean
"engineType": byte,
"isGroupReservation": bool,
"spentBonuses": {
  "amount": integer,
  "passengerReference": string
},
"spentBonusesByPassengers": [{
    "amount": integer,
    "passengerReference": string
  }
],
"appliedCertificates": [{
    "amount": integer,
    "number": string
  }
],
"originOfficeId": string,
"originOfficeType": string,
"journey": {
  "outboundFlights": [fullReservationFlight],
  "outboundFareFamily": {
    "code": string
  "returnFareFamily": {
    "code": string
  },
```

```
"outboundDuration": string,
      "returnFlights": [fullReservationFlight],
      "returnDuration": string,
           "separateFareFamilies": {
                 "code": string
        },
      "separateFlights": [fullReservationFlight],
      "separateDuration": string,
      "origin": string,
      "destination": string,
      "departureDate": datetime,
      "returnDate": datetime,
             "outboundBaggageAllowances": [{
                      "quantity": integer,
                      "weight": integer,
                      "passengerType": integer,
                                           "fareCode": "string"
                  }
             "returnBaggageAllowances": [{
    " " " integer,
                      "quantity": integer,
"weight": integer,
                      "passengerType": integer,
                                           "fareCode": "string"
                  }
             ],
                          "separateBaggageAllowances": [{
                                  "quantity": integer,
"weight": integer,
                          "passengerType": integer,
                                           "fareCode": "string"
            }
         ],
    "number": string,
    "reservationDate": datetime,
    "passengers": [passengerObject],
"services": [{
    "code": string,
         "status": string,
         "text": string,
         "petType": string,
                 "subType": string,
         "category": string,
         "passengerReference": string,
         "flightReference": string,
         "referenceNumber": string,
         "packReferenceNumber": string,
         "price": number,
         "issueDate": datetime,
                 "issuedByThirdPartyOffice": boolean,
                 "isIssuedByRefundableOffice": boolean
}
    ],
```

```
"seats": [{
        "number": integer,
        "title": string,
        "code": string,
        "status": string,
        "passengerReference": string,
        "flightReference": string,
        "referenceNumber": string,
        "packReferenceNumber": string,
        "issueDate": datetime,
               "issuedByThirdPartyOffice": boolean,
               "isIssuedByRefundableOffice": boolean
   "number": string,
      "code": string,
      "status": string,
      "referenceNumber": string,
      "packReferenceNumber": string,
      "issueDate": datetime,
         "issuedByThirdPartyOffice": boolean,
         "isIssuedByRefundableOffice": boolean
    "partnerId": integer,
        "partnerType": integer,
        "code": string,
        "amount": number,
        "currency": string,
        "passengerReference": string,
        "isInfantProduct": boolean,
               "isIssuedByRefundableOffice": boolean
      }
    ],
"hasSpecialConditions": boolean
    "errors": [{
        "ibeCode": integer,
        "description": string,
        "messages": [{
            "code": string,
            "text": string
          }
        ],
      }
    "success": boolean
}
```

#### fareFamily object

```
"fareFamilyId": integer,
  "code": string,
  "options": [{
    "code": string,
       "category": string,
       "order": integer,
       "showInPopup": boolean,
      "showInSummary": boolean, "showInUpsell": boolean,
       "showInFareIncluded": boolean,
       "showForAdult": boolean,
       "showForInfant": boolean,
       "showInBookingCart": boolean
    }
  ],
  "order": integer,
  "commercialFamily": string,
  "canRefund": boolean,
  "hasUpsale": boolean
}
```

#### fullReservationFlight object

```
{
    "aircraft": string,
    "aircraftIataCode": string,
    "referenceNumber": string,
    "origin": string,
    "destination": string,
    "departureDate": datetime,
    "arrivalDate": datetime,
    "arrivalDateUtc": datetime,
    "departureDateUtc": datetime,
    "flightNumber": string,
    "classOfService": string,
    "marketingCarrier": string,
    "operatingCarrier": string,
    "flightDuration": string,
    "stopDuration": string,
    "techStops": [{
            "arrivalDateTime": datetime,
            "departureDateTime": datetime,
            "airportCode": string,
            "stopDuration": string,
            "flightDurationUntilNextStop": string
        }
    ],
"flightDurationUntilNextStop": string,
    "arrivalTerminal": string,
    "departureTerminal": string,
```

```
"hash": string,
    "statuses": [
            string
    "codeshare": string,
    "codeshareFlightNumber": string
    "isCancelledByAirline": boolean,
        "isCheckinWithoutPseudo": boolean
}
passenger object
  "id": integer,
  "hasInfant": boolean,
  "referenceNumber": string,
  "relatedAdultReferenceNumber": string,
  "relatedInfantReferenceNumber": string,
  "relatedChildrenReferenceNumbers": [
     "string"
  ],
"firstName": string,
  "middleName": string,
  "surname": string,
  "passengerType": integer,
```

#### **Response options**

]

"isAdult": boolean,
"birthDate": datetime,

"nationality": string,
"documentNumber": string,

"email": string,
"phone": string,
"documentType": integer,

"documentExpiryDate": datetime,

"accompanimentBookingsInfo":[

}

"sex": integer,

Parameter	Description	Notes
success	Sign of the success of the	

"number": string,
"surname": string

}

Pa	rameter	Description	Notes
		request.	
		If the errors array is empty, then the field value will be true	
dat	ta	The data returned by the request	
1	tickets	Information about issued tickets	
	flightReferences	Flight segment	
		Ticket number.	
	number	<b>Example</b> : 262 2439494143	
	passengerReference	A reference to the passenger to whom this ticket belongs.	
	isInfantTicket	An sign that this passenger has a baby	
	issueDate	Date and time of issuing the tickets.	
	outboundFareFamily	An array of farFamily objects with information about the selected fares for the "outbound" flight	
	returnFareFamily	An array of farFamily objects with information about the selected fares for the "return" flight	
	separateFareFamilies	Service field with information about the selected fare for a flight without reference to a segment	
1	tsmData	An array of objects with information about additional services added to PNR	
	passengerReference	Reference to the passenger to	

Par	ameter	Description	Notes
		whom this service relates	
	price	Service cost	
	referenceType	The type of reference to the entry in the PNR, usually "SSR"	
	referenceNumber	SSR number. Each service has a unique SSR number in the PNR	
o	utboundBonus	Bonuses for flying there	
	bonus	Current number of bonuses awarded for the flight	
	replacedBonus	Outdated number of bonuses awarded per flight	
r	eturnBonus	Bonuses for return flights	
	bonus	Current number of bonuses awarded for the flight	
	replacedBonus	Outdated number of bonuses awarded per flight	
a	ppliedDiscounts	Discounts applied in this PNR.	
	flightReference	Reference to the segment for which the discount was applied	
	amount	Discount rate as a percentage	
	discountAmount	The absolute value of the discount in rubles	
	id	ID of the campaign in CRM for which the discount was applied	
	type	Discount type. Possible values:	
		DISCOUNT - regular	

Para	ameter	Description	Notes
		discount,	
		PROMO - discount on the flight promo code.	
		PROMOCODE - discount for additional services with a promotional code.	
	passengerReference	Reference to the passenger for whom the discount was applied.	
	serviceCode	The code of the added service for which the discount was applied.	
	promoNumber	The number of the applied promotional code from CRM.	
	serviceReference	Service identifier within the current booking.	
	usageType	Discount type: on tariff or on order	
	promotionType	Type of promo code: for a flight or for a service	
b	aseFarePrices	An array with information about base prices for tariffs.	
	currency	The currency in which the value is presented.	
		Example value: RUB	
	flightReferences	Flight segment	
	passengerReference	Reference to the passenger for whom the cost is determined.	
	isInfantFare	The sign if the passenger is an infant	
	totalPrice	Total price	

arameter		Description	Notes
base	ePrice	Base price (excluding tariffs and fees)	
sepa	aratePrice	Price per segment without direction	
outl	boundDiscount	An amount of discount for "There" route	
retu	ırnDiscount	An amount of discount for "From" route	
sepa	arateDiscount	The amount of discount applied to segments without direction	
pric	reHidden	The sign if the rate amount should be hidden for the client. Will be "true" for IT-tariffs.	
tax	DetailsInformation	Services information about tariffs and fees.	
	taxCategory	Tax category	
	taxDetails	Array of objects with information about tariffs and fees details.	
	rate	Tariff/fee sum	
	currencyCode	Currency code	
	type	Tariff/fee type	
foodO	nBoards	An array with information about meals available on flights	
departureAirport		Departure airport	
arri	valAirport	Arrival airport	
flightNumber		Flight number	
com	nmercialFamily	Fare family type (different meals may be available on the same flight for economy and	

Para	ameter	Description	Notes
		business).	
	ru	Translation of the option into Russian	
	en	Translation of the option into English	
	zh	Translation of the option into Chinese	
		Reservation receipt status.	
		Can take values:  0 - Ok (success)	
re	eservationRetrieveStatus	1 - TicketRequired (group booking, the passenger did not indicate the ticket number)	
		2 - InvalidTicketNumber (group booking, the passenger indicated an incorrect ticket number)	
ti	cketCouponStatuses	Array of information about statuses of flight coupons.	
	ticketNumber	Ticket number.	
	couponStatuses	Statuses of flight coupons.	
	couponStatusesBySegment	Statuses of flight coupons for flight segments.	
		The system in which the reservation was created.  Can take values:	
e	ngineType	0 - Unknown,	
		2 - Tais,	
		4 - Sirena	

ara	meter	Description	Notes
is	GroupReservation	Group booking flag	
spentBonuses		Object with information about the total count of bonuses spent	
	amount	Count of bonuses	
	passengerReference	Reference to the first passenger	
sı	oentBonusesByPassengers	An array with information about the number of bonuses spent by a specific passenger	
	amount	Count of bonuses	
	passengerReference	Reference to the passenger	
aj	ppliedCertificates	An array with information about applied certificates	
	amount	Certificate denomination	
	number	Certificate number	
OI	riginOfficeId	The office under which the reservation was created.	
		For example, SVXU608AZ	
Oi	riginOfficeType	The type of office under which the reservation was created.	
		Possible values: dictionary of offices	
jo	urney	Flight information for this booking	
	outboundFlights	An array of fullReservationFlight objects with details of "outbound" flights	
	outboundFareFamily	Service field with information about the selected fare for the	

Parameter		Description	Notes
		"outbound" flight. For example, ECOFLEXRU	
returnFar	reFamily	Service field with information about the selected fare for the "return" flight	
outbound	Duration	Total duration of the "outbound" flight	
returnFl	ights	An array of fullReservationFlight objects with detailed information about the "return" flights	
returnDu	ration	Total duration of the "return" flight	
separateF	<sup>7</sup> areFamilies	Service field with information about the selected fare for a flight without reference to a segment	
separate	Flights	An array of fullReservationFlight objects with detailed information about flights without reference to a segment	
separateI	Ouration	Total flight duration without reference to segment	
origin		Initial airport of departure	
destination	on	Initial airport of arrival	
departure	eDate	Departure date	
returnDa	te	Return date	
outboun	dBaggageAllowances	An array of objects containing detailed information about baggage allowances for the "outbound" route	
returnBa	aggageAllowances	An array of objects containing detailed information about	

Para	nmeter	Description	Notes
		baggage allowances for the "return" route	
	separateBaggageAllowances	An array of objects containing detailed information about baggage allowances for segments not tied to a destination	
	containsInternationalFlights	A sign of one airports of booking isn't in Russia	
nı	umber	Number of PNR	
re	eservationDate	Date and time of booking creation	
pa	assengers	An array of passengerData objects with passenger information	
se	ervices	Array of objects with information about additional services added to the booking	
	code	Additional service code  Possible values: dictionary of additional codes services	
	status	Service adding status.  Example: HK - service added successfully	
	text	Text in ssr format for sending pet information.  Example: DOG 1PC 8KG 45X35X25	
	petType	Pet type Possible values: DOG, CAT, PARROT, CANARY	

Para	ameter	Description	Notes
	subType	Sport Equipment type  Possible values: BIKE, SKIS, SURFING, FISHING, GOLF, HOCKEY, SCOOTER	
	category	Additional service category  Possible values: dictionary of additional service codes	
	passengerReference	Reference to the passenger for which the additional service has been added	
	packReferenceNumber	Reference to the service package in which the service was added	
	flightReference	Reference to the segment on which the service operates	
	referenceNumber	SSR number. Each service has a unique SSR number in the PNR.	
	price	Additional service cost	
	issueDate	Date and time of issuing the service.	
	issuedByThirdPartyOffice	A sign that the service was issued by a third-party office in relation to the office under which the booking was issued.	
	isIssuedByRefundableOffice	Sign that the return of the service is not possible, since it is added by a third-party office.	
S	eats	An array of objects with information about the places added to the booking	
	number	The row on which the seat is selected	

Par	rameter	Description	Notes
	title	Place	
	code	Seat selection service code. Value: RQST	
		Service adding status.	
	status	Example: HK - service added successfully	
	passengerReference	Reference to the passenger for whom the additional service has been added	
	flightReference	Reference to the segment on which the service operates	
	referenceNumber	SSR number. Each service has a unique SSR number in the PNR.	
	packReferenceNumber	Reference to the service package in which the location was added	
	issueDate	Date and time of issuing the service.	
	issuedByThirdPartyOffice	A sign that the service was issued by a third-party office in relation to the office under which the booking was issued.	
	isIssuedByRefundableOffice	Sign that the return of the service is not possible, since it is added by a third-party office.	
i	nsurance	Object with information about the insurance added to the booking	In developing
	number	Insurance document number	
	and a	Insurance code	
	code	Possible values: dictionary of	

Par	ameter	Description	Notes
		additional services (category insurance)	
	status	Service adding status.  Example: HK - service added successfully	
	referenceNumber	SSR number. Each service has a unique SSR number in the PNR.	
	packReferenceNumber	Reference to the service package in which the service was added	
	issueDate	Date and time of issuing the service.	
	issuedByThirdPartyOffice	A sign that the service was issued by a third-party office in relation to the office under which the booking was issued.	
	isIssuedByRefundableOffice	Sign that the return of the service is not possible, since it is added by a third-party office.	
p	artnerProducts	Array of objects with information about the partner services added to the booking	
	partnerId	Unique ID of the partner in the IBE engine.	
	partnerType	Unique code of partner's type	
	code	Partner service code.  Each partner has unique service codes.  See the codes for partner services in Attachment 5.	
	amount	Partner's service cost.	

P	Parameter		Description	Notes
		currency	Tariffication currency	
		passengerReference	Reference to the passenger for whom the service has been added	
		isInfantProduct	The sign of service for infant	
		isIssuedByRefundableOffice	Sign that the return of the service is not possible, since it is added by a third-party office.	
	ha	asSpecialConditions	The sign if one of the following services has been added to the booking: PETC, CBBG, WEAP, UMNR, MAAS, MEDA, EXST, STCR, WCHR, WCHC, WCHS, WCBD, WCBW, WCMP, WCOB, DEAF, BLND, DEPA, DEPU	
er	'roı	rs	Information about errors that occurred during the operation of the service	
	ib	eCode	Error code	
	de	escription	Error description	
	m	essages	An array of objects containing errors. The array may be empty, it is recommended to analyze the error by the ibeCode field	
		code	Error code	
		text	Error text	

# fareFamily

Parameter	Description
-----------	-------------

Parameter	Description
fareFamilyId	Serial number of the tariff family, used in recommendations.
	Family code, for example:
code	ECOLIGHT/ECOFLEX/ECOPREM and etc.
	Possible values: see the dictionary of the main tariff categories
order	Fare family display order
a a mana a mai a l'E a mai la a	Fare family type, for example:
commercialFamily	U6ECONOMY or U6BUSINESS
canRefund	The sign if the tariff is refundable
hasUpsale	The sign shows whether the given tariff can be "increased" to the next one in the price category.
	Array of objects with information about tariff options.
options	Used for the website of the booking engine.
	Tariff option code
	For example:
	upTo5bonuses
code	refundExchangeProhibited
	mealsOnBoard
	and etc.
	Used for the website of the booking engine.
	Category code for option
gatagerry	For example:
category	bonus, ffServices and etc.
	Used for the website of the booking engine.
order	Order for option output

Parameter		Description
	showInPopup	Whether to show an option in the "your options" pop-up window.
	showInSummary	Whether to show the option on the Summary page.
	showInUpsell	Whether to show the option in the information about the tariff increase.
	showInFareIncluded	Whether to show an option when selecting a filter.
	showForAdult	Whether to show an option for an adult passenger.
	showForInfant	Whether to show an option for a baby.
	showInBookingCart	Whether to show an option in the shopping cart.

# full Reservation Flight

Parameter	Description	Notes
aircraftIataCode	IATA aircraft code	
referenceNumber	Reference to the current flight segment	
origin	Departure airport for the current segment	
destination	Destination airport for the current segment	
departureDate	Departure date and time for the current segment	
arrivalDate	Arrival date and time for the current segment	
arrivalDateUtc	Date and time of arrival for the current segment in UTC	
departureDateUtc	Departure date and time for the current segment in UTC	
flightNumber	Flight number	
classOfService	Information about the selected tariff	

Parameter	Description	Notes
	Marketing airline	
marketingCarrier	For example: U6, S7	
operatingCarrier	The airline actually performing the flight	
	For example: U6, OK	
techStops	An array with information about technical landings	
arrivalDateTime	Date and time of arrival at the pick-up point	
departureDateTime	Date and time of departure from the pick-up point	
airportCode	Airport code of the stop	
stopDuration	Duration of the stop	
flightDurationUntilNextStop	Duration of the flight to the next stop	
flightDurationUntilNextStop	Duration of the flight to the next stop	
arrivalTerminal	Terminal number at the point of arrival	
departureTerminal	Terminal number at the point of departure	
hash	Unique hash of the flight	
statuses	Array with information about segment statuses	
	The full name of the airline that operates the codeshare flight.	
codeshare	For example: Czech Airlines for operating Carrier = OK	
	For operatingCarrier = U6,	

Parameter	Description	Notes
	this field is not filled in	
codeshareFlightNumber	The flight number of the airline that operates the codeshare flight.	
isCancelledByAirline	Sign of cancellation of flights by the airline	
isCheckinWithoutPseudo	Sign of hiding a pseudo- booking at the checkin	

# out bound Baggage Allowances, return Baggage Allowances, separate Baggage Allowances

Parameter	Description
quantity	count of baggage
weight	weight of baggage
passengerType	passenger type
fareCode	fare family for which baggage is returned

# passengerData

Parameter	Description	Note
id	Passenger's serial number (numbered from 1)	
hasInfant	An indication that this passenger has a baby	
referenceNumber	Reference to this passenger in the booking	
relatedAdultReferenceNumber	Reference to the adult passenger in the booking with whom the child or infant flies (it returns only	

Parameter	Description	Note
	for children and infants)	
relatedInfantReferenceNumber	Reference to the infant passenger in the booking with whom the adult flies (it returns only for adult)	
relatedChildrenReferenceNumbers	An array of links to child passengers which are travelling with an Adult (the array will be received only for an Adult with a children in the same booking)	
firstName	Passenger's name	
middleName	Passenger's patronymic (may be absent)	
surname	Passenger's surname	
passengerType	Passenger type.	
	Possible values: dictionary of passenger types	
	The sign if the passenger is an adult	
isAdult	true for passengers type ADT/SRC/YTH	
	false for passengers type CHD/INF	
birthDate	Date of birth	
sex	Passenger gender	
	Possible values: dictionary gender of passengers	
nationality	Nationality (country)	
	Possible values: dictionary of countries	

Parameter	Description	Note
	Masked number of document of passenger.	
documentNumber	Format:	
	<ul><li>passport: 53X67,</li><li>birth certificate: VIX43.</li></ul>	
documentType	Document type	
	Possible values: dictionary of document types	
	Date until which the document is valid	
documentExpiryDate	Mandatory only for a foreign passport. For other documents, +10 years from the current date is automatically set	
loyaltyCard	Loyalty card number "Wings"	
email	Email	
phone	Phone	
accompanimentBookingsInfo	An array containing information about bookings with accompanying passengers	For MIR, contains information about linked MNN and MNS bookings For MNN, MNS contains information about the booking from the MIR to which the current booking is linked
number	PNR booking with accompanying passenger	

Parameter		Description	Note
	surname	Last name of the accompanying passenger	

#### **Method DELETE reservation**

**Description:** the method allows to delete created unpaid reservation, after successful deletion of booking, all flight segments in the response of GET api/reservation in journey array have status XX.

Request format /api/apiVersion/reservation

## **Request parameters**

None. Cancellation reservations are identified by the session ID passed in the X-Session header.

## **Response format**

## **Response parameters**

F	Parameter	Description
		Sign of the success of the request.
S	uccess	If the errors array is empty, then the field value will be true
e	rrors	Information about errors that occurred during the operation of the service.
	ibeCode	Error code, see Attachment 1. IBE error codes
	description	Error description, see Attachment 1. IBE error codes

I	ara	ameter	Description
	messages		An array of objects containing errors from Sirena answer. The array may be empty, it is recommended to analyze the error by the ibeCode field
		code	Sirena error code
		text	Sirena error text

## Examples of unsuccessful requests and responses

An attempt to delete if the booking information was not loaded into the context.

## Booking management service v2.3

#### Changes in v 2.3:

In GET reservation service's response insurance object was replaced with insurances array.

In the GET reservation service response, the isCheckinWithoutPseudo parameter is added to the outboundFlights[], returnFlights[], separateFlights[] arrays.

The isIssuedByRefundableOffice parameter is added to the GET reservation service response and can be displayed in the tickets[]; ticketsWithoutFlightRefs:[]; informationalServices:[]; seats[]; insurances[]; services:[]; partnerProducts[] arrays.

## **Response format**

```
"outboundDuration": string,
  "returnFlights": [fullReservationFlight],
  "returnDuration": string,
  "origin": string,
  "destination": string,
  "departureDate": datetime,
  "returnDate": datetime
},
      "baseFarePricesBySegment": [
    "flightReference": string,
    "passengerReference": string,
    "totalPrice": string,
    "basePrice": string,
    "discountAmount": string,
    "passengerType": integer
  }
"fareBasisCodesFlightRefs" :{[fareBasisCodesFlightRefs object]},
"number": string,
"reservationDate": datetime,
"bookingTimeLimit": datetime,
"passengers": [{
    "id": integer,
    "hasInfant": boolean,
    "referenceNumber": string,
           "relatedAdultReferenceNumber": string,
           "relatedInfantReferenceNumber": string,
           "relatedChildrenReferenceNumbers": [
      "string"
    "firstName": string,
    "middleName": string,
    "surname": string,
    "passengerType": integer,
    "isAdult": boolean,
    "birthDate": datetime,
    "sex": integer,
    "nationality": string,
    "documentNumber": string,
    "documentExpiryDate": datetime,
    "email": string,
    "phone": string,
    "documentType": integer,
            "boardingPassRestrictedBySegment": {
        flightReference: boolean
    }
  }
"services": array,
"seats": array,
"insurances": [{
    "number": string,
    "passengerType": integer,
```

```
"code": string,
        "status": string,
        "passengerReference": string,
        "price": double,
"isIssuedByRefundableOffice": boolean
      }
    ],
"isAgentReservation": boolean,
    "isPayForbiddenForAgency": boolean,
    "partnerProducts": array,
        "flightsWithOpenDateCount": integer,
    "relatedPnrNumbers": [
          string
        ],
  },
"errors": [{
      "ibeCode": integer,
      "description": string,
      "messages": [{
          "code": string,
          "text": string
        }
      "success": boolean
    }
  ]
}
fullReservationFlight object
{
    "aircraft": string,
    "aircraftIataCode": string,
    "referenceNumber": string,
    "origin": string,
    "destination": string,
    "departureDate": datetime,
    "arrivalDate": datetime,
    "arrivalDateUtc": datetime,
    "departureDateUtc": datetime,
    "flightNumber": string,
    "classOfService": string,
    "marketingCarrier": string,
    "operatingCarrier": string,
    "flightDuration": string,
    "stopDuration": string,
    "techStops": [{
             "arrivalDateTime": datetime,
             "departureDateTime": datetime,
             "airportCode": string,
            "stopDuration": string,
            "flightDurationUntilNextStop": string
        }
    ],
```

```
"flightDurationUntilNextStop": string,
     "arrivalTerminal": string,
     "departureTerminal": string,
     "hash": string,
     "statuses": [
              string
            ],
     "codeshare": string,
    "codeshareFlightNumber": string
"isCancelledByAirline": boolean,
"isCheckinWithoutPseudo": boolean
}
fare Basis Codes Flight Refs\ object
  "fareBasis": string,
  "flightReferenceNumber": string,
  "passengerReferenceNumber": string,
  "expirationUtc": datetime
}
```

## **Response parameters (short format)**

	Parameter	Description	Notes
		Sign of query execution success.	
9	success	If errors array is empty, field value will be set to true	
•	data	Returned data	
	isGroupReservation	IT/BT reservation sign	In developing
	isCompanyGroupReservation	Group booking sign	In developing
	number	PNR number	
	reservationDate	Booking creation date and time	
	bookingTimeLimit	Date and time until which the unpaid booking will exist (rules are set in the settings in IBE)	
	passengers	Array of passengerData objects with information about passengers	
	services	Array of objects with information about auxiliary services.	

-		
seats	Array of objects with information about selected seats.	
insurances	Array of objects with information about selected insurances.	In developing
partnerProducts	Array of objects with information about partner's services.	
summToPayForExchange	The amount to be paid for ticket exchange (parameter is returned only when rebook process is in progress)	
journey	Information about flights for present booking.	
isAgentReservation	Agent booking sign to disable the booking management module	
flightsWithOpenDateCount	Number of flights with open dates	
relatedPnrNumbers	An array of related PNRs (obtained as a result of splitting a reservation as part of a partial exchange).	
isPayForbiddenForAgency	Sign that payment is not available for an unpaid booking	
baseFarePricesBySegment	An array of object with information about base fare prices by segments of flights	
fareBasisCodesFlightRefs	Array of objects with fare basis info	
errors	Information about errors appeared during query execution.	

# $insurances\ structure\ description$

Parameter	Description
number	Insurance document number
passengerType	Passenger type
code	Service code. Example: "URFL"
status	Service status, Example: "HK"
passengerReference	Reference to passenger to whom present service is provided
price	Service price

isIssuedByRefundableOffice	Sign that the return of the service is not possible, since it is added by a third-party office.
----------------------------	---

#### passengerData structure description

Parameter	Description
boardingPassRestrictedBySegment	Restrictions on obtaining a boarding pass by segment

#### Method POST api/Reservation

**Description:** booking creating, adding an information of flights, passengers, fares.

**Request format:** /api/apiVersion/Reservation

#### **Request body**

It has totally the same realisation as for post api/Reservation v2.2

#### **Response format**

It has the same realisation for post api/Reservation v2.2. A **data** object is extended by the baseFarePricesBySegment [] array and InformationalServices[] array.

## Changes in version 2.3:

In the GET reservation service response, the isCheckinWithoutPseudo parameter is added to the outboundFlights[], returnFlights[], separateFlights[] arrays.

The isIssuedByRefundableOffice parameter is added to the GET reservation service response and can be displayed in the tickets[]; ticketsWithoutFlightRefs:[]; informationalServices:[]; seats[]; insurances[]; services:[]; partnerProducts[] arrays.

In the POST reservation service response, the isExchangePermitted parameter is added to the data{} object.

In the request body and the response of the POST reservation service, the subsidiesType parameter is added to the data{} object.

## baseFarePricesBySegment

```
{
   "data": {
        "isGroupReservation": boolean,
```

```
"isCompanyGroupReservation": boolean,
"journey": {
  "outboundFlights": [fullReservationFlight],
  "outboundFareFamily": {
    "code": string
  "outboundDuration": string,
  "returnFlights": [fullReservationFlight],
  "returnDuration": string,
  "origin": string,
  "destination": string,
  "departureDate": datetime,
  "returnDate": datetime
},
     "baseFarePricesBySegment": [
    "flightReference": string,
    "passengerReference": string,
    "totalPrice": string,
    "basePrice": string,
    "discountAmount": string,
    "passengerType": integer
 }
],
   "fareBasisCodesFlightRefs" :{[fareBasisCodesFlightRefs object]},
"number": string,
"reservationDate": datetime,
   "bookingTimeLimit": datetime,
"passengers": [{
    "id": integer,
    "hasInfant": boolean,
    "referenceNumber": string,
           "relatedAdultReferenceNumber": string,
           "relatedInfantReferenceNumber": string,
           "relatedChildrenReferenceNumbers": [
      "string"
    "firstName": string,
    "middleName": string,
    "surname": string,
    "passengerType": integer,
    "isAdult": boolean,
    "birthDate": datetime,
    "sex": integer,
"nationality": string,
    "documentNumber": string,
    "documentExpiryDate": datetime,
    "email": string,
    "phone": string,
    "documentType": integer
 }
"services": array,
"seats": array,
```

```
"insurances": [{
         "number": string,
         "passengerType": integer,
         "code": string,
         "status": string,
                 "passengerReference": string,
                 "price": double,
         "isIssuedByRefundableOffice": boolean
      }
    ],
"isAgentReservation": boolean,
"arbiddonForAgency":
        "isPayForbiddenForAgency": boolean,
        "isExchangePermitted": boolean,
    "partnerProducts": array,
        "flightsWithOpenDateCount": integer
 },
"errors": [{
    "'bacode'
      "ibeCode": integer,
      "description": string,
      "messages": [{
           "code": string,
           "text": string
        }
      "success": boolean
    }
  ]
}
```

## Response parameters (at the shot form, only extention)

	Parameter	Description	Notes
•	data	A data which were received by the request	
		An array of object with information about base fare prices by segments of flights	

#### **InformationalServices**

```
{
  "code": string,
  "status": string,
  "text": string,
  "petType": string,
  "category": string,
  "passengerReference": string,
  "flightReference": string,
  "referenceNumber": string,
  "price": number,
  "issueDate": datetime,
  "issuedByThirdPartyOffice": boolean,
```

```
"isIssuedByRefundableOffice": boolean
}
```

## Response parameters

Parameter	Description	Notes
,	Additional service code	
code	Possible values: reference codes of the add. services	
	The status of adding the service.	
status	Example: HD service successfully added	
	Text in ssr format for sending information.	
text	Example: DOG 1PC 8KG 45X35X25	
	Type of pet.	
petType	Possible values: DOG, CAT, PARROT, CANARY	
	Category of additional service	
category	Possible values: Reference codes add. services	
passengerReference	Link to the passenger for whom an additional service has been added	
flightReference	Link to the segment on which the service operates	
referenceNumber	SSR number. There is an unique SSR number for each service in PNR	
price	The cost of an additional service	
issueDate	Date and time of service release.	
issuedByThirdPartyOffice	A sign that the service was issued by a third-party office in relation to the office under which the booking was issued	
isIssuedByRefundableOffice	Sign that the return of the service is not possible, since it is added by a third-party office.	

## Auxiliary services management service: api/services, api/catalogue

## Auxiliary services management service v2.2

API Service	catalogue / services
Short description	Services allows to retrieve information about auxiliary services and add them to PNR.
Supported HTTP(S)- methods	GET, POST
Conterminous systems	Sirena: svc_prices, svc_add
methods used	CRM: getContactMarkup, EmdPromoCode

#### **GET** catalogue method

**Description**: Obtaining of information about auxiliary services available for adding to booking.

Request format /api/apiVersion/catalogue

## **Request parameters**

Parameter	Description
currency	Current that is used for pricing services

## **Response format**

```
"excludedSeats": [string],
        "includedServiceCode": string,
        "code": string,
        "flightReferences": [{
                 "referenceNumber": string,
                 "passengerPrices": [{
                     "referenceNumber": string,
                     "amount": decimal
                     }]
                 }]
        }],
"seatServices": [{
"seatCharacteristics": [string],
    "code": string,
    "flightReferences": [{
        "referenceNumber": string,
        "passengerPrices": [{
             "referenceNumber": string,
            "amount": number
          }
        ]
      }
    ]
  }
"petsServiceConfiguration": [{
    "petsList": [string],
    "flightReferences": [string]
  }
"partnerId": integer,
    "partnerType": integer,
    "code": string,
    "amount": number,
    "currency": string,
            "bookingStatus": integer,
    "passengerReference": string,
    "isInfantProduct": boolean,
    "bookingId": string,
    "internalError": integer,
    "internalErrorMessage": string
  }
],
"portions": [{
    "type": st!
    "type": string,
    "number": string,
    "flightReferenceNumbers": [string]
  }
],
"serviceCategories": [{
'a": string,
    "code": string,
    "category": string,
        "subCategory": string,
```

```
"order": integer,
       "fullDirection": boolean,
       "onlyForRussianCitizens": true
  ],
       "serviceOptions": [{
               "code": string,
               "preselect": boolean, "category": string,
               "priority": integer,
"flightReferences": [string],
               "passengerReferences": [string]
         }
  ],
       "crmEmdPromoCodes": [{
       "serviceType": string,
       "promo": string,
       "promoDescription": string,
       "discountLevel": integer,
       "expireDate": datetime
     }
  ]
"moneyWallCoefficient": string
},
"errors": [{
    "ibaCode"
     "ibeCode": integer,
     "description": string,
     "messages": [{
         "code": string,
         "text": string,
         "additionalInfo": {
                "ssrType": string,
                "info": string
          }
     ]
  }
"success": boolean
```

#### **Response parameters**

Parameter	Description	Note
success	Sign of query execution success.	
	If errors array is empty, field value will be set to true	

data		Returned data	
S	ervices	Array of objects with information about airline's available services	
		Service code	
	code	Possible values	
	flightReferences	Array of objects with information about segments and passengers to whom services are available as well as service's prices	
	referenceNumber	Reference to flight segment	
	passengerPrices	Array of objects with information about passenger and service price	
	referenceNumber	Reference to passenger	
	amount	Price of service	
p	acks	An array with available service packages	In developing
	includedSeats	An array of characteristics of available seats within the service package	
	excludedSeats	An array of characteristics of unavailable places within the service package	
	includedServiceCode	Included service code	
		Service package code.	
	code	Possible values: Attachment 2. Dictionary of service packages	
	flightReferences	The arrays with information about the position and passengers, which services are available, as well as the cost of these services.	
	referenceNumber	Flight segment reference	
	passengerPrices	An array of objects with information about the passenger and the cost of the service	
	referenceNumber	Reference to a specific passenger	
	amount	Service cost for a specific passenger	

serviceOptions	Array of objects with information about which services should be automatically pre-selected in IBE frontend.	
category	Service category	
code	Service code	
	Possible values	
flightReferences	Array of objects with information about segments on which services are available	
preselect	If true, service should be automatically preselected in UI.	
	Note: Initial logic was applied to Web-client usage	
	Priority of automatic service selection, 0 - highest.	
priority	For instance, if service with priority 0 is unavailable, then service with priority 1 will be added etc.	
passengerReferences	Array of objects with information about references to passengers for which the service is preselected.	
seatServices	Array of objects with information about flight's seats available for selection	
	<b>IMPORTANT:</b> api/seatmap service returns more detailed information about available seats and should be used for "seat selection" service booking.	In developing
code	Service code, SEAT	
flightReferences	Array of objects with information about segments and passengers to whom services are available as well as service's prices	
referenceNumber	reference to flight segment	
passengerPrices	Array of objects with information about passenger and service price	
referenceNumber	Reference to passenger	
amount	Price of service	

petsServiceConfi	Array of objects with information about "pet transportation" service availability on different segments. Needed for pet transportation validation on "business" family fares.
petsList	Array of strings, containing list of pet types available for transportation
flightReference	Array of strings, containing list of segments on which service is available
serviceCategorie	Array of objects with information about services and order of its display in website
code	Service code
category	Service category
order	Display index in auxiliary services page. 1 - page top (A deprecated option that is no longer used. The order of arrangement of additional services is determined on the side of the booking engine)
fullDirection	Service for directions
onlyForRussiar	Citizens Service only for russian citizens
partnerProducts	Array of objects with information about partners services
partnerId	Partners unique ID in IBE.  Alfastrakh – 1,  Sealine insurance – 2,  Aeroexpress – 4
partnerType	Partner type  Insurance – 1,  Aeroexpress – 2
code	Partner's service code.
amou-t	Each partner has its own unique set of codes.
amount	Partner's service cost.

	currency	currency	
		Partner's service booking status	
		Possible values:	
	bookingStatus	0 - unknown, 1 - service is not issued,	
		2 - service is issued,	
		3 - error issuing of service,	
		4 - refund performed	
	portions	Service field	In developing
	type	Service field	
	number	Service field	
	flightReferenceNumbers	Service field	
e	rrors	Information about errors appeared during query execution.	
	ibeCode	Error code	
	description	Code description	
	messages	Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode	
	code	Sirena error code	
	text	Sirena error text	

## POST services method

**Description:** allows you to add services to the booking.

Request format: /api/apiVersion/services

# **Request body:**

```
{
    "seats": [{
        "number": integer,
```

```
"title": string,
   "code": string,
   "text": string,
   "passengerReference": string,
   "referenceNumber": "string"
   }
],
   "services": [{
      "code": string,
      "text": string,
      "passengerReference": string,
      "flightReference": string,
      "flightReference": string,
      "referenceNumber": string
   }
],
   "currency": string
```

## **Request parameters:**

	Parameters	Description
serv	vices	Array of objects with information about added services
C	ode	Additional service code
te	ext	Animal type
p	oassengerReference	Passenger reference
fl	lightReference	Flight reference
re	eferenceNumber	Paid services reference
seat	ts	Array of objects with information about added seats
n	umber	Row number of selected seat
ti	itle	Seat
C	ode	Seat code
te	ext	Text
re	eferenceNumber	Paid seat reference
p	oassengerReference	Passenger reference
fl	lightReference	Flight reference
cur	rency	Currency

## **Examples of requests with the services of the Airline**

```
Add one extra baggage
{
    "seats": [],
    "services": [
         {
              "code": "ABAG",
              "passengerReference": "12",
              "flightReference": "12"
    ],
         "currency": "RUB"
}
Add seat
{
    "seats": [
         {
              "number": 7,
"title": "A",
              "passengerReference": "12",
              "flightReference": "12"
         }
    ],
"services": [],
"currency": "RUB"
}
Add pet
{
    "seats": [],
    "services": [
         {
              "code": "PETC",
"text": "DOG",
              "passengerReference": "12",
              "flightReference": "12"
    ],
         "currency": "RUB"
}
```

## Logic of adding/removing services to a booking

IBE always updates the booking for additional services based on the parameters in the request.

## **Example:**

```
Add baggage
{
    "seats": [],
    "services": [{
        "code": "ABAG",
        "passengerReference": "12",
        "flightReference": "12"
    }
    ],
    "currency": "RUB"
}
```

To remove baggage from a booking, send the following request

```
{
    "seats": [],
    "services": [],
    "currency": "RUB"
}
```

This logic is implemented for all types of services

## **Response format**

The format of the response in terms of adding services is the same as the response of the GET api/reservation method.

## Service for obtaining information about additional services v2.3

## Changes in GET method response api/catalogue version 2.3:

Version 2.2	Version 2.3
In the services.flightReferences.referenceNumber array of type string changed to services.flightReferences.referenceNumbers array of type string.	
<pre>"services": [{</pre>	<pre>"services": [{         "code": string,         "flightReferences": [{</pre>

```
"referenceNumber": string,
                                                         "referenceNumber":
                               string,
                                                         "amount": number
"passengerPrices": [{
                                                    }
"referenceNumber": string,
                                                ]
                                           }
"amount": number
                                       ]
                     }
                                   }
                 ]
                               ]
             }
        ]
    }
1
```

In the packs.flightReferences.referenceNumber array of type string changed to packs.flightReferences.referenceNumbers array of type string.

```
"packs": [{
        "includedSeats":
[string],
    "excludedSeats":
                              "packs": [{
[string],
                                       "includedSeats": [string],
"includedServiceCode":
                                       "excludedSeats": [string],
string,
                                       "includedServiceCode": string,
        "code": string,
                                       "code": string,
        "flightReferences":
                                       "flightReferences": [{
[{
                                               "referenceNumbers": [string],
                                               "passengerPrices": [{
"referenceNumber": string,
                                                        "referenceNumber":
                              string,
"passengerPrices": [{
                                                        "amount": number
                                                   }
"referenceNumber": string,
                                               ]
                                           }
"amount": number
                                      ]
                     }
                                  }
                              ]
            }
        ]
    }
]
```

Changed the seatServices.flightReferences.referenceNumber array of type string to seatServices.flightReferences.referenceNumbers array of type string.

```
[string],
"code": string,
                                       "flightReferences": [{
                                               "referenceNumbers": [string],
        "flightReferences":
                                               "passengerPrices": [{
                                                        "referenceNumber":
[{
                              string,
"referenceNumber": string,
                                                        "amount": number
                                                   }
"passengerPrices": [{
                                               ]
                                           }
"referenceNumber": string,
                                       ]
                                  }
"amount": number
                     }
            }
        ]
    }
```

In version 2.3, the partnerProducts array has been removed.

In the array services[].flightReferences[] added information about available quotas for returned service (this array is returned only for service with the code = "PETC")

```
"services": [{
"services": [{
                                      "code": string,
        "code": string,
                                      "flightReferences": [{
                                               "referenceNumbers": [string],
        "flightReferences":
                                               "passengerPrices": [{
[{
                                                       "referenceNumber":
"referenceNumber": string,
                              string,
                                                       "amount": number
"passengerPrices": [{
                                                   }
"referenceNumber": string,
                                               "quotas": [{
                                                       "referenceNumber":
"amount": number
                              string,
                                                       "quantity": number
                     }
                                               ]
            }
        ]
                                          }
    }
                                      ]
                                  }
                              ]
```

At the v2.3 version in an array as serviceCategoryLabels[] receiving a data of additional option with Labels for appearing at the Front also the array has a data of label types.

```
"services": [{
```

In version 2.3, the serviceOptionLabels[] array displays the data of additional services, information of Labels to display, as well as the order of the Labels

At the v2.3 version in a sportEquipmentServiceConfiguration[] array receiving a dafa of able options for Sport equipment transportation option. it is receiving for "**Promo**" fare.

## Parameters of the serviceOptionLabels array[]

Parameter	Description
services	An array of objects with information about additional services, Label titles and their display on the page
serviceOptionLabels	An array of objects with additional service codes and Label information
code	Additional service code
labels	An array of objects with information about the Label's title and their location
labelTitle	The specific name/title of Label

I DEIOFILV	The priority of displaying Labels next to the service they belong to, where 0 is the top position above other labels
------------	--

#### Parameters of sportEquipmentServiceConfiguration[] array

Parameter	Description
subTypes	The array of strings with a list of able Sport equipment transportation options
flightReferences	The array of strings with a list of flight segments that are able to add the option

#### **Examples of requests and responses**

```
Error adding airline service (invalid service code)
    "seats": [],
                                   "errors": {
    "insurance": null,
                                     "services": [{
    "code": "ABBB",
    "partnerProducts": [],
    "services": [
                                          "passengerReference": "12",
         {
                                          "flightReference": "12",
             "code": "ABBB",
                                          "internalError": 1001,
                                          "internalErrorMessage": "Invalid
"passengerReference": "12",
                                   passenger or flight reference."
             "flightReference":
                                       }
"12"
                                     ]
        }
                                   }
    ]
Error when adding airline service (invalid reference to passenger)
    "seats": [],
                                   "errors": {
    "insurance": null,
                                     "services": [{
    "code": "ABAG",
    "partnerProducts": [],
    "services": [
                                          "passengerReference": "5",
         {
                                          "flightReference": "12",
             "code": "ABAG",
                                          "internalError": 1001,
                                          "internalErrorMessage": "Invalid
"passengerReference": "5",
                                   passenger or flight reference."
             "flightReference":
                                       }
"12
                                     ]
                                   }
    ]
```

#### Method for adding services to a booking: api/services/add

**Description:** a method for adding new services that allows not passing in the parameters already existing services in the order

Request format: api/apiVersion/services/add

#### **Request body**

```
{
    "services": [{
        "code": string,
        "text": string,
        "passengerReference": string,
        "refightReference": string,
        "referenceNumber": string
}
],
    "seats": [{
        "number": integer,
        "title": string,
        "code": string,
        "text": string,
        "passengerReference": string,
        "flightReference": string,
        "referenceNumber": string
}
]
```

#### **Request parameters:**

	Parameter	Description
sei	rvices	Array of objects with information about added services
	code	Additional service code
	text	Animal type
	passengerReference	Link to the passenger for whom the service is being added
	flightReference	Link to the segment for which the service is being added
	referenceNumber	Link to paid services. Taken from the GET api/reservation response.

	Parameter	Description	
se	ats	Array with objects about seats	
	number	Row number for selected seat	
	title	Seat	
	code	Seat code	
	text	Text	
	passengerReference	Passenger reference for adding seat	
	flightReference	Flight reference for adding seat	
	referenceNumber	Link to paid seats. Taken from the GET api/reservation response.	

#### Optimized method for removing services from booking api/services/removeByReferences

**Description:** a method for removing services from an order (more optimized analog than POST api/services/remove), provided that no ticket has been issued for the service and the flight segment for which the service was added has not yet departed.

**Note:** in the body request need to pass only references to those services that need to be deleted.

**Request format:** api/apiVersion/services/removeByReferences

### **Request body:**

#### **Request parameters:**

Parameter
-----------

Parameter		Description
services		The array with the links to services which need to delete from reservation
		Link to service which need to delete.
	referenceNumber	Value is possible to get from the response of GET api/reservation, parameter data.services[].referenceNumber
5	eats	The array with the links to seats which need to delete from reservation
	referenceNumber	Link to seat which need to delete.  Value is possible to get from the response of GET api/reservation, parameter data.seats[].referenceNumber

## **Response format:**

Response format regarding the removal of services and seats is the same with the response of GET api/reservation.

#### Method POST api/services/favorite

**Description:** allows you to get your favorite services for passengers

Request fromat /api/apiVersion/services/favorite

## **Request parameters**

Parameter	Description
docNumbers	Passengers' document numbers
emdCodes	Service codes
months	Number of months to search

## **Request body example**

```
{
  "DocNumbers": [
    string
```

], "errors": [], "success": boolean

Parameter		ameter	Description
d	data		The data returned by the request
	do	cNum	Document Number
	en	ndCode	Service code
	va	lue	Value
e	rroi	rs	Information about errors that occurred during the operation of the service.
	ibeCode		Error code
	de	escription	Error description
	messages		An array of objects containing the errors from Sirena's response. The array may be empty, it is recommended to analyze the error by the ibeCode field.
	code		Sirena error code
	text		Sirena error text
			Sign of the success of the request
success		ess	If the errors array is empty, then the field value will be true.

## **Request body example**

## Service for obtaining a cataolog of serivces without PNR

API service	CatalogueStandalone
Short description	Service allows to receive information about additional services without PNR
Supported HTTP(S)-methods	POST
Conterminous systems methods used	Sirena: pricing_variant

#### Method POST CatalogueStandalone

**Description:** get information about catalog of additional services without PNR

Request format: api/apiVersion/CatalogueStandalone

#### **Request body**

```
{
    "flights": {
        "destination": string,
                "departureDate": datetime,
                "arrivalDate": datetime,
                "flightNumber": string,
                "classOfService": string,
                "marketingCarrier": string,
                "operatingCarrier": string,
                "flightIndex": integer
        ],
"returnFlights": [{
"returnFlights": s
                "origin": string,
                "destination": string,
                "departureDate": datetime,
                "arrivalDate": datetime,
                "flightNumber": string,
                "classOfService": string,
                "marketingCarrier": string,
                "operatingCarrier": string,
                "flightIndex": integer
            }
        ]
   "outboundFareFamily": {
            "code": string,
```

```
"category": string,
           "isSubsidized": boolean
     },
"returnFareFamily": {
    'a" string,
           "code": string,
"category": string,
           "isSubsidized": boolean
     },
"fares": [{
                "passengerType": string,
                "flightIndex": integer,
"fareBasis": string,
                "isBreakpoint": boolean
           }
     ]
},
"passengers": [{
    "id": inf
           "id": integer,
           "firstName": string,
"middleName": string,
           "surname": string,
           "passengerType": string,
           "birthDate": datetime,
          "sex": string,
"loyaltyCard": string,
"disability": {
    "isDeaf": boolean,
    ""isDeaf": boolean,
                "isBlind": boolean,
                "hasGuideDog": boolean,
                "assistanceType": integer,
                "wheelchairType": integer,
                "commentary": string
          "nationality": string
     }
],
"currency": string
```

#### **Request parameters**

Parameter		Description	Note
flights		Object with information about flights	
	outboundFlights	An array of StandaloneInputFlight objects with information about flights in the "outbound" direction	
	returnFlights	An array of StandaloneInputFlight objects with information about flights in the "return" direction	

Parameter		Description	Note
fa	ires	Tariff information object	
	outboundFareFamily	Object with information on fares for "outbound" directions	
		Fare family code.	
	code	Data is taken from api/flights response: data.fareFamilies.code	
		The category of the tariff family.	
	category	Data is taken from api/flights response: data.fareFamilies.category	
	isSubsidized	Sign of a subsidized tariff.	In developin g
	returnFareFamily	Object with information on fares for the "return" route	
		Fare family code.	
	code	Data is taken from api/flights response: data.fareFamilies.code	
		The category of the tariff family.	
	category	Data is taken from api/flights response: data.fareFamilies.category	
	isSubsidized	Sign of a subsidized tariff.	In developin g
	fares	Array with information about tariffs for directions "outbound" and "return"	
	passengerType	Passenger type.	
	flightIndex	Segment number for a specific flight (numbered from 1)	
		Base rate name.	
	fareBasis	The data is taken from the api/flights response: data.recommendations.outboundFareDetails.fareBasis	

P	arameter	Description	Note
		and	
		data.recommendations.returnFareDetails.fareBasis	
		An indication of whether the tariff expires on the current segment.	
	isBreakpoint	The data is taken from the api/flights response: data.recommendations.outboundFareDetails.isBreakpoi nt and	
		data.recommendations.returnFareDetails.isBreakpoint	
pa	assengers	Object with passenger information	
	id	Passenger's serial number (numbered from 1) (required parameter)	
	firstName	Passenger's name	
1	middleName	Passenger's patronymic	
:	surname	Passenger's surname	
	passengerType	Passenger type (required parameter)	
	birthDate	Date of birth	
	sex	Passenger gender	
	loyaltyCard	Loyalty card number "Wings"	In developin g
	disability	Information about people with disabilities	
	isDeaf	Hearing impairment	
П	isBlind	Visual impairment	
	hasGuideDog	A guide dog must be accompanied, must be sent only together with the isBlind sign	
П	assistanceType	Passenger escort type	
	wheelchairType	Wheelchair type	
	commentary	Comment (optional)	

]	Parameter	Description	Note
	hasInfant	An indication that this passenger has a baby	
	nationality	Pax nationality	
	relatedInfantWithSeatI d	Id of the ins related to the adult	
•	currency	Search currency	

## StandaloneInputFlight

Parameter	Description	
origin	Departure airport	
destination	Arrival airport	
	Date and time of departure.	
	The data is taken from the api/flights response:	
	data.outboundFlights.flights.departureDateTime	
departureDate	or	
	data.returnFlights.flights.departureDateTime	
	Format: yyyy-MM-ddTHH:mm:ss	
	Example: 2018-06-20T01:00:00	
	Date and time of arrival.	
	The data is taken from the api/flights response:	
	data.outboundFlights.flights.arrivalDateTime	
arrivalDate	or	
	data.returnFlights.flights.arrivalDateTime	
	Format: yyyy-MM-ddTHH:mm:ss	
	Example: 2018-06-20T01:00:00	

Parameter	Description
	Flight number.
	The data is taken from the api/flights response:
flightNumber	data.outboundFlights.flightNumber
	or
	data.returnFlights.flightNumber
	Information about the selected tariff.
	The data is taken from the api/flights response:
classOfService	data.recommendations.outboundFareDetails.bookingCode
	or
	data.recommendations.returnFareDetails.bookingCode
	Marketing airline
marketingCarrier	For example: U6, S7
	The airline actually performing the flight
operatingCarrier	For example: U6, OK
flightIndex	Segment number for a specific flight (numbered from 1)

## **Response format**

```
"referenceNumber": string,
                        "quantity": number
                    }
                ]
            }
        ]
    }
],
"packs": [{
"in
        "includedSeats": [string],
        "excludedSeats": [string],
        "includedServiceCode": string,
        "code": string,
        "flightReferences": [{
                "referenceNumber": string,
                "passengerPrices": [{
                        "referenceNumber": string,
                        "amount": decimal
                    }
                ]
            }
        ]
    }
"seatCharacteristics": [string],
        "code": string,
        "flightReferences": [{
                "referenceNumber": string,
                "passengerPrices": [{
                        "referenceNumber": string,
                        "amount": number
                    }
                ]
            }
        ]
    }
],
"petsServiceConfiguration": [{
        "petsList": [string],
        "flightReferences": [string]
],
"insuranceProducts": [{
        "code": string,
        "amount": number
    }
"partnerType": "Unknown",
        "bookingStatus": "Unknown",
        "code": string,
```

```
"amount": number,
            "currency": string,
            "passengerReference": string,
            "isInfantProduct": boolean,
            "bookingId": string,
            "internalError": integer,
            "internalErrorMessage": string
        }
    "number": string,
             "flightReferenceNumbers": [string]
        }
    ],
"serviceCategories": [{
    "aada": string,
             "code": string,
            "category": string,
"order": integer,
"fullDirection": boolean,
            "onlyForRussianCitizens": true
    "code": string,
             "preselect": boolean,
            "flightReferences": [string],
            "category": string,
             "priority": integer,
    ],
"moneyWallCoefficient": string
"ibeCode": integer,
        "description": string,
        "messages": [{
                 "code": string,
                 "text": string,
                 "additionalInfo": {
                     "ssrType": string,
                     "info": string
                 }
            }
        ]
    }
],
"success": boolean
```

Parameter		ter	Description	Note
success <b>data</b>			Sign of the success of the request.	
			If the errors array is empty, then the field value will be true	
			The data returned by the request	
ser	services		An array of objects with information about available airline services	
С	ode	1	Service code	
fl	ligł	ntReferences	An array with information about the segments and passengers for which the services are available, as well as the cost of these services.	
	re	ferenceNumber	Flight segment reference	
	pa	assengerPrices	An array of objects with information about the passenger and the cost of the service	
		referenceNumber	Reference to a specific passenger	
	amount		Service cost for a specific passenger	
	qı	uotas	An array with information about available quotas for service (at the current time it's returned only for the service with code = "PETC").	
		referenceNumber	Reference to a specific passenger for whom quota is returned.	
		quantity	Count of available quotas for service.	
pac	cks		An array with available service packages	In developing
ir	includedSeats  excludedSeats  includedServiceCode  code  flightReferences		An array of characteristics of available seats within the service package	
e			An array of characteristics of unavailable places within the service package	
ir			Included service code	
С			Service package code.	
fl			The arrays with information about the position and passengers, which services are available, as well as	

Parameter		ter	Description	Note
			the cost of these services.	
	referenceNumber		Flight segment reference	
	p	assengerPrices	An array of objects with information about the passenger and the cost of the service	
		referenceNumber	Reference to a specific passenger	
		amount	Service cost for a specific passenger	
s	ervic	eOptions	An array with information about which services should be automatically preselected on the frontend of the booking engine.	
	cate	egory	Service category	
	cod	e	Service package code.	
	flig	htReferences	An array with information about segments for which services are available	
			Service field.	
	preselect		If true, then the service should be automatically preselected in the UI.	
			Note: The logic was originally added for use in the Web client.	
			Service field. Used in conjunction with the preselect field.	
	pric	ority	Indicates the priority of automatically adding a service to the UI, 0 is the highest.	
			For example, if a service with a priority of 0 is not available for pre-selection, then a service with a priority of 1 will be added, etc.	
	seatServices		An array of objects with information about the available seats for selection on the flight.	In
s			<b>IMPORTANT:</b> The api/seatmap service returns more complete information about available seats and should be used to book a seat selection service.	In developing

Parameter		Description	Note
seatCharacteristics		Array of site characteristics.	
	code	Service code, SEAT	
	flightReferences	An array with information about the segments and passengers for which the services are available, as well as the cost of these services.	
	referenceNumber	Flight segment reference	
	passengerPrices	An array of objects with information about the passenger and the cost of the service	
	referenceNumber	Reference to a specific passenger	
	amount	Service cost for a specific passenger	
	petsServiceConfiguration	An array of objects that contain information about the availability of the animal transport service on different segments. It is necessary to control the transportation of animals at the tariffs of the "business" family.	
	petsList	An array of strings, contains a list of animals available for transport	
	flightReferences	An array of strings, contains a list of segments on which the service is available	
	serviceCategories	An array of objects, contains information about services and the order in which they are displayed on the site.	
	code	Service code	
	category	Service category	
	order	The order of the additional services on the page. 1 - top of the page	
	fullDirection	Flag indicating whether the service covers the entire flight	
	portions	Service field	In developing
	type	Service field	
	number	Service field	

Parameter	Description	Note
flightReferenceNumbers	Service field	
moneyWallCoefficient	Coefficient for calculating the monthly installment payment	
errors	Information about errors that occurred during the operation of the service.	
ibeCode	Error code	
description	Error description	
messages	An array of objects containing errors from Sirena' answer. The array may be empty, it is recommended to analyze the error by the ibeCode field.	
code	Sirena error code	
text	Sirena error text	
additionalInfo	An array with additional error information	
ssrType	Ssr type	
info	Additional information	

## Retrieve aircraft seatmap service

API service	seatmap
Short description	Allows to receive information about seatmap scheme in aircraft
Supported HTTP(S)-methods	GET
Conterminous systems methods used	Sirena: seat_map, svc_order_view

## **GET** seatmap method

**Description:** receives information about seatmap scheme in aircraft.

**Request format:** api/apiVersion/seatmap

## **Request example**

api/apiVersion/seatmap?referenceNumber=1&origin=LED&destination=DME&departureDate=20220723&flightNumber=80&classOfService=E&commercialFamily=U6ECONOMY

## **Request parameters**

Information about flight for which seatmap is needed

Parameter	Mandatory	Description
referenceNumber	Yes	Reference to flight segment
origin	No	Origin airport
destination	No	Destination airport
departureDate	No	Date and time of departure
flightNumber	No	Flight number
classOfService	No	Information about selected tariff
commercialFamily	No	Fare family type, for instance: U6ECONOMY or U6BUSINESS

#### **Response format**

```
"data": {
  "isEmpty": boolean,
  "compartmentDetails": [{
      "number": integer,
      "seats": [{
    "seat": string,
    "stage
           "number": integer,
          "description": string,
          "characteristics": [string],
           "occupation": string,
           "passengerRelatedPrice": [{
               "name": string,
               "type": string,
               "uniqueCustomerIdentifier": string,
               "seatPrice": number,
                               "seatUnavailableReason": {
                                    "isByCharacteristics": boolean,
                    "isByCheckin": boolean,
                    "isByAgent": boolean,
                    "isByRegistrationUnavailability": boolean,
                    "isByPreselects": boolean,
                    "isByRelatedPassengerUnavailability": boolean
               "isSeatUnavailable": boolean,
               "hasInfant": boolean
            }
           "classDesignator": string
        }
      ]
    }
  ]
  "passengersTotalData": [{
      "passengerReference": string,
      "passengerPriceLevels": [{
               "price": decimal,
               "priceLevel": integer
      ]
}
 ],
"preselectedSeats": [{
    "flightRefere
             "flightReference": string,
             "passengerReference": string,
```

	Parameter			Description
Sl	success			Sign of query execution success.  If errors array is empty, field value will be set to true
d	data			Returned data
	isEmpty		npty	Flag identifying whether data is returned from sirena  This field can be used to determine possibility of selecting seats on present flight segment
	compartmentDetails		partmentDetails	Array of objects with information about seats grouped by rows
		nı	ımber	Row number
		se	eats	Array of objects which contains detailed information about seats
			seat	Seat. Possible values: A-F
			number	Row number for seat

	Seat description
do a suinti ou	9 – central seat
description	A – aisle seat
	W – window seat
characteristics	Seat characteristics
occupation	Sign of seat's occupation
passengerRelatedPrice	Array of objects with information about seat prices for. Only available for seats with CH characteristics.
name	Passenger name
type	Passenger type
uniqueCustomerIdentifier	unique passenger ID
seatPrice	seat price
seatUnavailableReason	Array of objects with parameters that are reason of unavailability seats
isByCharacteristics	Seat is not available for the passenger by characteristics
isByCheckin	The passenger has been already checked-in
isByAgent	Another seat was chosen by Agent
isByRegistrationUnavailability	Check-in is not available
isByPreselects	Another seat was pre-selected earlier
isByRelatedPassengerUnavailability	Seat is not available for the passenger because the seat is not suitable for accompanied passengers
isSeatUnavailable	Seat availability flag
hasInfant	Flag identifying that passenger travels with infant
classDesignator	Information about seat class. Possible values: ECONOMY, BUSINESS

	passengersTotalData	An array of objects with information about the cost of seats in the context of passengers
	passengerReference	Passenger reference
	passengerPriceLevels	An array of objects of the cost of seats available to the passenger
	price	Seat cost
	priceLevel	Seat value category
	preselectedSeats	Array with information about pre- added seats at the seat selection step in the booking engine.
	flightReference	Link to the flight segment.
	passengerReference	Link to the passenger.
	title	Seat letter.
	number	Seat number.
erı	rors	Information about errors appeared during query execution.
	ibeCode	IBE error code
	description	IBE error description
		Array of objects, containing conterminous system's errors
	messages	Array might be empty. It is recommended to analyze ibeCode field.
	code	Sirena error code
	text	Sirena error text

## Retrieve aircraft seatmap service without PNR

API service	SeatmapStandalone
Short description	Allows to receive information about seatmap scheme in aircraft without PNR
Supported HTTP(S)-methods	POST
Conterminous systems methods used	Sirena: pricing_variant, svc_pricing
	CRM: getContactMarkup

#### **POST** SeatmapStandalone method

**Description:** retrieve information about seatmap scheme in aircraft without PNR.

**Request format:** api/apiVersion/SeatmapStandalone

#### **Request body**

```
"passengers": [
     "id": integer,
     "firstName": string,
"middleName": string,
     "surname": string,
     "passengerType": string,
     "birthDate": datetime,
     "sex": integer,
"loyaltyCard": string,
"disability": {
    "isDeaf": boolean,
        "isBlind": boolean,
        "hasGuideDog": boolean,
        "assistanceType": integer,
        "wheelchairType": integer,
        "commentary": string
     },
"hasInfant": boolean
     "nationality": string
     "relatedInfantWithSeatId": integer
  }
],
"origin": string,
"cation": st
"destination": string,
```

```
"departureDate": datetime,
"flightNumber": string,
"classOfService": string,
"commercialFamily": string,
"currency": string
}
```

Par	ameter	Description	Note
pas	sengers	Array with data about passengers	
id		Passenger's serial number (numbered from 1)	
fi	rstName	Passenger's name	
m	iiddleName	Passenger's patronymic (may be absent)	
sı	ırname	Passenger's surname	
pa	assengerType	Passenger type	
bi	rthDate	Date of birth	
		Passenger gender	
se	ex	Possible values: see dictionary "gender of passengers"	
lo	yaltyCard	Loyalty card number "Wings"	In developing
di	isability	Information about people with disabilities	
	isDeaf	Hearing impairment	
	isBlind	Visual impairment	
	hasGuideDog	A guide dog must be accompanied, must be sent only together with the isBlind sign	
	assistanceType	Passenger assistance type  Possible values: dictionary of assistance types	

Parameter	Description	Note
wheelchairType	Wheelchair type	
wheetenan Type	Possible values: dictionary of wheelchair type	
commentary	Comment (optional)	
hasInfant	An sign that this passenger has a baby	
	Nationality (country)	
nationality	Possible values: dictionary of countries	
relatedInfantWithSeatId	Id of the ins related to the adult	
origin	Departure airport	
destination	Destination airport	
	Date and time of departure	
departureDate	Format: yyyy-MM-ddTHH:mm:ss	
	Example: 2018-06-20T01:00:00	
flightNumber	Flight number.	
classOfService	Information about the selected tariff	
commercialFamily	Fare family type (different meals may be available on the same flight for economy and business).	
currency	Search currency	

## **Response format**

```
"passengerRelatedPrice": [{
                                 "name": string,
                                 "type": string,
                                 "uniqueCustomerIdentifier": string,
                                 "seatPrice": number,
                                 "seatUnavailableReason": {
                                      "isByCharacteristics": boolean,
                                      "isByCheckin": boolean,
                                      "isByAgent": boolean,
                                      "isByRegistrationUnavailability":
boolean,
                                      "isByPreselects": boolean,
                                      "isByRelatedPassengerUnavailability":
boolean
                                  },
                                 "isSeatUnavailable": boolean,
                                 "hasInfant": boolean
                            }
                        ],
"classDesignator": string
                    }
                ]
            }
        ],
"isEmpty": boolean,
        "passengersTotalData": [{
                "passengerReference": string,
                "passengerPriceLevels": [{
                        "price": decimal,
                         "priceLevel": integer
                ]
            }
        1
   },
"errors": [{
    "ibe(
            "ibeCode": integer,
            "description": string,
            "text": string,
                    "additionalInfo": {
                        "ssrType": string,
                         "info": string
                    }
                }
            ]
        }
```

```
],
"success": boolean
}
```

Par	rameter	Description
		Sign of the success of the request.
suc	cess	If the errors array is empty, then the field value will be true.
dat	a	The data returned by the request.
		Flag identifying whether data is returned from sirena
is	sEmpty	This field can be used to determine possibility of selecting seats on present flight segment
c	ompartmentDetails	Array of objects with information about seats grouped by rows
	number	Row number
	seats	Array of objects which contains detailed information about seats
	seat	Seat. Possible values: A-F
	number	Row number for seat
		Seat description
	description	9 – central seat
	description	A – aisle seat
		W – window seat
	characteristics	Seat characteristics

Para	ameter	Description	
	occupation	Sign of seat's occupation	
	passengerRelatedPrice	Array of objects with information about seat prices for. Only available for seats with CH characteristics.  Passenger name	
	name		
	type	Passenger type	
	uniqueCustomerIdentifier	unique passenger ID	
	seatPrice	seat price	
	seatUnavailableReason	Array of objects with parameters that are reason of unavailability seats	
	isByCharacteristics	Seat is not available for the passenger by characteristics	
	isByCheckin	The passenger has been already checked-in	
	isByAgent	Another seat was chosen by Agent	
	isByRegistrationUnavailability	Check-in is not available	
	isByPreselects	Another seat was pre-selected earlier	
	isByRelatedPassengerUnavailability	Seat is not available for the passenger because the seat is not suitable for accompanied passengers	
	isSeatUnavailable	Seat availability flag	
	hasInfant	Flag identifying that passenger travels with infant	
	classDesignator	Information about seat class. Possible values: ECONOMY, BUSINESS	
	passengersTotalData	An array of objects with information about the cost of seats in the context of passengers	
	passengerReference	Passenger reference	
	passengerPriceLevels	An array of objects of the cost of	

Pa	Parameter		Description
			seats available to the passenger
		price	Seat cost
		priceLevel	Seat value category
eri	ors	3	Information about errors appeared during query execution.
	ibe(	Code	IBE error code
	desc	cription	IBE error description
	messages		Array of objects, containing conterminous system's errors
			Array might be empty. It is recommended to analyze ibeCode field.
	code		Sirena error code
	text		Sirena error text
	additionalInfo		Additional information about error
		ssrType	Ssr type
		info	Information

#### **Cancellation service**

API service	annul
Short description	Allows to cancel tickets and receive information on canceled bookings
Supported HTTP-(S) methods	GET, POST
	Sirena:
Conterminous systems methods used	Getting information on booking - order
	Cancel (part or all) PNR seats (without tickets refund) - release_seats

## POST api/annul method

**Description:** allows to cancel tickets for all passengers in the booking

Request format: /api/apiVersion/Annul

**Request parameters:** X-Session is passed in the header

## **Response format:**

Parameter	Description
	Sign of the success of the request.
success	If the errors array is empty, then the field value will be true

Pai	Parameter		Description
err	errors		Information about errors that occurred during the operation of the service.
	ibeC	Code	Error code, see Attachment 1. IBE error codes
	desc	ription	Error description, see Attachment 1. IBE error codes
	messages		An array of objects containing errors from Sirena answer.
			The array may be empty, it is recommended to analyze the error by the ibeCode field.
		code	Error code
		text	Error text

## GET api/annul method

**Description:** allows to get information on booking cancellation

**Request parameters:** X-Session is passed in the header

Parameter	Obligation	Description
pnrNumber	yes	PNR number, unique six-character booking ID

## **Response format:**

Parameter	Description
	Sign of the success of the request.
success	If the errors array is empty, then the field value will be true
data	The data returned by the request
pnrNumber	PNR number
createdDate	Date and time when the cancellation was issued
errors	Information about errors that occurred during the operation of the service.
ibeCode	Error code, see Attachment 1. IBE error codes
description	Error description, see Attachment 1. IBE error codes
	An array of objects containing errors from Sirena answer.
messages	The array may be empty, it is recommended to analyze the error by the ibeCode field.
code	Error code
text	Error text

#### **Partial cancellation service**

API service	annul/partial
Short description	Allow to cancel certain tickets from reservation
Supported HTTP-(S) methods	POST
	Sirena:
Used methods of related systems	Getting information on booking - order
	Cancel (part or all) PNR seats (without tickets refund) - release_seats

## POST api/annul method

**Description:** allow to cancel tickets for certain passengers in reservation

Request format: /api/apiVersion/Annul/Partial

**Request parameters:** X-Session is passed in the header

## **Request body**

Parameter		ımeter	Description
success			Sign of the success of the request.
			If the errors array is empty, then the field value will be true
errors		rs	Information about errors appeared during query execution.
	ib	eCode	Error code, see EN_Attachment 1. IBE error codes
	de	escription	Code description, see. EN_Attachment 1. IBE error codes
	messages		Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode.
		code	Error code
		text	Error text

## Auxiliary partner's services management service

API service	partners/types, partners/[id]
Short description	Services allows to retrieve information about partner's services and add them to booking
Supported HTTP(S)- methods	GET, POST
Conterminous systems methods used	Partner's API

#### **GET partners/types method**

**Description**: Service allows to retrieve list of partner's services which are available for booking for specific application type.

Validated via API-key passing in method.

**Request Format** /api/apiVersion/partners/types

**Request header** X-session is not needed for call, no data from booking context is used.

**Request parameters** no parameters

#### **Response format**

```
{
  "data": [{
      "partnerId": integer,
      "name": string
  }
],
  "errors": [{
      "ibeCode": integer,
      "description": string,
      "messages": [{
            "code": string,
            "text": string
      }
      ]
    }
  ],
  "success": boolean
}
```

	Parameter	Description	
		Sign of query execution success.	
SI	uccess	If errors array is empty, field value will be set to true	
d	ata	Returned data	
	partnerId	Unique partner's code	
	name Partner's name		
e	rrors	Information about errors appeared during query execution.	
	ibeCode	Error code, see EN_Attachment 1. IBE error codes	
	description	Code description, see. EN_Attachment 1. IBE error codes	
	messages	Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode.	
	code	Sirena error code	
	text	Sirena error text	

# Response example (Website application type)

#### Response example (mobile application type)

#### **GET** partners/id method

**Description**: service allows to retrieve list of services available for specific partner.

Request format /api/apiVersion/partners/id

**Request example** /api/apiVersion/partners/1 - for retrieving of Alfastrah services.

**Request headers** X-Session **should** be passed because information about available partner's services depends on passenger's list, flight directions etc.

All information will be taken from booking context.

#### **Request parameters**

id - partner's code

```
"flightReferences": [
                                                               string
                                    ]
                         }
              },
"compatibleProductCodes": [
                  string
             ],
"internalError": integer,
"internalErrorMessage": string,
"passengerAmounts": [
                   {
                       "referenceNumber": string,
                       "amount": number,
                       "currency": string
    ],
"errors": [{
    "ihe(
              "ibeCode": integer,
              "additionalInfo": {
                            "ssrType": string,
                            "info": string
                       }
                  }
    ],
"success": boolean
}
```

Parameter	Description
	Sign of query execution success.
success	If errors array is empty, field value will be set to true
data	Returned data
partnerId	Unique partner's code

partnerType		Unique partner's type	
		Booking service's status	
ŀ	oookingStatus	Field is left for backward compatibility and will always be set to 0.	
(	code	Code of partner's service	
á	nmount	Cost of partner's service	
(	currency	Currency	
l	preselectedOption	An array of settings for pre-selecting an parners service (in the basket at the third step)	
	preselect	Sign of preselection of a partner service	
	passengers	An array of passengers for whom a partner service is preselected	
	referenceNumber	Passenger reference	
	passengerType	Passenger type, see Attachment 2. Dictionary of Passenger Types	
	flightReferences	id of segments in the booking with preselected option	
•	compatibleProductCodes	An array of partner service codes that can be added to a booking at the current rate	
i	nternalError	Internal engine error code	
i	nternalErrorMessage	Description of an internal engine error	
	passengerAmounts	An array with information about the amounts for partner services in the context of passengers (returned for Alfainsurance).	
	referenceNumber	Passenger reference.	
	amount	Amount for the partner product for the passenger.	
	currency	Currency.	
er	rors	Information about errors appeared during query execution.	
j	beCode	Error code, see EN_Attachment 1. IBE error codes	
O	lescription	Code description, see. EN_Attachment 1. IBE error codes	
]	nessages	Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode.	
	code	Sirena error code	

	text  additionalInfo		Sirena error text
			Additional error information
		ssrType	Ssr type
		info	Information

#### Response example, Aeroexpress

```
Request /api/apiVersion/partners/4
```

#### Response example, Telemedicine

```
Request /api/apiVersion/partners/7
```

```
"12"

}

}

}

partnerId": 7,
    "partnerType": 3,
    "bookingStatus": 0,
    "code": "SBERVET",
    "amount": 300.00,
    "currency": "RUB"
}

,
    "errors": [],
    "success": true
}
```

### **POST partners method**

**Description**: service allows to add partner's services to booking

Request format /api/apiVersion/partners

**Request header** X-Session **should** be passed in call because services are added to specific booking

#### **Request format**

#### **Request parameters**

Parameter	Description
partnerId	Partner's unique code
code	Code of partner's service
amount	The cost of the added service

	Reference to the passenger to whom the service is being added (mandatory parameter for telemedicine)	
isInfantProduct	Sign that the services was bought for an infant (mandatory parameter for alfamedicine)	

**Response format** matches GET api/reservation method response.

#### Response example

```
"data": {
  "journey": {
     "outboundFlights": [{
         "aircraft": "32N",
         "referenceNumber": "1",
         "origin": "LED",
"destination": "DME",
         "departureDate": "2020-01-22T14:35:00",
"arrivalDate": "2020-01-22T16:25:00",
"flightNumber": "60",
         "classOfService": "E",
         "operatingCarrier": "U6",
         "marketingCarrier": "U6"
       }
     "outboundFareFamily": {
       "code": "ECOFLEXRU"
    },
"origin": "LED",
"destination": "DME",
""rapate": "202
     "departureDate": "2020-01-22T14:35:00"
  },
"number": "VY9NCD",
  "passengers": [{
       "id": 1,
       "hasInfant": false,
       "referenceNumber": "2",
       "firstName": "TEST",
       "middleName": "TESTOVICH",
       "surname": "TESTOV",
       "passengerType": 0,
       "birthDate": "1988-08-11T00:00:00",
       "sex": 0,
       "nationality": "RUS",
       "documentNumber": "14001232244",
       "documentExpiryDate": "2029-12-25T00:00:00",
       "email": "TEST@YANDEX.RU",
       "phone": "79510002233",
```

```
"documentType": 0,
        "isAdult": true,
        "isChanged": false
      }
    ],
"services": [],
    "seats": [],
    "partnerProducts": [{
        "partnerId": 1,
        "partnerType": 1,
        "bookingStatus": 1,
        "code": "TRAVEL",
        "amount": 847.00,
        "currency": "RUB",
        "passengerReference": "2",
        "isInfantProduct": false,
        "bookingId": "94cf3c93-b6aa-49c5-8de1-f3fa2749b5e2"
      }, {
   "partnerId": _4,
        "partnerType": 2,
        "bookingStatus": 1,
        "code": "STANDARTOW",
"amount": 500.00,
        "currency": "RUB",
        "passengerReference": "2",
        "isInfantProduct": false,
        "bookingId": "abf3bf5c-acc3-442d-98fa-df317ab439e2",
        "orderId": string
      }
    ],
"hasSpecialConditions": false
  },
  "errors": [],
  "success": true
}
```

#### **Examples of invalid requests and responses**

Request	Response
<pre>Invalid partner's code for TRAVEL service {           "products": [</pre>	<pre>"partnerProducts": [{     "partnerId": 4,     "partnerType": 2,     "bookingStatus": 1,     "code": "STANDARTOW",     "amount": 500.00,     "currency": "RUB",     "passengerReference": "2",     "isInfantProduct": false,     "bookingId": "f4b21bb1-7a31-46c2-b6b4- 5198632e5f7f"     } ],</pre>

```
"hasSpecialConditions": false,
            "partnerId":
                              "errors": {
4,
                                "partnerProducts": [{
            "code":
                                    "internalError": 5000,
"STANDARTOW"
                                    "internalErrorMessage": "Invalid product
        }
                              code",
    ]
                                    "partnerId": 4,
}
                                    "partnerType": 2,
                                    "bookingStatus": 0,
                                    "code": "TRAVEL",
                                    "amount": 0.0,
                                    "currency": "RUB"
                                  }
                                ]
                              }
                              "partnerProducts": [{
                                  "partnerId": 4,
                                  "partnerType": 2,
                                  "bookingStatus": 1,
                                  "code": "STANDARTOW",
Invalid service code for Sealine
                                  "amount": 500.00,
partner
                                  "currency": "RUB",
                                  "passengerReference": "2",
{
                                  "isInfantProduct": false,
    "products": [
                                  "bookingId": "f4b21bb1-7a31-46c2-b6b4-
        {
                              5198632e5f7f"
            "partnerId":
                                }
2,
            "code":
                              "hasSpecialConditions": false,
"AVIAPL"
                              "errors": {
                                "partnerProducts": [{
                                    "internalError": 5000,
             "partnerId":
                                    "internalErrorMessage": "Invalid product
                             code",
4,
            "code":
                                    "partnerId": 2,
"STANDARTOW"
                                    "partnerType": 1,
        }
                                    "bookingStatus": 0,
                                    "code": "AVIAPL",
    ]
}
                                    "amount": 0.0,
                                    "currency": "RUB"
                                  }
                                ]
                              }
```

#### Ticket void service

API service	ticket/void
Short description	Allows to void air tickets and additional services
Supported HTTP(S)-methods	POST

API service	ticket/void
Conterminous systems methods used	Sirena: void_tickets

#### POST ticket/void method

**Description:** void of air tickets and additional services.

**Note:** when voiding not all the tickets from the booking split happens and all tickets that are voided are transferred to separated booking, the PNR of which is returned in the response of POST /ticket/void. Tickets that were not voided remain in the original booking. The error is returned when trying to split an infant (or leave it in the original booking) without an adult.

Request format /api/apiVersion/ticket/void

#### **Request body**

```
{
    "TicketNumbers": [string],
    "NeedReturnSeats": boolean
}
```

#### **Request parameters**

Parameter	Description
TicketNumbers	Array of air tickets and additional services to void
NeedReturnSeats	Seat void flag

#### **Response body**

```
"success": boolean }
```

Parameter			Description
dat	ta		Returned data
	voidedTicketNumbers		Array of voided tickets
	notVoideo	dTicketNumbers	Array of tickets that failed to be voided
	notVoidR	eason	Reason why void failed
	separated	Pnr	Pnr of splitted reservation
err	errors		Information about errors appeared during query execution.
	ibeCode		IBE error code
	descriptio	n	IBE error description
	messages		Array of objects, containing conterminous system's errors
			Array might be empty. It is recommended to analyze ibeCode field.
		code	Sirena error code
		text	Sirena error text
			Sign of query execution success.
suc	success		If errors array is empty, field value will be set to true

# **Services for working with queues (for agents)**

## Service for placing PNR to queues.

API service	queue/placePNR
Short description	The service allows placing PNR in queue
Supported HTTP-(S) methods	POST
Used methods of related systems	Sirena: queue_pnr_place

#### POST queue/placePNR method

**Description:** placing the PNR in queues

Request format /api/apiVersion/queue/placePNR

## **Request parameters**

Parameter	Description
queueNumber	Queue number in which need to place the booking
pnr	Booking number which need to be queued

	Parameter	Description
		Sign of query execution success.
succe	SS .	If errors array is empty, field value will be set to true
data		Empty array of objects
erroi	rs	Information about errors appeared during query execution.
ibe	eCode	IBE error code
de	scription	IBE error description
		Array of objects, containing conterminous system's errors
me	essages	Array might be empty. It is recommended to analyze ibeCode field.
	code	Sirena error code
	text	Sirena error text
	additionalInfo	Additional information about error
	ssrType	Ssr type
	info	Information

## Examples of successful requests and responses

```
Request
{
    "queueNumber": 1,
    "pnr": "1Z9RR1"
}
Response
{
    "data": {},
    "errors": [],
    "success": true
}
```

### **Examples of failed requests and responses**

An example of an attempt to add the booking to the queue, which is not available for the key of the office under which the addition is being made

# 

An example of an attempt to add the booking to inaccessible queue for the office key under which the addition is being made

## Service for retrieving the list of bookings from the queue

API service	queue/list
Short description	The service allows to retrieve the list of bookings from the queue
Supported HTTP-(S) methods	POST
Used methods of related systems	Sirena: queue_show

#### POST queue/list method

**Description** retrieving the list of bookings from the queue

Request format /api/apiVersion/queue/list

#### **Request parameters**

Parameter	Description
queueNumber	Number of the queue for which the list of bookings is requested to be

returned

# **Response format**

```
{
  "surname": string
             }
           ]
         }
      ]
    }
  "additionalInfo": {
             "ssrType": string,
"info": string
           }
         }
      ]
    }
  ],
"success": boolean
}
```

#### **Response parameters**

Parameter		Description
		Sign of the success of the request.
success		If the errors array is empty, then the field value will be true.
data		Array with information about booking lists
queuedPnrs		Array of objects with basic information about queues
	number	Queue number
	passengers	Array with information about passengers in the booking
	name	Name and patronymic (if any) of the passenger

		surname	Last name of the passenger
e	errors		Information about errors appeared during query execution.
	ib	eCode	IBE error code
	description		IBE error description
	messages		Array of objects, containing conterminous system's errors  Array might be empty. It is recommended to analyze ibeCode field.
		code	Sirena error code
		text	Sirena error text
	additionalInfo ssrType		Additional information about error
			Ssr type
		info	Information

# Examples of successful requests and responses

# **Examples of failed requests and responses**

Request for a non-existent queue

#### Response

### Service for retrieving the count of records

API service	queue/counttotal
Short description	The service allows retrieving the count of records.
Supported HTTP-(S) methods	POST
Used methods of related systems	Sirena: queue_count

#### POST queue/counttotal method

**Description** retrieving the count of records

Request format /api/apiVersion/queue/counttotal

**Request parameters** are empty

```
{
   "data": [{
           "queuesInfo": [{
                  "queueNumber": integer,
                  "queueName": string,
                  "count": integer
              }
           ]
       }],
   "errors": [{
           "ibeCode": integer,
           "description": string,
           "text": string,
                  "additionalInfo": {
                      "ssrType": string,
```

Parameter		Parameter	Description
			Sign of the success of the request.
Sl	success		If the errors array is empty, then the field value will be true.
d	data		An array with information about the number of bookings in queues
	qı	ueuesInfo	Array of objects with basic information about the number of PNRs in the queues
		queueNumber	Queue number
		queueName	Queue title
		count	Number of bookings in the queue
eı	errors		Information about errors appeared during query execution.
	ib	eCode	IBE error code
	de	escription	IBE error description
	messages		Array of objects, containing conterminous system's errors
			Array might be empty. It is recommended to analyze ibeCode field.
		code	Sirena error code
		text	Sirena error text
		additionalInfo	Additional information about error
		ssrType	Ssr type
		info	Information

# **Examples of successful responses**

## Service for removing PNR from the queues

API service	queue/removeItem
Short description	The service allows removing the PNR from the queues.
Supported HTTP-(S) methods	POST
Used methods of related systems	Sirena: queue_pnr_remove

#### POST queue/removeItem method

**Description** removing the PNR from the queues

Request format /api/apiVersion/queue/removeItem

#### **Request parameters**

Parameter	Description	
queueNumber	Number of the queue from which the reservation is requested to be deleted	
pnr	Booking number to be removed from the queue	

	Parameter		Description
			Sign of query execution success.
Sl	ucce	PSS	If errors array is empty, field value will be set to true
d	ata		Empty array of objects
e	rror	rs	Information about errors appeared during query execution.
	ibe	eCode	IBE error code
	de	scription	IBE error description
			Array of objects, containing conterminous system's errors
	me	essages	Array might be empty. It is recommended to analyze ibeCode field.
		code	Sirena error code
		text	Sirena error text
		additionalInfo	Additional information about error
		ssrType	Ssr type
		info	Information

# Examples of successful requests and responses

```
Request
{
     "queueNumber": 111,
     "pnr": "1Z9S18"
}
Response
{
     "data": {},
     "errors": [],
     "success": true
}
```

**Examples of failed requests and responses** are the same as examples of failed requests and responses for POST queue/placePNR method

# Obtain recommendations for rebook /api/Exchange/Search v2.3

API service	/Exchange/Search
Short description	Obtain list of available recommendations for rebook
Supported HTTP(S)-methods	POST
Conterminous systems methods used	Sirena: exchange_pricing

#### Method POST Exchange/Search

**Note:** allow to get information about the cheapest option for exchange with non-negative amount for surcharge

**Request format:** api/apiVersion/Exchange/Search

### **Request headers**

X-Api-Key - unique GUID for the systems, using IBE API.

#### **Request body**

#### **Request parameters**

Parameter	Description	
reservationNumber	Number of a reservation	

lastName		Surname of a passenger	
originDestination		An array of data about the part of the flight to be exchanged	
	origin	IATA-code of origin airport	
	destination	IATA-code of destination airport	
	flightNumber	Number of flight	
	classOfSerivce	Class of serivce	
	departureDate	Departure date	
	segmentReference	Reference to the segment to be exchanged	
passengerReference		Reference to the segment whose tickets to be exchanged	
searchPeriod		A period of days for getting recommendations to exchange (available values: 1; 3; 5, 'null' - accepting as '1' value)	
searchIndirectFlights		An indication of the search for flights with transfers in Sirena.	
		If the value is true, Sirena searches for flights with transfers. By default, the value is false.	

```
"showForAdult": boolean,
                 "showForInfant": boolean,
                 "showInBookingCart": boolean
             }
         "order": integer,
        "commercialFamily": string,
        "canRefund": boolean,
        "hasUpsale": boolean,
        "isLowCost": boolean
],
"recommendations": [
        "totalPrice": float,
        "totalAddCollectPrice": float,
        "breakdowns": [
             {
                 "ticketNumber": string,
                 "passengerReference": string,
                 "paxType": integer,
                 "baseFareAmount": float,
                 "taxAmount": float,
                 "totalAmount": float,
                 "addCollectAmount": float
             }
        ],
"flightGroupDetails": [
                 "flightGroupId": integer,
                 "fareFamilyId": integer,
                 "isExchange": boolean,
                 "baggageAllowances": [
                          "quantity": integer,
                          "weight": integer,
                          "passengerType": integer
                 ],
"fareDetails": [
                     {
                          "bookingCode": string,
                          "fareBasis": string,
                          "isBreakpoint": boolean,
                          "paxType": integer,
"paxCount": integer,
                          "flightIndex": integer,
                          "ruleKey": string
                     }
                 ],
"flightGroupHash": string
             }
        ]
    }
```

```
"currency": string,
        "foodOnBoards": [{
                 "departureAirport": string,
                 "arrivalAirport": string,
                 "flightNumber": string,
                                "commercialFamily": string,
                 "translation": {
                     "ru": string,
                     "en": string,
                     "zh": string
                }
            }
        "moneyWallCoefficient": float
   },
"errors": [{
    "ibe(
            "ibeCode": integer,
            "description": string,
             "messages": [{
                     "code": string,
                     "text": string
            ]
    "success": true
}
flightGroup object
  "flightGroupId": integer,
  "flights": [{
      "flightId": integer,
      "departureAirport": string,
      "departureTerminal": string,
      "arrivalAirport": string,
      "arrivalTerminal": string,
      "departureDateTime": datetime,
      "excludedNationalities": [
          string
      "arrivalDateTime": datetime,
      "aircraft": string,
      "aircraftIataCode": string,
      "techStops": [{
          "arrivalDateTime": datetime,
          "departureDateTime": datetime,
          "airportCode": string,
          "stopDuration": string,
          "flightDurationUntilNextStop": string
        }
      ],
```

Pa	arameter	Description
		Sign of query execution success.
su	CCESS	If errors array is empty, field value will be set to true
da	ıta	Returned data
	currency	currency in which prices are represented
	noneyWallCoefficient	Coefficient for calculating the monthly installment payment
	flights	Array of flightGroup objects with information about flights
1	fareFamilies	Array of objects with information about fare families
	fareFamilyId	Fare family ID
		Fare family code, for ex:
	code	ECOLIGHTRU/ECOFLEXRU/ECOPREMRU etc.
		Fare family category, for ex:
	category	ECOLIGHT/ECOFLEX/ECOPREM
		Possible values: see <u>Attachment 2, Main fare family categories</u>
	order	Fare families display order
		f\Fare family type for ex:
	commercialFamily	U6ECONOMY or U6BUSINESS

Parameter		Description
	isSubsidized	Sign of subsidised tariff
	canRefund	Sign of refundable tariff
	,	Sign indentifying whether present tariff can be upgraded to next one in price category.
	hasUpsale	Used for management of Upsale block display in frontend.
	options	Array of fareFamiliesOptions objects with information about tariff options.
		Possible values: see <u>Attachment 2, tariff options</u>
f	oodOnBoards	Array of objects with information about meals available on the flight
	departureAirport	Airport of departure
	arrivalAirport	Airport of arrival
	flightNumber	Flight number
	commercialFamily	Fare family type (different type of meals for economy and business can be available for one flight)
	translation	Object with translation options
	ru	Options translation to russian
	en	Options translation to english
	zh	Option translation chinese
r	recommendations	Array of recommendations objects for flights
	totalPrice	Total ticket price including all applied discounts
	totalAddCollectPrice	Amount to be paid in case of rebook
	breakdowns	Array of tickets that are available for exchange
	ticketNumber	Number of issued ticket
	passengerReference	Reference to a passenger
	рахТуре	Type of a passenger
	baseFareAmount	Base price

]	Parameter		Description	
		taxAmount	Tariffs and fees	
		totalAmount	Full ticket price including tariffs and fees	
AddCollectAmount   Amount to be		AddCollectAmount	Amount to be paid in case of rebook	
•	errors		Information about errors appeared during query execution.	
	ibeCode		Error code, see EN_Attachment 1. IBE error codes	
	description		Code description, see. EN_Attachment 1. IBE error codes	
	messages		Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode.	
		code	Sirena error code	
		text	Sirena error text	

# flightGroup object

Contain information about flights

data.flights		
flightGroupId	Index number used in recommendations	
flightGroupDuration	Total flight time: summed up of duration values of each <u>transfer</u> and technical stop.	
hash	Service field	
flights	Array of objects with information about transfers	
flightId	Flight Id	
departureAirport	Airport of departure	
departureTerminal	Terminal in airport of departure	
arrivalAirport	Airport of arrival	
	Departure date and time	
departureDateTime	Format: yyyy-MM-ddTHH:mm:ss	
	Example: 2018-05-27T17:25:00	

da	data.flights		
		Arrival date and time	
	arrivalDateTime	Format: yyyy-MM-ddTHH:mm:ss	
		Example: 2018-05-27T20:50:00	
	•	Full aircraft title	
	aircraft	For ex.: Airbus A320	
	aircraftIataCode	IATA aircraft code	
	flightDuration	Duration of flight	
	flightNumber	flight number	
	marketingCarrier	Marketing carrier	
		Example: U6, S7	
		Operating carrier (one actually performed flight)	
	operatingCarrier	Example: U6, OK	
	originalFlightReferenceNumber	A number of flight segment for exchanging by original booking	
	hash	service field	

# **Exchange cancellation service:**

API service	exchange/Cancel
Short description	Exchange cancellation via API IBE
Supported HTTP(S)-methods	POST
Conterminous system methods used	Sirena: exchange_cancel

# POST Exchange/Cancel method

**Description**: allows to cancel the running ticket exchange process

**Request format**: /api/apiVersion/Exchange/Cancel

**Request headers:** 

X-Api-Key – unique GUID for the systems using IBE API.

## **Request body:**

```
{
    "pnrNumber": string,
    "lastName": string,
}
```

#### **Request parameters:**

Parameter	Description
pnrNumber	Reservation (PNR) number
lastName	Passegnger's surname

```
"data": {
 "tickets": [
   {
    "number": "string",
    "passengerReference": "string",
    "flightReferences": [
       "16"
    "isInfantTicket": boolean,
    "isIssuedByRefundableOffice": boolean,
    "issueDate": datetime
   }
  ],
 "journey": {
  "outboundFlights": [fullReservationFlight],
  "returnFlights": [fullReservationFlight],
  "separateFlights": [fullReservationFlight],
  "outboundFareFamily": {
   "code": "string",
   "category": "string",
   "isSubsidized": true,
```

```
"isLowCost": true,
 "isUnaccompaniedMinor": true
},
"returnFareFamily": {
 "code": "string",
 "category": "string",
 "isSubsidized": true,
 "isLowCost": true,
 "isUnaccompaniedMinor": true
},
"separateFareFamilies": [
  "flightReference": "string",
  "code": "string",
  "category": "string",
  "isSubsidized": true,
  "isLowCost": true,
  "isUnaccompaniedMinor": true
 }
],
"outboundDuration": "string",
"returnDuration": "string",
"separateDuration": "string",
"origin": "string",
"destination": "string",
"departureDate": "2025-05-07T16:32:04.939Z",
"returnDate": "2025-05-07T16:32:04.939Z",
"outboundBaggageAllowances": [
  "quantity": 0,
  "weight": 0,
  "passengerType": "Adult",
  "fareCode": "string"
 }
],
"returnBaggageAllowances": [
  "quantity": 0,
  "weight": 0,
  "passengerType": "Adult",
  "fareCode": "string"
```

```
}
 ],
 "separateBaggageAllowances": [
    "flightReference": "string",
    "quantity": 0,
   "weight": 0,
   "passengerType": "Adult",
   "fareCode": "string"
  }
 ],
 "containsInternationalFlights": true
},
"number": "string",
"reservationDate": "2025-05-07T16:32:04.939Z",
"bookingTimeLimit": "2025-05-07T16:32:04.939Z",
"passengers": [passengerData],
"services": [
  "code": "string",
  "status": "string",
  "text": "string",
  "petType": "string",
  "subType": "string",
  "category": "string",
  "fareAmount": 0,
  "passengerQualifier": "string",
  "passengerReference": "string",
  "flightReference": "string",
  "referenceNumber": "string",
  "packReferenceNumber": "string",
  "ticketNumber": "string",
  "finalPrice": 0,
  "price": 0,
  "currency": "string",
  "discountAmount": 0,
  "amadeusErrorCode": "string",
  "amadeusErrorMessage": "string",
  "internalError": "UnknownError",
  "internalErrorMessage": "string",
  "issueDate": "2025-05-07T16:32:04.939Z",
```

```
"issuedByThirdPartyOffice": true,
  "isIssuedByRefundableOffice": true,
  "serviceDuration": 0,
  "expireDateUtc": "2025-05-07T16:32:04.939Z"
 }
],
"seats": [
 {
  "number": 0,
  "title": "string",
  "isCheckinSeat": true,
  "code": "string",
  "status": "string",
  "text": "string",
  "petType": "string",
  "subType": "string",
  "category": "string",
  "fareAmount": 0,
  "passengerQualifier": "string",
  "passengerReference": "string",
  "flightReference": "string",
  "referenceNumber": "string",
  "packReferenceNumber": "string",
  "ticketNumber": "string",
  "finalPrice": 0,
  "price": 0,
  "currency": "string",
  "discountAmount": 0,
  "amadeusErrorCode": "string",
  "amadeusErrorMessage": "string",
  "internalError": "UnknownError",
  "internalErrorMessage": "string",
  "issueDate": "2025-05-07T16:32:04.939Z",
  "issuedByThirdPartyOffice": true,
  "isIssuedByRefundableOffice": true,
  "serviceDuration": 0,
  "expireDateUtc": "2025-05-07T16:32:04.939Z"
 }
],
"luggageSeats": [
 {
```

```
"referenceNumber": "string",
  "passengerReference": "string"
 }
],
"insurances": [
 {
  "number": "string",
  "passengerType": "Adult",
  "code": "string",
  "status": "string",
  "text": "string",
  "petType": "string",
  "subType": "string",
  "category": "string",
  "fareAmount": 0,
  "passengerQualifier": "string",
  "passengerReference": "string",
  "flightReference": "string",
  "referenceNumber": "string",
  "packReferenceNumber": "string",
  "ticketNumber": "string",
  "finalPrice": 0,
  "price": 0,
  "currency": "string",
  "discountAmount": 0,
  "amadeusErrorCode": "string",
  "amadeusErrorMessage": "string",
  "internalError": "UnknownError",
  "internalErrorMessage": "string",
  "issueDate": "2025-05-07T16:32:04.939Z",
  "issuedByThirdPartyOffice": true,
  "isIssuedByRefundableOffice": true,
  "serviceDuration": 0,
  "expireDateUtc": "2025-05-07T16:32:04.939Z"
 }
],
"partnerProducts": [
  "partnerId": "Unknown",
  "partnerType": "Unknown",
  "bookingStatus": "Unknown",
```

```
"code": "string",
  "amount": 0,
  "currency": "string",
  "passengerReference": "string",
  "flightReference": "string",
  "isInfantProduct": true,
  "bookingId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
  "orderId": "string",
  "isIssuedByRefundableOffice": true,
  "preselectedOption": {
   "preselect": true,
    "passengers": [
     {
      "referenceNumber": "string",
      "passengerType": "Adult",
      "flightReferences": [
       "string"
      ]
    }
   ]
  "compatibleProductCodes": [
   "string"
  ],
  "internalError": "UnknownError",
  "internalErrorMessage": "string",
  "passengerAmounts": [
     "referenceNumber": "string",
     "amount": 0,
     "currency": "string"
   }
  ]
 }
],
"ticketFares": [
  "referenceNumber": "string",
  "referenceQualifier": "string",
  "baseAmount": 0,
  "totalAmount": 0,
```

```
"currency": "string",
  "passengerReferences": [
     "referenceNumber": "string",
     "referenceQualifier": "string"
   }
  ],
  "passengerType": "Adult"
 }
],
"ticketFaresWithoutZapOff": [
  "referenceNumber": "string",
  "referenceQualifier": "string",
  "baseAmount": 0,
  "totalAmount": 0,
  "currency": "string",
  "passengerReferences": [
     "referenceNumber": "string",
     "referenceQualifier": "string"
  ],
  "passengerType": "Adult"
 }
],
"fareBasisCodesFlightRefs": [
  "fareBasis": "string",
  "flightReferenceNumber": "string",
  "passengerReferenceNumber": "string",
  "expirationUtc": "2025-05-07T16:32:04.939Z"
 }
],
"hasSpecialConditions": true,
"isRefundAvailable": true,
"annulUnavailabilityReason": "FromKyrgyzstan",
"isAnnulAvailable": true,
"isAgentReservation": true,
"accountCode": "string",
"tourCode": "string",
```

```
"flightsWithOpenDateCount": 0,
  "relatedPnrNumbers": [
   "string"
  ]
},
 "errors": [
   "ibeCode": "Ibe",
   "description": "string",
   "messages": [
      "code": "string",
      "text": "string",
      "additionalInfo": {
       "ssrType": "string",
       "info": "string"
    }
 ],
 "success": true
}
```

# **Response parameters**

Parameter		eter	Description
success			Sign of query execution success.
			If errora array is empty, field value will be set to true
data			Returned data
	tickets		Information about issued tickets
		flightReferences	Flight segment
		number	Ticket number.
			Example: 262 2439494143
		passengerReference	A reference to the passenger this ticket belongs to
		isInfantTicket	An sign that this passenger has a baby

Parameter		Description	
	issueDate	Date and time of issuing the tickets	
jo	urney	Flight information object	
	outboundFlights	An array of objects fullReservationFlight with information about flights for "there" direction	
	returnFlights	An array of objects fullReservationFlight with information about flights for "return" direction	
	separateFlights	An array of objects fullReservationFlight with detailed information about flights without reference to direction	
	outboundFareFamily	Object with information about tariffs for "there" direction	
	returnFareFamily	Object with information about tariffs for return direction	
	separateFareFamilies	Object with information about tariffs for flights without reference to direction	
	outboundDuration	Outbound flight's duration	
	returnDuration	Return flight's duration	
	separateDuration	Duration for flights without reference to direction	
	origin	Origin airport	
	destination	Destination airport	
	departureDate	Outbound flight's date	
	returnDate	Return flight's date	
	outboundBaggageAllowances	An array of objects containing detailed information about the baggage allowances for the <b>outbound</b> flight	
	returnBaggageAllowances	An array of objects containing detailed information about the baggage allowances for the <b>return</b> flight	
	separateBaggageAllowances	An array of objects containing detailed information about the baggage allowances for flights without reference to direction	
	containsInternationalFlights	A sign that one of the airports is located outside the	

Parameter	Description	
	territory of the Russian Federation	
number	Number of PNR	
reservationDate	Date and time of booking creation Format: yyyy-MM-ddTHH:mm:ss Example: 2018-06-20T15:44:00	
bookingTimeLimit	Date and time until which the unpaid booking will exist (rules are set in the settings in IBE)	
passengers	Array of objects passengerData with information about passengers	
services	Array of objects with information about auxiliary services	
seats	Array of objects with information about selected seats	
luggageSeats	An array of objects with information about luggage with separate air ticket and ssr CBBG	
insurances	Object with information about the selected insurance. Filled in when using the api/services service	
partnerProducts	An array of objects with information about partner services. Filled in when using the api/services service	
ticketFares	An array of objects with information about tariffs after applying the discount	
ticketFaresWithoutZapOff	An array of objects with information about tariffs without applying a discount	
fareBasisCodesFlightRefs	Array of objects with fare basis info	
hasSpecialConditions	Sign of the additional conditions	
isRefundAvailible	Sign of the availability of the return	
annulAnavailibilityReason	Reason for unavailability of booking cancellation	
isAnnulAvailible	Indication of availability of booking cancellation	
isAgentReservation	Agent booking sign to disable the booking management module	

Pa	Parameter		Description	
	accountCode		Account code	
	tou	ırCode	Tour code	
	flig	htsWithOpenDateCount	Number of flights with open dates	
		An array of related PNRs (obtained as a result of splitting a reservation as part of a partial exchange		
err	errors		Information about errors appeared during query execution	
	ibeCode		Error code, see app. 1. IBE error codes	
	description		Error's description, see app. 1. IBE error codes	
	me	essages	An array of objects containing errors. The array may be empty, it is recommended to analyze the error by the ibeCode field	
		code	Error's code	
		text	Error's text	
		additionalInfo	Additional info	

# $Full Reservation Flight\ object$

Parameter	Description	
aircraft	Plane's full title Example: Airbus A320	
aircraftlataCode	Plane's IATA-code	
referenceNumber	SSR number	
origin	Origin airport's IATA-code	
destination	Destination airport's IATA-code	
departureDate	Date and time of departure	
arrivalDate	Date and time of arrival	
arrivalDateUtc	Current segment's date and time in UTC	

Parameter		Description	
departureDateUtc		Departure date and time in UTC	
flightNumber		Flight number	
cla	assOfService	Chosen fare's info	
со	mmercialFamily	Fare's family type Example: U6ECONOMY or U6BUSINESS	
ma	arketingCarrier	Marketing airline	
ор	eratingCarrier	The airline actually operating the flight Example: U6, OK	
fliç	htDuration	Flight's duration	
sto	ppDuration	Stop's duration	
ted	chStops	An array with information about technical landings	
	arrivalDateTime	Date and time of arrival to techstop-point	
	departureDateTime	Date and time of departure from techstop-point	
	airportCode	IATA-code of techstop airport	
	stopDuration	Techstop's duration	
	flightDurationUntilNextStop	Duration of the flight to the next stop	
arı	rivalTerminal	Terminal number at the point of arrival	
de	partureTerminal	Terminal number at the point of departur	
ha	sh	Unique hash of the flight	
sta	atuses	Array with information about segment statuses	
со	deshare	The full name of the airline that operates the codeshare flight	
со	deshareFlightNumber	The flight number of the airline that operates the codeshare flight	
isCancelledByAirline		Sign of cancellation of flights by the airline	
isCheckinWithoutPseudo		Sign of hiding a pseudo-booking at the checkin	

# PassengerData object

Parameter	Description	
id	Passenger's serial number	
hasInfant	Flag identifying that passenger travels with infant	
referenceNumber	Reference to this passenger in the booking	
relatedAdultReferenceNumber	Reference to the adult passenger in the booking with whom the child or infant flies (it returns only for children and infants)	
relatedInfantReferenceNumber	Reference to the infant passenger in the booking with whom the adult flies (it returns only for adult)	
relatedChildrenReferenceNumbers	An array of links to child passengers which are travelling with an Adult (the array will be received only for an Adult with a children in the same booking)	
disability	Information about people with disabilities	
firstName	Passenger's name	
middleName	Passenger's patronymic or middle name (may be absent)	
surname	Passenger's surname	
passengerType	Passenger type	
birthdate	Date of birth	
sex	Passenger's gender	
nationality	Nationality (country)	
documentNumber	Document number	
documentExpiryDate	Date until which the document is valid	
loyaltyCard	Loyalty card number "Wings"	
email	E-mail	
phone	Phone number	
documentType	Document's type	

Parameter	Description	
isAdult	The sign if the passenger is an adult	
	true for passengers type ADT/SRC/YTH	
	false for passengers type CHD/INF	
isChanged	Sign of passenger data's changed	
checkedIn	Passenger check-in on flight coupon	
checkInHasStarted	Starting check-in on flight coupon	
checkedInSegment	Passenger check-in on flights	
boardingPassRestrictedBySegment	Restrictions on obtaining a boarding pass by segment	
hasPassengersDataErrors	The sign of errors in passengers data	
passengerDataErrors	Array with detailed information of errors in passengers data	
endorsements	Array with information about documents to buy tickets on the subsidized fares or to apply discounts on partner loyalty cards	
paymentDocument	Payment document's info	
accompanimentBookingsInfo	Information about the reservation containing an accompanying passenger	

# Involuntary ticket refund service for agents using.

## POST involuntaryRefund/moneyless method

API service	InvoluntaryRefund/moneyless	
Short description	Let to process involuntary refund of tickets and services for agents	
Supported HTTP(S)-methods	POST	
Conterminous systems methods used	Sirena:  Receiving booking information: order, pnr_status  Refund initiation: svc_emd_refund_query, svc_emd_refund_confirm, payment-ext-auth  Making changes to a booking: add_ssr, modify_pnr, divide_order	

**Description:** agents method that let to process involuntary refund of tickets and services in PSS system without interaction with payment system of Airline.

Request format: /api/apiVersion/InvoluntaryRefund/Moneyless

#### **Request parameters:**

Parameter	Mandatory	Description
pnrNumber	yes	Unique booking number (PNR).
passengers	yes	Array with information about passengers whom needs to process the involuntary moneyless refund
isTicketRefund	yes	The sign that a ticket with services or only services is being refunded.
partnerProducts	no	An array of partner services to be returned (the array

		parameters are similar to the apiVersion/partners/id response parameters)
lastName	yes	Passenger's last name
passengerReferenceNumber	yes	Passenger reference.  Associated with field data -> passengers -> referenceNumber
relatedAdultReferenceNumber	no	Reference to the adult passenger with whom the child or infant is flying.  The parameter is filled for the child and infant
relatedInfantReferenceNumber	no	Reference to the infant with whom the adult is flying.  The parameter is filled for the adult who flies with infant.
passengerType	yes	Passenger type.  Possible types of passengers are presented in EN_8_1_Attachment: Dictionaries of passenger types.
services	no	An array with information about purchased and refundable additional services of the airline.
code	no	Returned additional service code.
ticketNumber	no	Ticket number of the returned additional service.

**Response format and parameters** are the same with POST api/refund/partial method response format and parameters.

# Voluntary tickets and services refund service

API Service	refund, refund/calculate, refund/partial	
Short description	Allows to calculate refund sum and perform tickets and services refund and also get information about already performed refund.	
Supported HTTP(S) methods	POST, GET	
	Sirena:	
	Receive information about booking: order, pnr_status	
	Initiate refund: svc_emd_refund_query, svc_emd_refund_confirm, payment-ext-auth	
Conterminous systems methods used	Making changes to a booking: add_ssr, modify_pnr, divide_order	
	CRM:	
	Create refund request: ServiceReqInsert_Input	
	BPC:	
	Registering an order for autorefund: bmmRefund	

### **POST refund/calculate method**

**Description**: allows to receive breakdown of refund sums for each passenger.

Request format: /api/apiVersion/refund/calculate

## **Request parameters:**

Parameter	Mandadtory	Description	Comments
pnrNumber	yes	PNR number, unique 6-digit booking identifier	
lastName	no	Passenger's last name	
passengers	yes	Array of passengers for which refund sums needs to be	

			calculated	
lastName		yes	Passenger's last name	
	passengerReferenceNumber	yes	Reference to passenger  Linked with data →  passengers → reference Number	
	relatedAdultReferenceNumb er	no	Reference to the adult passenger with whom the child or infant is flying.  The parameter is filled for the child and infant	
	relatedInfantReferenceNum ber	no	Reference to the infant with whom the adult is flying.  The parameter is filled for the adult who flies with infant.	
	luggageSeats	no	Array with information about luggage with separate air ticket and ssr CBBG.	In developing
	referenceNumber yes		Reference to the service for which a separate air ticket was issued. Corresponds to the field in the response GET Reservation data → luggageSeats → referenceNumber.	In developing
	passengerType yes		Passenger type.  Possible values: see EN_8_1_Attachment: Dictionaries of passenger types	
isInvoluntaryMoneyless no		no	Indicates whether the calculation of refundable amounts is for performing POST api/InvoluntaryRefund/Moneyles s refund on ADP.	

# Request examples

```
Refund for adult passenger
{
    "pnrNumber": "1ZGDLS",
        "isInvoluntaryMoneyless": false,
    "passengers": [{
            "lastName": "CHEREPANOV",
            "passengerType": 0,
            "passengerReferenceNumber": "12",
            "luggageSeats": []
    ]
}
Refund for adult and child
{
    "pnrNumber": "1ZGDWS",
    "passengers": [{
            "lastName": "BYKOV",
            "passengerType": 0,
            "passengerReferenceNumber": "12",
            "luggageSeats": []
        }, {
    "lastName": "BARABANOV",
            "passengerType": 5,
            "passengerReferenceNumber": "14",
            "luggageSeats": [],
            "relatedAdultReferenceNumber": "12"
        }
    ]
}
Response format
{
    "data": [{
            "passengerRefundDetails": [{
                     "hasInfant": boolean,
                     "passengerType": integer,
                     "referenceNumber": string,
                     "surname": string,
                     "ticketRefundDetails": {
                         "isInfantTicket": boolean,
                         "commissionAmount": integer,
                         "refundBonuses": integer,
```

"refundCurrency": integer,

```
"refundTotal": integer,
    "taxDetailsInformation": [{
            "taxCategory": string,
"taxDetails": [{
                    "rate": string,
                    "currencyCode": string,
                    "type": string
                }
            ]
        }
    ],
"ticketNumber": string
"serviceRefundDetails": [{
        "code": string,
        "text": string,
        "commissionAmount": integer,
        "refundBonuses": integer,
        "refundCurrency": integer,
        "refundTotal": integer,
        "taxDetailsInformation": [{
                "currencyCode": string,
                         "type": string
                    }
                ]
            }
        ],
"ticketNumber": string
    }
"partnerProducts": [{
    "document": st
        "document": string,
        "refundAmount": integer,
        "isRefundAmountUnknown": boolean,
        "partnerId": integer,
        "partnerType": integer,
        "bookingStatus": integer,
        "code": string,
        "amount": integer,
        "currency": string,
        "passengerReference": string,
        "flightReference": string,
        "isInfantProduct": boolean,
        "bookingId": string,
        "orderId": string,
        "compatibleProductCodes": [string]
    }
]
```

}

],

#### **Response parameters**

	Parameter	Description	Comments
		Sign of query execution success.	
Succ		If errors array is empty, field value will be set to true	
data	1	Returned data	
passengerRefundDetails		Array of objects with refund details information for each passenger.	
	hasInfant	Flag identifying whether passenger travels with infant	
	passengerType	Passenger type  Possible values: see EN_8_1_Attachment: Dictionaries of passenger types	
referenceNumber		Reference to passenger	
	surname	Passenger's surname	
	ticketRefundDetails	Array of objects with refund details information	

luggageSeatsRefundDetails	Array with information about CBBG luggage with separate air ticket to refund.	In developing
type	Tariff/fee type	
currencyCode	Currency code	
rate	Tariff/fee sum	
taxDetails	Array of objects with information about tariffs and fees details.	
taxCategory	Tax category  For refundable taxes "R" is returned, for non-refundable taxes - "NRT".	
	refundBonuses and refundCurrency values should be displayed to a user.	
taxDetailsInformation	<b>Important:</b> Information from present segment can be ignored.	
	Services information about tariffs and fees.	
ticketNumber	Ticket number should contain 13 digits	
	refundCurrency  ATC number	
refundTotal	Total refund sum, sum of refundBonuses and	
refundCurrency	Number of refunded	
refundBonuses	Number of refunded "Wings" bonuses	
commissionAmount	Commission amount for refund	
isInfantTicket	Flag identifying whether ticket is infant's document	

	All array elements are the same with passengerRefundDetails array elements, the field "surname" has value "CBBG".	
serviceRefundDetails	Array of objects with service's refund information.	
	Service code	
code	Possible values: see EN_8_1_Attachment: Dictionaries of services types	
text	Type of refundable pet when code="PETC".	
commissionAmount	Commission amount for refund of service.	
refundBonuses	Number of refunded "Wings" bonuses	
refundCurrency	Number of refunded roubles	
refundTotal	Total refund sum, sum of refundBonuses and refundCurrency	
	EMD number	
ticketNumber	Ticket number should contain 13 digits	
taxDetailsInformation	Services information about tariffs and fees.	
	Tax category.	
taxCategory	For refundable taxes "R" is returned, for non-refundable taxes - "NRT".	
taxDetails	Array of objects with information about tariffs and fees.	
rate	Tariff/fee sum	

currencyCode Currency code		Currency code	
	type	Tariff/fee type	
part	tnerProducts	Array of objects with partner's products refund information	
a	mount	Partner's service price	
b	oookingId	Unique partner's service order id	
b	ookingStatus	Partner's services order status	
C	ode	Partner's service tariff code. See EN_8_3_Attachment: Partner's services.	
C	urrency	Currency code	
d	locument	Partner's service document number. For insurances - issued insurance policy number.	
isInfantProduct		Flag identifying whether service is issued for an infant.	
is	sRefundAmountUnknown	Flag identifying whether the amount for refund of partner product is unknown.	
p	partnerId	Partner's id.	
p	partnerType	Partner's type.	
p	passengerReference	Reference to passenger for whom partner's service is being refunded	
re	efundAmount	Refundable sum.	
fl	lightReference	Reference to the flight segment, if the partner product wasn't added for the entire flight.	
О	orderId	Partner order id	
C	ompatibleProductCodes	Codes of services of the current partner, which are compatible with this service when purchased it	

	re	efundWithTicketOnlyServices	Array with service codes that can't be refunded without refunding the ticket.	In developing
errors		ors	Information about errors appeared during query execution.	
ibeCode EN_8_2_Attachment: IBE error codes				
	description		Code description, see. EN_8_2_Attachment: IBE error codes	
	messages		Array of objects, containing errors from Sirena response.  Array can be empty, it is recommended to analyse errors by ibeCode.	
		code	Sirena error code	
	text Sirena error text			

# POST refund/partial method

**Description**: allows you to refund tickets for booking in the context of passengers.

**Request format:** /api/apiVersion/refund/partial

## **Request parameters:**

Parameter	Mandadtory	Description	Comments
pnrNumber	yes	PNR number, unique 6-digit booking identifier	
passengers	yes	An array of passengers for which refund sums needs to be calculated	
isTicketRefund	yes	The sign that a ticket with services or only services is being	

		returned	
partnerProducts	no	An array of partner services to be returned (the array parameters are similar to the GET api/Reservation response parameters)	
lastName	yes	Passenger's last name	
passengerReferenceNumber	yes	Passenger reference.  Associated with field data -> passengers -> referenceNumber	
luggageSeats	no	Array with information about luggage with separate air ticket and ssr CBBG.	In developing
passengerType	yes	Passenger type.  Possible types of passengers are presented in EN_8_1_Attachment: Dictionaries of passenger types.	
related Adult Reference Number	no	Reference to the adult passenger with whom the child or infant is flying.  The parameter is filled for the child and infant	
relatedInfantReferenceNumber	no	Reference to the infant with whom the adult is flying.  The parameter is filled for the adult who flies with infant.	
services	no	An array with	

			information about purchased and refundable additional services of the airline	
	code	yes	Returned additional service code	
	ticketNumber	yes	Ticket number of the returned additional service	

**Response format:** the same as the refund/calculate method, the crmRefundRequestId field is added with the number of the created request for a refund to CRM, if autorefund was unsuccessful.

## **Response parameters (short description):**

	Parameter	Description	Comments
success		Sign of query execution success.	
		If errors array is empty, field value will be set to true	
d	lata	Returned data	
		Array with refund information	
	passengerRefundDetails	Full analogue of data in response of api/refund/calculate method	
	D ( ID II	Refund request number in CRM.	
	crmRefundRequestId	Example: 1-46MJI9D.	
	refundWithTicketOnlyServices	Array with service codes that can't be refunded without refunding the ticket.	In developing
errors		Information about errors appeared during query execution.	

## **Requests examples**

Example of requesting a full refund of a ticket with additional airline services and partner services

```
{
    "pnrNumber": "1ZGLB0",
    "lastName": "KUZNETSOV",
    "passengers": [{
             "lastName": "KUZNETSOV",
             "passengerType": 0,
             "passengerReferenceNumber": "12",
            "luggageSeats": [],
             "isTicketRefund": true,
             "partnerProducts": [{
                     "partnerId": 7,
                     "partnerType": 3,
                     "bookingId": "36a0173b-aee6-40e6-8d80-aaf3b154904b",
                     "code": "SBERDOC"
                "partnerType": 1,
"bookingId": "49753312-18df-4ac0-a68e-7c15ea8fe8b8",
                     "code": "AVIADYNAMIC"
                 }
            ],
"services": [{
   "ticke
                     "ticketNumber": "2624500003235",
                     "code": "HTML"
                 }
            ]
        }
    ]
}
Example of request for refund of partner services without a ticket
{
    "pnrNumber": "1ZROML",
    "lastName": "TESTOV",
    "passengers": [{
             "lastName": "TESTOV",
             "passengerType": 0,
             "passengerReferenceNumber": "12",
             "isTicketRefund": false,
             "partnerProducts": [{
                     "partnerId": 1,
                     "partnerType": 1,
                     "bookingId": "9940f823-4bb8-4c7c-a485-7341551c3285",
                     "code": "AVIADYNAMIC"
                 }
            ]
        }
    ]
}
```

An example of a request for a refund of additional airline services without a ticket

```
{
    "pnrNumber": "1ZRTVO",
    "lastName": "TESTOV",
    "passengers": [{
            "lastName": "TESTOV",
            "passengerType": 0,
            "passengerReferenceNumber": "12",
            "isTicketRefund": true,
            "partnerProducts": [],
            "services": [{
                     "ticketNumber": "2624552270079",
                     "code": "PETC"
                }
            }
        ]
    }
```

#### **Description of voluntary refund process**

Voluntary refund is initiated by airline's client own will.

Short description of voluntary refund business process.

- 1. Client opens BMM (booking management module) using PNR number and passenger's last name.
- 2. Selects option "Make a return", pop-up window gets opened with information about passengers existing in booking.
- 3. Selects a Voluntary refund.
- 4. Selects passengers for whom refund is needed to be performed and clicks on "Calculate amount" (for refund).
- 5. api/refund/calculate method is called, refund details data is displayed to client (refund bonuses, sum, fines etc). Actual refund is not performed at this step.
- 6. Client selects "Confirm refund" option, api/refund/partial method is called.
- 7. The IBE service performs a refund of services and/or air tickets to the API of partners and Sirena.
- 8. The IBE service validates the possibility of registering an auto return order.
- 9. The IBE service registers an order for return (using a separate method for registering a return order in the PM. Registration is always on the original PNR for which the payment was made).
- 10. The PM checks the possibility of auto-refund for the current order: it requests a GET api/refund, validates the contents of the order and the amounts to be refunded.
- 11. The PM sends a refund request to the bank.
- 12. The PM sends the status of the request for a refund: Option A the order is accepted by the bank for return; Option B the order is not accepted for return, or an error has been received from the PM

#### 13. Then option A:

- 1. The IBE service informs the user about a successfully completed refund request with information that the funds will be credited to the card within some time, depending on the bank
- 2. The PM fiscalizes the return receipt. The check is sent to the client.
- 3. When you re-enter the BMM, information is displayed that the order has been returned.

#### 14. Then option B:

- 1. Realizing automatically annulling seats from the booking (the same process as annulling by POST api/Annul request).
- 2. The IBE service generates a request for a refund in CRM.
- 3. If the return fails, one of the possible error messages is displayed.
- 4. The IBE service informs the user about a successfully created refund request with information about the request number.
- 5. Within 30 days, the request in CRM is processed manually by the operator, and the amount to be returned is requested from the engine.
- 6. After financial refund operation is performed, confirmation is sent to IBE (information about refund completion is being recorded to DB).
- 7. Refund considered to be complete.

#### General technical information.

- 1. For each refund (initiated by api/refund method call) a record with unique refund session ID is created in DB.
- 2. 3 entities can be linked with refund session: a) tickets refund information entity, b) airline's services refund information entity c) partner's services refund information entity
- 3. Refund session can have several states. During refund process IBE transfers session from one state to another performing following operations:
  - 1. Initiated refund session is initiated;
  - 2. VatCalculated VAT information is calculated for refund;
  - 3. PartnerServicesCanceled partners services cancellation performed if it is necessary;
  - 4. PnrSplitted PNR is split into several parts (in case of partial refund);
  - 5. CrmRequestCreated Refund request is created in CRM;
  - 6. PnrCanceled PNR and tickets are cancelled (irreversible operation). In case of partial refund child PNR and its tickets gets cancelled.
  - 7. ManualAnalysis an error appeared in voluntary refund process. See point 5.
- 4. Entities with information about tickets, airline's and partner's services also has several states:
  - 1. NotAvailable entity is not available for refund sum information retrieve;
  - 2. Available refund sum information can be retrieved for a ticket/service;
  - 3. Processed refund is confirmed;
  - 4. Manual Processing Required manual processing is required for this refund;
  - 5. Failed refund confirmation end with an error

5. Complete of the refund session to the final state
If an error appears during refund procedure and operation hangs in one of intermediate
states (before PnrCanceled state) then special job periodically attempts to continue refund
process.

If refund session does not transfer to terminal state, during allotted time, IBE logs an error and transfers session to ManualAnalysis state.

Error gets handled in Azure Insights and email notification is being sent for this event. Manual analysis of this situation is performed afterwards.

For retrieving of refund session information and refund confirmation GET refund/pnr and PUT refund/pnr methods of GOI is being used.

These methods are described in GOI documentation.

#### Failed request and response examples

Description	Request format	Response example
Lets consider that in 1ZGLL0 booking adult passenger (of type 0) is added and correct reference to passenger - 12.  An error will appear in case of:  1. Incorrect reference to passenger is passed. 2. Incorrect type of passenger is passed.	Request for point 1.  {     "pnrNumber": "1ZGLL0",     "lastName": "TERENTEVA",     "passengers": [	<pre>{     "errors": [</pre>

```
"pnrNumber": "1ZGLL0",
                              "lastName": "TERENTEVA",
                              "passengers": [
                                       "lastName":
                         "TERENTEVA",
                                       "passengerType":
                         1,
                         "passengerReferenceNumber":
                         "12",
                         "isTicketRefund": true,
                                      "luggageSeats":
                         [],
                                      "services": [],
                         "partnerProducts": []
                                  }
                              ]
                         }
                              "pnrNumber": "1ZGDWS",
"lastName": "BYKOV",
                                                           {
                                                               "errors": [
                              "passengers": [
                                                                        "ibeCode":
                                       "lastName":
                                                           1062,
                         "BYKOV",
                                                                        "messages":
                                       "passengerType":
                                                           Booking for 1 adult and 1
                         Θ,
                                                                             {
child
                         "passengerReferenceNumber":
                                                           "text": "Some passenger
                         "12",
                                                           refund requested for is
It is not possible to
                                                           not adult or after
perform refund only for
                                                           refund an infant will
                         "isTicketRefund": true,
adult passenger.
                                                           be left without adults"
                                      "luggageSeats":
                         [],
                                                                             }
                                      "services": [],
                                                                        ]
                         "partnerProducts": []
                                                               ],
"success": false
                                  }
                                                           }
                              ]
                         }
```

#### **GET refund method**

**Description**: allows to receive information about already performed refund.

**Request format**: /api/refund

#### **Request parameters:**

Parameter	Description	Comments
pnrNumber	PNR number, unique 6-digit booking identifier	
lastName	Passenger's last name	
lastNameHash	Passenger last name hash	
ticketNumber	er Ticket number of passenger In developing	

## **Response format**

# **Response format:**

Parameter	Description	
	Sign of query execution success.	
success	If errors array is empty, field value will be set to true	
data	Returned data	
pnrNumber	PNR number, unique 6-digit booking identifier	
createdDate	Date and time in GMT of refund	
crmRefundRequestId	Request ID in CRM.	
errors	Information about errors appeared during query execution	
ibeCode	Error code, see EN_8_2_Attachment: IBE error codes	
description	Code description, see. EN_8_2_Attachment: IBE error codes	

messages		Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode
	code	Sirena error code
	text	Sirena error text

#### **Example of successful response:**

# Online check-in services api/checkin

Services for obtaining information about the status of registration and the possibility of registration

API service	vice Checkin, Checkin/reservation, Checkin/register, Checkin/cancel	
Short description	Allows you to check the possibility of online check-in from the BMM and if it is available to check-in.	
Supported HTTP(S)-methods	GET, POST	
Conterminous systems methods used	<b>Sirena:</b> order, pnr_status, view_flown_status, authorize, doSearchFltMulti, doLoadPnrMulti, doSavePax, doViewCraft, addProtLayer	

#### **GET Checkin** method

**Description:** allows you to get data about the possibility of registration and the current registration status.

Returns the start and end time of registration, as well as the time remaining before the start or end of registration.

**Request format** /api/apiVersion/checkin **Request parameters** 

Parameter	Description	
lastName	Last name of one of the passengers added to the booking. The parameter is passed in Latin.	
pnrNumber	The PNR number to get information for	

#### **Response format**

```
"data": [
    "segments": [
        "canRegister": boolean,
         "flightReference": string,
         "webCheckinEndDate": datetime,
         "webCheckinEndDateUtc": datetime,
"webCheckinStartDate": datetime,
         "webCheckinStartDateUtc": datetime,
         "webCheckinEndRemainingTime": integer,
         "webCheckinStartRemainingTime": integer
      }
    ],
"passengers": [
         "canRegister": boolean,
         "passengerReference": string,
         "flightReference": string,
                 "isBoardingPassAvailable": boolean,
         "ticketNumber": string, "registered": boolean,
         "registrationUnavailableMessage": string,
        "registrationUnavailableCode": integer
      }
    ],
"passengerSeats": [
      {
         "seatCheckinStatus": string,
         "flightReference": string,
         "passengerReference": string,
         "title": string,
         "number": integer
    ]
"errors": [
    "ibeCode": string,
    "description": string,
    "messages": [
```

```
{
    "code": string,
    "text": string,
    "additionalInfo": {
        "ssrType": string,
        "info": string
      }
    }
    }
}
success": boolean
```

## **Response parameters**

Parameter		Description
success		Sign of query execution success. If errors array is empty, field value will be set to true
data		Information about online registration
segments	5	Array of flight segments
canRe	gister	Sign web registration is available
flightF	Reference	Link to the flight segment
webCl	heckinEndDate	Local end date of web registration
webCl	heckinEndDateUtc	UTC end date of web registration
webCl	heckinStartDate	Local Web registration start date
webCl	heckinStartDateUtc	UTC start date of web registration
webCl	heckinEndRemainingTime	The number of seconds until the end of the web

	registration. The parameter will not be returned if the value <=0
webCheckinStartRemainingTime	The number of seconds before the start of the web registration. The parameter will not be returned if the value <=0
passengers	List of passengers
canRegister	Sign of the possibility of registration
passengerReference	Link to the passenger
flightReference	Link to the flight segment
isBoardingPassAvailable	Sign of the passenger's boarding pass availability
ticketNumber	Passenger's ticket number for the segment
registered	Sign the passenger is registered
registrationUnavailableMessage	An array of objects containing errors from Sirena's response, why this passenger cannot be registered.  The array may be empty, it is recommended to analyze the error by the registration Unavailable Code field.
registrationUnavailableCode	The error code that makes web registration unavailable
passengerSeats	Passenger seats at check- in
seatCheckinStatus	Registration status.  Possible values in

			Attachment: Dictionary of description of statuses of seats on checkin
		flightReference	Link to the flight segment
		passengerReference	Link to the passenger
		title	Row seat
		number	Seat number
er	'ro	rs	Information about errors that occurred during the operation of the service
	ib	eCode	Error code, see Attachment 1. IBE error codes
	de	escription	Error description, see Attachment 1. IBE error codes
	m	essages	An array of objects containing errors from Sirena answer. The array may be empty, it is recommended to analyze the error by the ibeCode field.
	СС	ode	Sirena error code
	te:	xt	Sirena error text

## **Examples of successful responses**

The answer is when the check-in is open and the passenger is not registered

```
"webCheckinEndRemainingTime": 48932
             }
        ],
"passengers": [
                 "canRegister": true,
                 "passengerReference": "12",
                 "flightReference": "12",
                 "ticketNumber": "2622400030362",
                 "registered": false
        "passengerSeats": []
    "success": true
}
Response when registration is completed
{
    "data": {
        "segments": [
                 "canRegister": true,
                 "flightReference": "12",
                 "webCheckinEndDate": "2023-04-15T06:50:00",
                 "webCheckinEndDateUtc": "2023-04-15T01:50:00Z", "webCheckinStartDate": "2023-04-13T08:50:00",
                 "webCheckinStartDateUtc": "2023-04-13T03:50:00Z",
                 "webCheckinEndRemainingTime": 39211
        ],
"passengers": [
                 "canRegister": true,
                 "passengerReference": "12",
                 "flightReference": "12",
                 "ticketNumber": "2622400030311",
                 "registered": true
             }
        ],
"passengerSeats": [
                 "seatCheckinStatus": 4,
                 "flightReference": "12",
                 "passengerReference": "12",
                 "title": "C",
                 "number": 19
             }
        1
    "errors": [],
    "success": true
```

```
}
Answer when registration is not open yet:
{
    "data": {
         "segments": [
                  "canRegister": false,
                  "flightReference": "12"
        ],
"passengers": [
                  "canRegister": false,
"passengerReference": "12",
                  "flightReference": "12",
                  "ticketNumber": "2622400030358",
                  "registered": false,
                  "registrationUnavailableMessage": "No requested flight in
reservation",
                  "registrationUnavailableCode": 401161
         ]
    "errors": [],
    "success": true
}
Response when check-in is only available at the airport:
{
    "data": {
         "segments": [
                                   "canRegister": false,
                  "flightReference": "12",
                  "webCheckinEndDate": "2024-12-03T05:50:00",
                  "webCheckinEndDateUtc": "2024-12-02T19:50:00Z", "webCheckinStartDate": "2024-12-02T07:50:00",
                  "webCheckinStartDateUtc": "2024-12-01T21:50:00Z",
                  "webCheckinEndRemainingTime": 38437
             }
        ],
"passengers": [
                  "canRegister": false,
                  "passengerReference": "12",
                  "flightReference": "12",
                  "ticketNumber": "2622400119239",
                  "registered": false,
                  "registrationUnavailableMessage": "Web registration is not
available.",
```

### **GET Seatmap/checkin method**

**Description:** allows you to get a map of places for online registration

Request format /api/apiVersion/Seatmap/checkin

#### **Request example**

api/apiVersion/seatmap/checkin?referenceNumber=1&origin=LED&destination=DME&departureDate=20220723&flightNumber=80&classOfService=E&commercialFamily=U6ECONOMY

### **Request parameters**

Information about flight for which seatmap is needed

Parameter	Mandatory	Description
referenceNumber	Yes	Reference to flight segment
origin	No	Origin airport
destination	No	Destination airport
departureDate	No	Date and time of departure
flightNumber	No	Flight number
classOfService	No	Information about selected tariff
		Fare family type, for instance:
commercialFamily	No	U6ECONOMY or U6BUSINESS
currency	No	Currency in which search results will be returned

#### **Response format**

{

```
"data": {
  "compartmentDetails": [
      "number": integer,
      "seats": [
        {
          "seat": string,
          "number": integer,
          "description": string,
          "characteristics": [
            string
          "occupation": string,
          "passengerRelatedPrice": [
            {
              "name": string,
              "type": string,
              "uniqueCustomerIdentifier": string,
              "seatPrice": double,
              "isSeatUnavailable": boolean,
              "hasInfant": boolean,
              "autoSeating": boolean
            }
          ],
"classDesignator": string
        }
      ]
    }
 ],
"isEmpty": boolean,
  "passengersTotalData": [
    {
      "passengerReference": string,
      "passengerPriceLevels": [
          "price": double,
          "priceLevel": integer
    }
 ],
"passengerSeats": [
    {
      "seatCheckinStatus": string,
      "flightReference": string,
      "passengerReference": string,
      "title": string,
      "number": integer
    }
  "preselectedSeats": [
      "flightReference": string,
      "passengerReference": string,
```

# Response parameters

Parameter	Description
success	Sign of query execution success.
	If errors array is empty, field value will be set to true
data	Returned data
isEmpty	Flag identifying whether data is returned from sirena  This field can be used to determine possibility of selecting seats on present flight segment
compartmentDetails	Array of objects with information about seats grouped by rows
number	Row number
seats	Array of objects which contains detailed information about seats
seat	Seat. Possible values: A-F

number	Row number for seat
	Seat description
	9 – central seat
description	A – aisle seat
	W – window seat
characteristics	Seat characteristics. The main characteristics are listed in the Appendix: Reference books
occupation	Sign of seat's occupation
passengerRelatedPrice	Array of objects with information about seat prices for. Only available for seats with CH characteristics.
name	Passenger name
type	Passenger type
uniqueCustomerIdentifier	Unique passenger ID
seatPrice	seat price
isSeatUnavailable	Seat availability flag
hasInfant	Flag identifying that passenger travels with infant
autoSeating	Flag of a free place for auto-seating
classDesignator	Information about seat class. Possible values: ECONOMY, BUSINESS
passengersTotalData	An array of objects with information about the cost of seats in the context of passengers
passengerReference	Passenger reference
passengerPriceLevels	An array of objects of the cost of seats available to the passenger
price	Seat cost
priceLevel	Seat value category
passengerSeats	Array of places to register
seatCheckinStatus	The status of the place on registration
flightReference	Link to the flight segment

passengerReference	Link to the passenger
title	Row seat
number	Seat number
preselectedSeats	Pre-selection of seats
flightReference	Link to the flight segment
passengerReference	Link to the passenger
title	Row seat
number	Seat number
errors	Information about errors appeared during query execution.
ibeCode	IBE error code
description	IBE error description
messages	Array of objects, containing conterminous system's errors  Array might be empty. It is recommended to analyze ibeCode field.
code	Sirena error code
text	Sirena error text

## **POST Checkin/reservation method**

**Description:** The method allows you to reserve a place for online registration

Request format /api/apiVersion/checkin/reservation

# **Response format**

# **Request parameters**

	Parameter	Description
9	seats	Array with information about reserved seats
	number	Seat number
	title	Row seat
	passengerReference	Link to the passenger
	flightReference	Link to the flight segment
boardingPassEmail		E-mail for sending boarding pass after registration. Optional parameter.

# **Request example**

# **Response format**

```
"data": {
  "passengers": [
       "flightReference": string,
       "passengerReference": string,
       "number": integer,
"title": string,
       "reserveFree": boolean
     }
  ]
},
"errors": [
  {
    "ibeCode": string,
     "description": string,
     "messages": [
       {
         "code": string,
         "text": string,
```

```
"additionalInfo": {
         "ssrType": string,
         "info": string
      }
      }
      }
      ;
      "success": boolean
}
```

Pa	rameter	Description
suc	ccess	Sign of the success of the request. If the errors array is empty, then the field value will be true
dat	ta	The data returned by the request
	passengers	List of passengers
	passengerReference	Link to the passenger
	flightReference	Link to the flight segment
	number	Seat number
	title	Row seat
	reserveFree	The sign of a free place at registration
errors		Information about errors that occurred during the operation of the service
	ibeCode	Error code, see Attachment 1. IBE error codes
	description	Error description, see Attachment 1. IBE error codes
	messages	An array of objects containing errors from Sirena answer. The array may be empty, it is recommended to analyze the error by the ibeCode field
	code	Sirena error code

text Sirena error text

## Response example

## **POST Checkin/register method**

**Description:** The method will allow you to register a passenger for a free seat

Request format /api/apiVersion/checkin/register

## **Request format**

## **Request parameters**

Parameter		Description
references		Array with information about registered passengers and flight segments.
	passengerReference	Link to the passenger
	flightReference	Link to the flight segment

## Request example

```
{
    "references": [{
            "passengerReference": 12,
            "flightReference": 12
        }
    ]
}
Response body
  "data": {
    "flights": [
        "pnrNumber": string,
        "aircraft": string,
        "aircraftIataCode": string,
        "referenceNumber": string,
        "origin": string,
        "destination": string,
        "departureDate": datetime,
        "arrivalDateUtc": datetime,
        "departureDateUtc": datetime,
        "arrivalDate": datetime,
        "flightNumber": string,
        "classOfService": string,
        "commercialFamily": string,
        "operatingCarrier": string,
        "marketingCarrier": string,
        "codeshareName": string,
        "flightDuration": string,
        "stopDuration": string,
        "techStops": [
          {
            "arrivalDateTime": datetime,
            "departureDateTime": datetime,
            "airportCode": string,
            "stopDuration": string,
            "flightDurationUntilNextStop": string
          }
        ],
"flightDurationUntilNextStop": string,
        "arrivalTerminal": string,
        "departureTerminal": string,
        "hash": string,
        "statuses": [
          string
        "isCancelledByAirline": true
      }
    ],
```

```
"passengers": [
    {
       "flightReference": string,
       "passengerReference": string,
       "number": integer,
       "title": string,
       "emd": string,
       "registered": boolean
    }
  ],
"passengersErrors": [
    {
      "flightReference": string,
"referenceNumber": string,
       "code": integer,
       "text": string
},
"errors": [
  {
    "ibeCode": string,
    "description": string,
    "messages": [
       {
         "code": string,
         "text": string,
         "additionalInfo": {
           "ssrType": string,
           "info": string
      }
    ]
  }
],
"success": boolean
```

Parameter		Description
succ	cess	Sign of the success of the request. If the errors array is empty, then the field value will be true
data	a	Online check-in information array
f	lights	Online check-in information

pnrNumber	Unique Booking Number (PNR).
aircraft	Aircraft
aircraftIataCode	IATA aircraft code
referenceNumber	Link to the current flight segment
origin	Departure airport for the current segment
destination	Arrival airport for the current segment
departureDate	Departure date and time for the current segment
arrivalDateUtc	Arrival date and time for the current segment in UTC
departureDateUtc	Departure date and time for the current segment in UTC
arrivalDate	Date and time of arrival for the current segment
flightNumber	Flight number
classOfService	Information about the selected tariff
commercialFamily	Type of tariff family
operatingCarrier	The airline actually performing the flight
marketingCarrier	Marketing Airline
codeshareName	Code name
flightDuration	Duration of the flight
stopDuration	Duration of the stop
techStops	Array with information about technical stops
flightDurationUntilNextSto	Duration of the flight to the next stop

		arrivalTerminal	Terminal number at the point of arrival
		departureTerminal	Terminal number at the point of departure
		hash	Unique hash of the flight
		statuses	Segment status
		isCancelledByAirline	Indication of flight cancellation by the airline
	pa	ssengers	List of passenger seats
		flightReference	Link to the flight segment
		passengerReference	Link to the passenger
		number	Seat number
		title	Row number
		emd	Electronic document confirming the release of the place service
		registered	Sign of registration
	pa	ssengersErrors	Array of registration errors
		flightReference	Link to the flight segment
		referenceNumber	Link to the passenger
		code	Error code
		text	Error text
er	ror	s	Information about errors that occurred during the operation of the service
	ibe	eCode	Error code, see Attachment  1. IBE error codes
	de	scription	Error description, see Attachment 1. IBE error codes
	me	essages	An array of objects containing errors from

	Sirena answer. The array may be empty, it is recommended to analyze the error by the ibeCode field
code	Sirena error code
text	Sirena error text

## Response example

```
{
    "data": {
        "flights": [
                "pnrNumber": "217MSL",
                "aircraft": "Airbus A319",
                "aircraftIataCode": "319",
                "referenceNumber": "12",
                "origin": "SVX"
                "destination": "DME",
                "departureDate": "2023-04-18T06:50:00",
                "arrivalDateUtc": "2023-04-18T04:15:00Z",
                "departureDateUtc": "2023-04-18T01:50:00Z",
                "arrivalDate": "2023-04-18T07:15:00",
                "flightNumber": "264",
                "classOfService": "A",
                "commercialFamily": "U6ECONOMY",
                "operatingCarrier": "U6",
                "marketingCarrier": "U6"
                "flightDuration": "2:25",
                "techStops": [],
                "hash": "2023-04-18 06:50:00-264-SVX-DME",
                "statuses": [
                    "HK"
                ],
"isCancelledByAirline": false
            }
        ],
"passengers": [
                "flightReference": "12",
                "passengerReference": "12",
                "number": 24,
                "title": "A",
                "registered": true
        ],
"passengersErrors": []
   "success": true
```

}

## Example of a response in case of an error in registration

```
{
    "data": {
         "flights": [
                  "pnrNumber": "217D9K",
                  "aircraft": "Airbus A319",
                  "aircraftIataCode": "319",
                  "referenceNumber": "12",
                  "origin": "SVX",
"destination": "DME",
                  "departureDate": "2023-04-18T06:50:00",
"arrivalDateUtc": "2023-04-18T04:15:00Z",
                  "departureDateUtc": "2023-04-18T01:50:00Z",
                   "arrivalDate": "2023-04-18T07:15:00",
                  "flightNumber": "264",
                  "classOfService": "A"
                  "commercialFamily": "U6ECONOMY",
                  "operatingCarrier": "U6", "marketingCarrier": "U6",
                  "flightDuration": "2:25",
                  "techStops": [],
                  "hash": "2023-04-18 06:50:00-264-SVX-DME",
                  "statuses": [
                       "HK"
                  ],
"isCancelledByAirline": false
              }
         "passengers": [],
         "passengersErrors": [
                  "flightReference": "12",
                  "referenceNumber": "12",
                  "code": 401166,
                  "text": "Passenger seat not reserved."
              }
         ]
    "errors": [],
    "success": true
}
```

#### POST Checkin/cancel method

**Description:** The method allows you to cancel free passenger registration

**Note:** After the registration is removed, it is possible to register for another place

**Request format** /api/apiVersion/checkin/cancel

## **Request body**

## **Request parameters**

	Parameter	Description
ref	erences	Array with information about references to passengers for whom need to cancel registration and flight segments.
	passengerReference	Link to the passenger
	flightReference	Link to the flight segment

# **Request example**

# **Response body**

```
{
  "data": {
    "flights": [
      {
        "pnrNumber": string,
        "aircraft": string,
        "aircraftIataCode": string,
        "referenceNumber": string,
        "origin": string,
        "destination": string,
}
```

```
"departureDate": datetime,
      "arrivalDateUtc": datetime,
      "departureDateUtc": datetime,
      "arrivalDate": datetime,
      "flightNumber": string,
      "classOfService": string,
      "commercialFamily": string,
      "operatingCarrier": string,
      "marketingCarrier": string,
      "codeshareName": string,
      "flightDuration": string,
      "stopDuration": string,
      "techStops": [
          "arrivalDateTime": datetime,
          "departureDateTime": datetime,
          "airportCode": string,
"stopDuration": string,
          "flightDurationUntilNextStop": string
        }
      ],
"flightDurationUntilNextStop": string,
      "departureTerminal": string,
      "hash": string,
      "statuses": [
        string
      "isCancelledByAirline": true
    }
 ],
"passengers": [
    {
      "flightReference": string,
      "passengerReference": string,
      "number": integer,
      "title": string,
      "emd": string,
      "registered": boolean
    }
 ],
"passengersErrors": [
    {
      "flightReference": string,
      "referenceNumber": string,
      "code": integer,
      "text": string
    }
  ]
"errors": [
    "ibeCode": string,
    "description": string,
```

Pa	Parameter		Description
success		ss	Sign of the success of the request. If the errors array is empty, then the field value will be true
da	data		Online check-in information array
	fli	ghts	Online check-in information
		pnrNumber	Unique Booking Number (PNR).
		aircraft	Aircraft
		aircraftIataCode	IATA aircraft code
		referenceNumber	Link to the current flight segment
		origin	Departure airport for the current segment
		destination	Arrival airport for the current segment
		departureDate	Departure date and time for the current segment
		arrivalDateUtc	Arrival date and time for the current segment in UTC

	departureDateUtc	Departure date and time for the current segment in UTC
	arrivalDate	Date and time of arrival for the current segment
	flightNumber	Flight number
	classOfService	Information about the selected tariff
	commercialFamily	Type of tariff family
	operatingCarrier	The airline actually performing the flight
	marketingCarrier	Marketing Airline
	codeshareName	Code name
	flightDuration	Duration of the flight
	stopDuration	Duration of the stop
	techStops	Array with information about technical stops
	flightDurationUntilNextStop	Duration of the flight to the next stop
	arrivalTerminal	Terminal number at the point of arrival
	departureTerminal	Terminal number at the point of departure
	hash	Unique hash of the flight
	statuses	Segment status
	isCancelledByAirline	Indication of flight cancellation by the airline
F	passengers	List of passenger seats
	flightReference	Link to the flight segment
	passengerReference	Link to the passenger
	number	Seat number
	title	Row number

emd	Electronic document confirming the release of the place service
registered	Sign of registration
passengersErrors	Array of registration errors
flightReference	Link to the flight segment
referenceNumber	Link to the passenger
code	Error code
text	Error text
errors	Information about errors that occurred during the operation of the service
ibeCode	Error code, see Attachment 1. IBE error codes
description	Error description, see Attachment 1. IBE error codes
messages	An array of objects containing errors from Sirena answer. The array may be empty, it is recommended to analyze the error by the ibeCode field
code	Sirena error code
text	Sirena error text

# Response example

```
"departureDateUtc": "2023-04-18T01:50:00Z",
                      "arrivalDate": "2023-04-18T07:15:00",
"flightNumber": "264",
"classOfService": "A",
                      "commercialFamily": "U6ECONOMY",
"operatingCarrier": "U6",
"marketingCarrier": "U6",
                       "flightDuration": "2:25",
                      "techStops": [],
"hash": "2023-04-18 06:50:00-264-SVX-DME",
                      "statuses": [
                            "HK"
                      ],
"isCancelledByAirline": false
                 }
           ],
"passengers": [
                       "flightReference": "12",
                      "passengerReference": "12",
                       "registered": false
           ],
"passengersErrors": []
     },
"errors": [],
"success": true
}
```

# Change passenger's data service

API service	passenger
Short description	Allows to change passenger's data in booking
Supported HTTP(S)-methods	POST
Conterminous systems methods used	Sirena: modify

## POST passenger method

**Description**: allows to change passenger's personal data in booking

Implemented logic:

- 1. The fields "Sex", "Birth date", "Document number" it isn't allowed to change.
- 2. The fields "Last name", "Name", "Middle name", "E-mail" and "Phone" it is allowed to change one time.

A limit for changing is 3 symbols in total by 3 fields ("Last name", "Name", "Middle name").

## Update in logic implementation for version 2.3

- 1. The fields "Last name", "Name", "Middle name", "E-mail" and "Phone" are allowed to be changed once for each passenger.
- 2. The fields "Sex", "Birth date", "Document number", "Validity" (for international flights) are allowed to be changed once for each passenger.

The data change limit is 3 characters by the sum of the fields "Last name" + "Name" + "Middle name".

The data change limit is 3 characters by the sum of the fields "Birth date" + "Document number" + "Validity" (for international flights).

**Request format**: /api/apiVersion/passenger

#### **Request parameters**

Parameter	Mandatory	Description
I di dilictei	Widiladioi y	Bescription

referenceNumber	yes	Reference to passenger	
passengerType	yes	Passenger's type	
surname	no	Last name	
firstName	no	First name	
middleName	no	Middle name	
email	no	Email	
phone	no	Phone	
nationality	no	Nationality	
sex	no	Sex	
birthDate	no	Date of birth	
isEmailPayment	yes	Tag for generating payment link sent to user's email	
documentNumber	no	Document number	
documentExpiryDate	no	The validity period of the document	
callbackUrl	no	Url for retrieve payment status	
engine	no	engine for BMM	
lang	no	Interface language for the BPC payment form.  Possible values:  • ru - Russian; • en - English; • cn - Chinese.	
redirectLang	no	Redirection language to BMM after payment.  Possible values:  • ru - Russian; • en - English; • zh - Chinese; • uz - Uzbek; • ky - Kyrgyz; • fr - French.	
returnUrl	no	Return address after payment.	

# **Response format**

Parameter	Description
	Sign of query execution success.
success	If errors array is empty, field value will be set to true
data	Returned data
orderId	Order ID
	Payment link
	Format: https://web.rbsuat.com/amadeuspsp/static/payment/payment.htm
paymentFormURL	?orderId= <order_id></order_id>
	&hash= <hash></hash>
	&systemId= <system_id></system_id>
	&language= <language></language>
errors	Information about errors appeared during query execution.
ibeCode	Error code, see EN_Attachment 1. IBE error codes

description		Code description, see. EN_Attachment 1. IBE error codes
messages		Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode.
	code	Sirena error code
	text	Sirena error text

# Request and response examples

Description	Request example	Response example
Mandatory parameter r eferenceNu mber is not passed	{ "surname": "Test" }	<pre>{     "errors": [</pre>
Invalid value of passengerT ype is passed	{     "referenceNum     ber": 2,      "passengerTyp     e": 1     }	<pre>{     "errors": [</pre>
Valid request	Passenger in booking {     "id": 12,	<pre>{     "data": {         "orderId": "0c42e8e6-5f91-4e04-b4d6- 347d840014fa",         "paymentFormURL": "https://web.rbsuat.com/amadeuspsp/static/payment/</pre>

```
payment.html?orderId=0c42e8e6-5f91-4e04-b4d6-
"hasInfant":
               347d840014fa&systemId=mainwebst&language=ru&hash=6
false,
               61a02522e176c52d97d7e6436a44b3115ea8ea1bfc9ca3e107
               88780d1feaf09"
"referenceNum
                   },
"errors": [],
ber": "12",
                   "success": true
"firstName":
               }
"ANTON",
"middleName":
"ANDREEVICH",
"surname":
"SAVIN",
"passengerTyp
e": 0,
"birthDate":
"1999-10-
25T00:00:00",
    "sex": 0,
"nationality"
: "RUS",
"documentNumb
er":"44441112
22",
"documentExpi
ryDate":
"2049-12-
31T00:00:00",
    "email":
"S0BAKA010101
@MAIL.RU",
    "phone":
"79531568787"
"documentType
": 0,
"isAdult":
true,
"isChanged":
false
```

```
Request
"referenceNum
ber": "12",
"passengerTyp
e": 0,
"documentNumb
er":
"4444111222",
"email":
"sobaka010101
"sex": 0,
"birthDate":
"1999-10-
25T00:00:00Z"
"isEmailPayme
nt":
false
 "lang":
"ru",
"redirectLang
": "ru"
}
```

# Contact info add service Reservation/AddContactInfo (for agents)

API service	Reservation/AddContactInfo
Short description	Allow to add contact info to a passenger or without a reference
Supported HTTP(S)-methods	POST
Conterminous systems methods used	Sirena: modify_pnr

#### POST Reservation/AddContactInfo method

**Description**: Allow to add email or phone number to a passenger or add contact info without reference certain passenger

You can see added contact info in the response of GET Reservation/Advanced response

Request format: /api/apiVersion/Reservation/AddContactInfo

## **Request parameters**

Parameter		Description
re	eservationNumber	PNR of reservation
surname		Passenger's surname
C	ontactInfo	Array with contact info
	email	Email
	phoneNumber	Phone number
	passengerReference	Reference to a passenger (optional)

# **Reponse format**

```
{
    "errors": [{
        "ibeCode": number,
        "description": string,
        "messages": [{
```

P	Parameter Description		Description
Sign of query execution success.			Sign of query execution success.
success  If errors array is empty, field value will be set to true		If errors array is empty, field value will be set to true	
eı	r <b>ro</b>	rs	Information about errors appeared during query execution.
	ib	eCode	Error code, see EN_Attachment 1. IBE error codes
	de	escription	Code description, see. EN_Attachment 1. IBE error codes
messages   °		iessages	Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode.
		code	Sirena error code
		text	Sirena error text

# Service for retrieving SSR and remarks information /api/version/Reservation/Advanced (for agents)

API service	/Reservation/Advanced	
Short description	Allows you to get all SSRs and remarks (with the RM type) that are in the booking in order to view them, as well as to put the reservations with the necessary remarks in the queue, and remove the reservations with the remarks that are not interesting for the agent from the queue	
Supported HTTP(S)-methods	GET	
Conterminous systems methods used	Sirena: order, pnr_status	

## **POST AddSSR method**

**Note:** method is available on ADP

**Description:** adds SSR to reservation

Request format: api/apiVersion/Reservation/Advanced

# Request header

X-Api-Key - unique GUID of system using IBE API.

# **Request paramaters description**

Parameter	Description
PnrNumber	Reservation number.
TicketNumber	Ticket number, if one is used instead of PNR number, to retrieve reservation.
LastName	Passenger last name.
LastNameHash	Passenger last name hash.

```
{
    "data": {
```

```
"remarks": [
  {
    "type": "string",
    "text": "string"
    "referenceNumber": "string",
    "passengerReferences": [
      "string"
    "flightReferences": [
      "string"
  }
],
"specialServiceRequests": [
  {
    "code": "string",
    "status": "string",
"text": "string",
    "referenceNumber": "string",
    "passengerReferences": [
      "string"
    "flightReferences": [
      "string"
  }
],
"contacts": [
  {
    "email": "string",
    "phoneNumber": "string",
    "passengerReference": "string"
  }
],
"tickets": [
  {
    "number": "string",
    "passengerReference": "string",
    "flightReferences": [
      "string"
    "isIssuedByRefundableOffice": "bool",
    "issueDate": "datetime"
  }
"outboundFareFamily": {
  "fareFamilyId": "integer",
  "code": "string",
  "shortCode": "string",
  "category": "string"
  "isSubsidized": "bool",
  "options": [
    {
```

```
"code": "string",
      "category": "string",
      "order": "integer",
      "showInPopup": "bool"
      "showInSummary": "bool",
      "showInUpsell": "bool",
      "showInFareIncluded": "bool",
      "showForAdult": "bool",
      "showForInfant": "bool"
      "showInBookingCart": "bool"
    }
  "order": "integer",
  "commercialFamily": "string",
  "canRefund": "bool",
  "hasUpsale": "bool"
  "isLowCost": "bool"
"returnFareFamily": {
   "fareFamilyId": "integer",
  "code": "string",
  "shortCode": "string",
  "category": "string"
  "isSubsidized": "bool",
  "options": [
    {
      "code": "string",
      "category": "string",
      "order": "integer",
      "showInPopup": "bool"
      "showInSummary": "bool",
      "showInUpsell": "bool"
      "showInFareIncluded": "bool",
      "showForAdult": "bool",
      "showForInfant": "bool",
      "showInBookingCart": "bool"
    }
     "separateFareFamily": {
  "fareFamilyId": "integer",
  "code": "string",
  "shortCode": "string",
  "category": "string",
  "isSubsidized": "bool",
  "options": [
    {
      "code": "string",
      "category": "string",
      "order": "integer",
      "showInPopup": "bool"
      "showInSummary": "bool",
      "showInUpsell": "bool",
"showInFareIncluded": "bool",
      "showForAdult": "bool",
```

```
"showForInfant": "bool",
       "showInBookingCart": "bool"
    }
  ],
  order": "integer",
"commercialFamily": "string",
  "canRefund": "bool",
  "hasUpsale": "bool",
  "isLowCost": "bool"
},
"tsmData": [
  {
    "passengerReference": "string",
     "price": "integer",
     "referenceType": "string",
     "referenceNumber": "string"
  }
],
    "outboundBonus": {
    "bonus": "string",
"replacedBonus": "string"
    },
"returnBonus": {
    "bonus": "string",
"replacedBonus": "string"
    },
"appliedDiscounts": [
  {
     "flightReference": "string",
     "amount": "integer",
     "discountAmount": "integer",
     "id": "string",
     "type": "string",
     "passengerReference": "string",
     "serviceCode": "string", "promoNumber": "string",
     "serviceReference": "string",
     "usageType": "string",
     "promotionType": "string"
  }
],
"baseFarePrices": [
     "currency": "string",
"passengerReference": "string",
     "flightReferences": [
       "string"
     ],
"isInfantFare": "bool",
"integer!
     "totalPrice": "integer",
     "basePrice": "integer",
             "separatePrice": "integer",
     "outboundPrice": "integer",
     "returnPrice": "integer",
```

```
"discountAmount": "integer",
             "separateDiscount": "integer",
             "outboundDiscount": "integer",
    "returnDiscount": "integer",
"priceHidden": "bool",
    "taxDetailsInformation": [
         "taxCategory": "string",
         "taxDetails": [
           {
              "rate": "string",
"currencyCode": "string",
              "type": "string"
           }
         ]
      }
    ]
  }
"spentBonusesByPassengers": [
    "amount": "integer",
"commissionAmount": "integer",
    "passengerReference": "string"
  }
"appliedCertificates": [
  {
    "amount": "integer",
    "number": "string"
  }
],
"fareBasisCodesFlightRefs": [
    "fareBasis": "string",
    "flightReferenceNumber": "string",
    "passengerReferenceNumber": "string",
             "expirationUtc": "datetime"
  }
"familyTrip": "bool",
"originOfficeId": "string",
"originOfficeType": "string"
"isPayForbiddenForAgency": "bool",
"foodOnBoards": [
    "flightNumber": "string",
    "departureAirport": "string",
    "arrivalAirport": "string",
    "commercialFamily": "string",
    "translations": {
       "additionalProp1": "string",
"additionalProp2": "string",
       "additionalProp3": "string"
```

```
},
"ru": "string",
    "en": "string"
    "zh": "string"
  }
"reservationRetrieveStatus": "string",
"ticketCouponStatuses": [
    "ticketNumber": "string",
    "couponStatuses": {
      "additionalProp1": "string",
"additionalProp2": "string",
      "additionalProp3": "string"
    "couponStatusesBySegment": {
      "additionalProp1": "string",
      "additionalProp2": "string"
      "additionalProp3": "string"
    }
  }
"engineType": "string"
"isGroupReservation": "bool"
"isCompanyGroupReservation": "bool",
"isReceiptAvailable": "bool",
"isInvoluntaryRefundAvailable": "bool",
"isVoluntaryRefundAvailable": "bool",
"informationalServices": [
  {
    "code": "string",
    "status": "string",
"text": "string",
    "petType": "string"
    "category": "string",
    "fareAmount": integer,
    "passengerQualifier": "string",
    "passengerReference": "string",
    "flightReference": "string",
    "referenceNumber": "string",
    "packReferenceNumber": "string",
    "ticketNumber": "string",
    "finalPrice": integer,
    "price": integer,
"discountAmount": integer,
    "amadeusErrorCode": "string",
    "amadeusErrorMessage": "string",
    "internalError": "string",
    "internalErrorMessage": "string",
    "issueDate": "datetime",
    "issuedByThirdPartyOffice": "bool",
        "isIssuedByRefundableOffice": "bool",
    "serviceDuration": integer,
    "expireDateUtc": "datetime"
```

```
}
],
"journey": {
  "outboundFlights": [
      "aircraft": "string",tsmData
"aircraftIataCode": "string",
       "referenceNumber": "string",
       "origin": "string",
       "destination": "string",
       "departureDate": "datetime",
       "arrivalDateUtc": "datetime",
       "departureDateUtc": "datetime",
       "arrivalDate": "datetime",
       "flightNumber": "string",
       "classOfService": "string",
       "commercialFamily": "string",
       "operatingCarrier": "string"
       "marketingCarrier": "string",
       "codeshareName": "string",
       "flightDuration": "string",
       "stopDuration": "string",
       "techStops": [
            "arrivalDateTime": "datetime",
           "departureDateTime": "datetime",
           "airportCode": "string",
            "stopDuration": "string",
            "flightDurationUntilNextStop": "string"
         }
       "flightDurationUntilNextStop": "string",
       "arrivalTerminal": "string",
       "departureTerminal": "string",
       "hash": "string",
       "statuses": [
         "string"
       ],
"isCancelledByAirline": "bool",
"isthoutPseudo": "
           "isCheckinWithoutPseudo": "bool"
    }
  ],
"returnFlights": [
     {
       "aircraft": "string",
"aircraftIataCode": "string",
"referenceNumber": "string",
       "origin": "string",
       "destination": "string",
       "departureDate": "datetime",
       "arrivalDateUtc": "datetime"
       "departureDateUtc": "datetime",
       "arrivalDate": "datetime",
       "flightNumber": "string",
```

```
"classOfService": "string",
    "commercialFamily": "string",
    "operatingCarrier": "string"
    "marketingCarrier": "string",
    "codeshareName": "string",
"flightDuration": "string",
    "stopDuration": "string",
    "techStops": [
        "arrivalDateTime": "datetime",
        "departureDateTime": "datetime",
        "airportCode": "string",
        "stopDuration": "string",
        "flightDurationUntilNextStop": "string"
      }
    ],
    "flightDurationUntilNextStop": "string",
    "arrivalTerminal": "string",
    "departureTerminal": "string",
    "hash": "string",
    "statuses": [
      "string"
    ],
"isCancelledByAirline": "bool",
        "isCheckinWithoutPseudo": "bool"
  }
],
  "separateFlights": [
    "aircraft": "string"
    "aircraftIataCode": "string",
    "referenceNumber": "string",
    "origin": "string",
    "destination": "string",
    "departureDate": "datetime",
    "arrivalDateUtc": "datetime",
    "departureDateUtc": "datetime",
    "arrivalDate": "datetime",
"flightNumber": "string",
    "classOfService": "string",
    "commercialFamily": "string",
    "operatingCarrier": "string",
    "marketingCarrier": "string",
    "codeshareName": "string",
    "flightDuration": "string",
    "stopDuration": "string",
    "techStops": [
        "arrivalDateTime": "datetime",
        "departureDateTime": "datetime",
        "airportCode": "string",
        "stopDuration": "string"
        "flightDurationUntilNextStop": "string"
```

```
],
"flightDurationUntilNextStop": "string",
"string"
    "arrivalTerminal": "string",
    "departureTerminal": "string",
    "hash": "string",
    "statuses": [
      "string"
    ],
"isCancelledByAirline": "bool",
        "isCheckinWithoutPseudo": "bool"
  }
"outboundFareFamily": {
  "code": "string",
  "category": "string",
  "isSubsidized": "bool",
  "isLowCost": "bool",
  "isUnaccompaniedMinor": "bool"
},
"returnFareFamily": {
    "" "string",
  "code": "string",
  "category": "string",
  "isSubsidized": "bool",
  "isLowCost": "bool",
  "isUnaccompaniedMinor": "bool"
},
   "separateFareFamily": {
  "code": "string",
  "category": "string",
  "isSubsidized": "bool",
  "isLowCost": "bool",
  "isUnaccompaniedMinor": "bool"
"returnDuration": "string",
    "separateDuration": "string"
"origin": "string",
"destination": "string",
"departureDate": "datetime",
"returnDate": "datetime",
"outboundBaggageAllowances": [
    "quantity": "integer",
    "weight": "integer",
    "passengerType": "string",
            "fareCode": "string"
  }
],
"returnBaggageAllowances": [
  {
    "quantity": "integer",
"weight": "integer",
    "passengerType": "string",
            "fareCode": "string"
```

```
}
  ],
      "separateBaggageAllowances": [
      "quantity": "integer",
"weight": "integer",
       "passengerType": "string",
               "fareCode": "string"
  "containsInternationalFlights": "bool"
"number": "string",
"reservationDate": "datetime",
"bookingTimeLimit": "datetime",
"passengers": [
  {
    "id": "integer",
    "hasInfant": "bool",
    "referenceNumber": "string",
    "relatedAdultReferenceNumber": "string",
    "relatedInfantReferenceNumber": "string",
    "disability": {
   "isDeaf": "bool",
      "isBlind": "bool",
      "hasGuideDog": "bool",
      "assistanceType": "string",
       "wheelchairType": "string",
       "commentary": "string"
    },
"firstName": "string",
    "string"
    "middleName": "string",
    "surname": "string",
    "passengerType": "string",
    "birthDate": "datetime",
    "sex": "string",
"nationality": "string",
    "documentNumber": "string",
    "documentExpiryDate": "datetime",
    "loyaltyCard": "string",
    "email": "string",
    "phone": "string"
    "documentType": "string",
    "isAdult": bool",
    "isChanged": "bool",
    "checkedIn": {
       "additionalProp1": "bool",
      "additionalProp2": "bool",
       "additionalProp3": "bool"
    "additionalProp1": "bool",
"additionalProp2": "bool",
       "additionalProp3": "bool"
```

```
},
"checkedInSegment": {
       "additionalProp1": "bool",
       "additionalProp2": "bool",
"additionalProp3": "bool"
    "additionalProp1": "bool",
"additionalProp2": "bool",
       "additionalProp3": "bool"
    },
"hasPassengersDataErrors": "bool",
     "passengerDataErrors": [
         "key": "string",
         "value": "string"
    ],
"endorsements": [
       {
         "endorsement": "bool",
         "isDisability": "bool<sup>'</sup>,
         "endorsementDocNumber": "string",
         "endorsementDocDate": "datetime",
         "loyaltyPartnerCard": "string"
      }
    ],
             "accompanimentBookingsInfo":[
                      "number": string,
                      "surname": string
],
"services": [
    "code": "string",
    "status": "string",
    "text": "string",
    "petType": "string"
    "category": "string",
    "fareAmount": "integer",
    "passengerQualifier": "string",
    "passengerReference": "string",
    "flightReference": "string",
    "referenceNumber": "string",
    "packReferenceNumber": "string",
    "ticketNumber": "string",
    "finalPrice": "integer",
    "price": "integer",
"discountAmount": "integer",
"amadeusErrorCode": "string",
    "amadeusErrorMessage": "string",
```

```
"internalError": "string",
    "internalErrorMessage": "string",
    "issueDate": "datetime",
    "issuedByThirdPartyOffice": "bool",
         "isIssuedByRefundableOffice": "bool"
  }
],
"seats": [
  {
    "number": "integer",
    "title": "string",
"code": "string",
    "status": "string",
    "text": "string",
    "petType": "string"
    "category": "string",
    "fareAmount": "integer",
    "passengerQualifier": "string",
"passengerReference": "string",
    "flightReference": "string",
    "referenceNumber": "string",
    "packReferenceNumber": "string",
    "ticketNumber": "string",
    "finalPrice": "integer",
    "price": "integer",
    "discountAmount": "integer",
    "amadeusErrorCode": "string",
    "amadeusErrorMessage": "string",
    "internalError": "string",
    "internalErrorMessage": "string",
    "issueDate": "datetime",
    "issuedByThirdPartyOffice": "bool",
         "isIssuedByRefundableOffice": "bool"
  }
],
"luggageSeats": [
    "referenceNumber": "string",
    "passengerReference": "string"
  }
],
"insurances": [
    "number": "string",
     "passengerType": "string",
    "code": "string",
    "status": "string",
    "text": "string",
    "petType": "string"
    "category": "string",
    "fareAmount": "integer",
    "passengerQualifier": "string", "passengerReference": "string",
    "flightReference": "string",
```

```
"referenceNumber": "string",
    "packReferenceNumber": "string",
    "ticketNumber": "string",
"finalPrice": "integer",
    "price": "integer",
    "discountAmount": "integer",
    "amadeusErrorCode": "string",
    "amadeusErrorMessage": "string",
    "internalError": "string",
    "internalErrorMessage": "string",
    "issueDate": "datetime",
    "issuedByThirdPartyOffice": "bool",
        "isIssuedByRefundableOffice": "bool"
  }
],
"partnerProducts": [
    "partnerId": "string",
    "partnerType": "string"
    "bookingStatus": "string",
    "code": "string",
    "amount": "integer"
    "currency": "string",
    "passengerReference": "string",
    "flightReference": "string",
    "isInfantProduct": "bool",
    "bookingId": "string",
    "orderId": "string",
        "isIssuedByRefundableOffice": "bool"
    "preselectedOption": {
      "preselect": ""bool,
      "passengers": [
           "referenceNumber": "string",
           "passengerType": "string"
      1
    "compatibleProductCodes": [
      "string"
    ],
"internalError": "string",
"armagage": "s
    "internalErrorMessage": "string"
  }
],
"ticketFares": [
    "referenceNumber": "string",
    "referenceQualifier": "string",
    "baseAmount": "integer",
    "totalAmount": "integer",
    "currency": "string",
    "passengerReferences": [
      {
```

```
"referenceNumber": "string",
           "referenceQualifier": "string"
        }
      ],
"passengerType": "string"
    }
  ], "ticketFaresWithoutZapOff": [
    {
      "referenceNumber": "string",
      "referenceQualifier": "string",
      "baseAmount": "integer",
"totalAmount": "integer",
      "currency": "string",
      "passengerReferences": [
           "referenceNumber": "string",
           "referenceQualifier": "string"
      "passengerType": "string"
    }
  "isRefundAvailable": "bool",
  "annulUnavailabilityReason": "string",
  "isAnnulAvailable": true,
  "isAgentReservation": true,
  "accountCode": "string",
  "tourCode": "string"
},
"errors": [
  {
    "ibeCode": "integer",
    "description": "string",
    "messages": [
      {
        "code": "string",
"text": "string",
         "additionalInfo": {
           "ssrType": "string",
           "info": "string"
        }
      }
    ]
  }
"success": "bool"
```

#### contacts block

Parameter		Description
contacts		Returned data
	email	Email
	phoneNumber	Phone number
	passengerReference	Reference to a passenger

## Remarks block

Parameter		Description
remarks		Returned data
	type	Remark type (tag <type>)</type>
	text	Content of tag freeText
	referenceNumber	Reference to a service
	passengerReferences	Reference to a passenger (if exists)
	flightReferences	Reference to a segment (is exist)

## $special Service Requests\ block$

P	arameter	Description
specialServiceRequests		Returned data
	code	SSR code (tag <type>)</type>
	status	Status
	text	Content of tag freeText
	referenceNumber	Reference to a service
	passengerReferences	Reference to a passenger (if exists)
	flightReferences	Reference to a segment (if exists)

# $in formation al Services\ block$

Parameter	Description	Notes	
-----------	-------------	-------	--

Parameter	Description	Notes	
	Additional service code		
code	Possible values: reference codes of the add. services		
	The status of adding the service.		
status	Example: HD service successfully added		
44	Text in ssr format for sending information.		
text	Example: DOG 1PC 8KG 45X35X25		
	Type of pet.		
petType	Possible values: DOG, CAT, PARROT, CANARY		
	Category of additional service		
category	Possible values: Reference codes add. services		
passengerReference	Link to the passenger for whom an additional service has been added		
flightReference Link to the segment on which the service operates			
referenceNumber SSR number. There is an unique SSR number for each service in PNR			
price	The cost of an additional service		
issueDate	Date and time of service release.		
issuedByThirdPartyOffice	A sign that the service was issued by a third-party office in relation to the office under which the booking was issued		
isIssuedByRefundableOffice	Sign that the return of the service is not possible, since it is added by a third-party office.		

## Service for add SSR to reservation/api/version/Reservation/AddSSR (for agents)

API service	/Reservation/AddSSR
Short description	Service for add SSR via API IBE
Supported HTTP(S)-methods	POST

#### **POST AddSSR methodx**

**Note:** method is available on ADP

**Description:** add SSR to the reservation

You can see added SSR in GET Reservation/Advanced response

**Response format:** api/apiVersion/Reservation/AddSSR

#### **Response headers**

X-Api-Key - unique GUID of systems using IBE API.

#### **Request body**

#### **Request parameters**

Parameter	Description
reservationNumber	Unique booking number (PNR)
surname	Passenger's surname
ssrs SSR information object	

code	SSR code(different of selling in IBE): OTHS, WEAP, BIKE, SPEQ, DOCO, DOCA, MEDA, DEAF, BLND, DPNA, ESAN, STCR, WCBD, WCBW, WCHC, WCHR, WCHS, WCMP, WCOB, CTCR
passengerReference	Reference number
segmentReference	Flight segment reference
freeText	Text

## **Response format**

```
{
    "code": string,
                 "status": string,
                 "text": string,
                 "referenceNumber": string,
                 "passengerReferences": [
                     string
                 ],
"flightReferences": [
                     string
                 ]
            }
        ]
    },
"errors": [
             "ibeCode": integer,
            "description": string,
            "messages": [
                 {
                     "code": string,
"text": string
            ]
    "success": bool
}
```

#### **Response parameter**

Parameter	Description
success	Sign of query execution success.

		If errors array is empty, field value will be set to true	
data		Returned data	
ssr		Array of SSRs that were added to the reservation	
	code	SSR code	
	status	SSR status	
	text	freeText of SSR	
	referenceNumber	SSR reference number	
	passengerReference	Passenger reference number	
	flightReference	Flight segment reference number	
err	ors	Information about errors appeared during query execution	
il	beCode	Error code, see EN_Attachment 1. IBE error codes	
d	escription	Code description, see. EN_Attachment 1. IBE error codes	
n	nessages	Array of objects, containing errors from Sirena response. Array can be empty, it is recommended to analyse errors by ibeCode	
	code	Sirena error code	
	text	Sirena error text	

## Service of tickets rebook /api/Exchange (for agents)

API service	/Exchange
Short description	Service of tickets exchange
Supported HTTP(S)-methods	POST
Conterminous systems methods used	Sirena: exchange_pricing, divide_order, exchange_confirm

#### **POST Exchange method**

Note: method is available on ADP

**Description:** allow to make a rebook of ticket

**Request format:** api/apiVersion/Exchange

#### **Request headers**

X-Api-Key - unique GUID for systems using IBE API.

#### **Request body**

```
"pnrNumber": string,
"lastName": string,
"travelParts": [
         "segmentReference": string,
         "segmentReferenceLast": string,
         "fareFamily": {
             "code": string,
             "category": string,
             "isLowCost": boolean,
             "isUnaccompaniedMinor": boolean
        },
"addFlights": [
                  "origin": string,
"destination": string,
                  "departureDate": datetime,
                  "arrivalDate": datetime,
                  "flightNumber": string,
                  "classOfService": string,
                  "fares": [
```

## **Request parameters**

Pa	ra	meter	Description
pnı	rN	umber	Number of a reservation
las	tN	ame	Passenger's lastname
tra	travelParts		Array with information about the flight segment
	se	gmentReference	Reference to the flight segment
	se	gmentReferenceLast	Reference to the last flight segment
	fa	reFamily	Object with information about the fare family
		code	Tariff code
		category	Tariff category
		isLowCost	Sign of lowcost flight
		isUnaccompaniedMinor	Sign of unaccompanied child
	addFlights		An array with information about the segment to be exchanged
		origin	Departure airport
		destination	Destination airport
		departureDate	Departure date
		arrivalDate	Arrival date

Pa	Parameter		er	Description
	flightNumber		htNumber	Number of flight
		clas	ssOfService	Information about selected tariff
	fares		es	Tariff information object
			fareBasis	Base fare name
			isBreakpoint	Flag identifying whether tariff ends on present segment
			paxType	Passenger type
pa	passengerReferences		erReferences	An array of references to passengers for whom the exchange is being made

## **Response format**

```
{
  "data": {
    "journey": {
        "outboundFlights": [fullReservationFlight],
        "returnFlights": [fullReservationFlight],
        "outboundFareFamily": {
            "code": "string",
            "category": "string",
            "isSubsidized": "boolean",
            "isLowCost": "boolean",
            "isUnaccompaniedMinor": "boolean"
        },
        "returnFareFamily": {
```

```
"code": "string",
  "category": "string",
  "isSubsidized": "boolean",
  "isLowCost": "boolean",
  "isUnaccompaniedMinor": "boolean"
},
"outboundDuration": "string",
"returnDuration": "string",
"origin": "string",
"destination": "string",
"departureDate": "datetime",
"returnDate": "datetime",
"outboundBaggageAllowances": [
  {
    "quantity": "integer",
    "weight": "integer",
    "passengerType": "string"
  }
],
"returnBaggageAllowances": [
  {
    "quantity": "integer",
```

```
"weight": "integer",
       "passengerType": "string"
     }
  ],
  "containsInternationalFlights": "boolean"
},
"number": "string",
"reservationDate": "datetime",
"bookingTimeLimit": "datetime",
"passengers": [
  {
    "id": "integer",
    "hasInfant": "boolean",
    "referenceNumber": "string",
     "relatedAdultReferenceNumber": "string",
    "relatedInfantReferenceNumber": "string",
     "disability": {
       "isDeaf": "boolean",
       "isBlind": "boolean",
       "hasGuideDog": "boolean",
       "assistanceType": "string",
       "wheelchairType": "string",
```

```
"commentary": "string"
},
"firstName": "string",
"middleName": "string",
"surname": "string",
"passengerType": "string",
"birthDate": "datetime",
"sex": "string",
"nationality": "string",
"documentNumber": "string",
"documentExpiryDate": "datetime",
"loyaltyCard": "string",
"email": "string",
"phone": "string",
"documentType": "string",
"isAdult": "boolean",
"isChanged": "boolean",
"checkedIn": {
  "additionalProp1": "boolean",
  "additionalProp2": "boolean",
  "additionalProp3": "boolean"
},
```

```
"checkInHasStarted": {
  "additionalProp1": "boolean",
  "additionalProp2": "boolean",
  "additionalProp3": "boolean"
},
"checkedInSegment": {
  "additionalProp1": "boolean",
  "additionalProp2": "boolean",
  "additionalProp3": "boolean"
},
"checkInHasStartedSegment": {
  "additionalProp1": "boolean",
  "additionalProp2": "boolean",
  "additionalProp3": "boolean"
},
"hasPassengersDataErrors": "boolean",
"passengerDataErrors": [
  {
     "key": "string",
     "value": "string"
  }
],
```

```
"endorsements": [
       {
          "endorsement": "boolean",
          "isDisability": "boolean",
          "endorsementDocNumber": "string",
          "endorsementDocDate": "datetime",
          "loyaltyPartnerCard": "string"
       }
],
"services": [
  {
    "code": "string",
     "status": "string",
    "text": "string",
     "petType": "string",
    "category": "string",
    "fareAmount": "integer",
     "passengerQualifier": "string",
     "passengerReference": "string",
     "flightReference": "string",
```

```
"referenceNumber": "string",
     "packReferenceNumber": "string",
    "ticketNumber": "string",
    "finalPrice": "integer",
     "price": "integer",
     "discountAmount": "integer",
     "amadeusErrorCode": "string",
     "amadeusErrorMessage": "string",
    "internalError": "string",
    "internalErrorMessage": "string",
     "issueDate": "datetime",
    "issuedByThirdPartyOffice": true
  }
],
"seats": [
  {
    "number": "integer",
    "title": "string",
    "code": "string",
    "status": "string",
    "text": "string",
     "petType": "string",
```

```
"category": "string",
     "fareAmount": "integer",
     "passengerQualifier": "string",
     "passengerReference": "string",
     "flightReference": "string",
    "referenceNumber": "string",
     "packReferenceNumber": "string",
     "ticketNumber": "string",
     "finalPrice": "integer",
     "price": "integer",
     "discountAmount": "integer",
     "amadeusErrorCode": "string",
     "amadeusErrorMessage": "string",
    "internalError": "string",
     "internalErrorMessage": "string",
    "issueDate": "datetime",
    "issuedByThirdPartyOffice": "boolean"
  }
],
"luggageSeats": [
  {
    "referenceNumber": "string",
```

```
"passengerReference": "string"
  }
],
"insurances": [
  {
     "number": "string",
     "passengerType": "string",
     "code": "string",
     "status": "string",
     "text": "string",
     "petType": "string",
     "category": "string",
     "fareAmount": "integer",
     "passengerQualifier": "string",
     "passengerReference": "string",
     "flightReference": "string",
     "referenceNumber": "string",
     "packReferenceNumber": "string",
     "ticketNumber": "string",
     "finalPrice": "integer",
     "price": "integer",
     "discountAmount": "integer",
```

```
"amadeusErrorCode": "string",
     "amadeusErrorMessage": "string",
    "internalError": "string",
     "internalErrorMessage": "string",
     "issueDate": "datetime",
     "issuedByThirdPartyOffice": "boolean"
  }
],
"partnerProducts": [
     "partnerId": "string",
     "partnerType": "string",
     "bookingStatus": "string",
    "code": "string",
     "amount": "integer",
    "currency": "string",
     "passengerReference": "string",
     "flightReference": "string",
    "isInfantProduct": "boolean",
     "bookingId": "string",
     "orderId": "string",
     "preselectedOption": {
```

```
"preselect": "boolean",
       "passengers": [
            "referenceNumber": "string",
            "passengerType": "string"
         }
       1
     },
     "compatibleProductCodes": [
       "string"
    ],
    "internalError": "string",
    "internalErrorMessage": "string"
  }
],
"ticketFares": [
  {
    "referenceNumber": "string",
    "referenceQualifier": "string",
    "baseAmount": "integer",
    "totalAmount": "integer",
    "currency": "string",
```

```
"passengerReferences": [
       {
         "referenceNumber": "string",
         "referenceQualifier": "string"
       }
    ],
     "passengerType": "string"
  }
],
"ticketFaresWithoutZapOff": [
  {
    "referenceNumber": "string",
    "referenceQualifier": "string",
    "baseAmount": "integer",
     "totalAmount": "integer",
    "currency": "string",
     "passengerReferences": [
       {
         "referenceNumber": "string",
         "referenceQualifier": "string"
       }
    ],
```

```
"passengerType": "string"
    }
  ],
  "fareBasisCodesFlightRefs": [
    {
       "fareBasis": "string",
       "flightReferenceNumber": "string",
       "passengerReferenceNumber": "string",
       "expirationUtc": "datetime"
    }
  ],
  "has Special Conditions": "boolean",\\
  "isRefundAvailable": "boolean",
  "annulUnavailabilityReason": "string",
  "isAnnulAvailable": "boolean",
  "isAgentReservation": "boolean",
  "accountCode": "string",
  "tourCode": "string"
},
"errors": [
  {
    "ibeCode": "string",
```

```
"description": "string",
     "messages": [
        {
          "code": "string",
          "text": "string",
          "additionalInfo": {
             "ssrType": "string",
             "info": "string"
          }
        }
     ]
  }
],
"success": "boolean"
```

## FullReservationFlight object

```
{
    "aircraft": string,
    "aircraftIataCode": string,
    "referenceNumber": string,
    "origin": string,
    "destination": string,
    "departureDate": datetime,
    "arrivalDate": datetime,
    "arrivalDateUtc": datetime,
    "departureDateUtc": datetime,
    "flightNumber": string,
```

#### **Response parameters**

Parameter		Description
		Sign of the success of the request.
Su	ccess	If the errors array is empty, then the field value will be true.
da	ta	The data returned by the request.
	number	New booking number. It can be either equal to the previous one, or differ in the case of a partial exchange.
		Date and time of booking creation
	reservationDate	Format: yyyy-MM-ddTHH:mm:ss
		Example: 2018-06-20T15:44:00
	bookingTimeLimit	Date and time until which the unpaid booking will exist (the

Description	
rules are set by the settings in IBE)	
An array of passengerData objects with information about the passengers that were requested to be exchanged	
Array of objects with information about auxiliary services.	
Array of objects with information about selected seats.	
Object with information about selected insurance.	
An array of objects with information about luggage with separate air ticket and ssr CBBG.	
The reference to CBBG luggage.	
The reference to passenger who added CBBG luggage. Associated with field data → passengers[n] → referenceNumber.	
An array of objects with information about partner services.	
Information about the new segments for which the exchange is made	
An array of the fullReservationFlight objects with details of outbound flights	
Service field, contains the	
fareFamily code	

Para	ameter	Description
		fullReservationFlight objects with detailed information about the "return" flights
	returnFareFlights	Service field, contains fareFamily code
	outboundDuration	The total duration of the flight "there"
	returnDuration	The total duration of the return flight
	origin	Initial airport of departure
	destination	Initial airport of destination
	departureDate	Departure date
	returnDate	Return date
	outboundBaggageAllowances	An array of objects containing detailed information about the baggage allowance for the outward direction
	returnBaggageAllowances	An array of objects containing detailed information about the baggage allowance for the "back" direction
	containsInternationalFlights	A sign that one of the airports is located outside the territory of the Russian Federation
ti	icketFares	An array of objects with information about tariffs after applying the discount
	baseAmount	Base rate
	passengerReferences	An array of objects with links to passengers
	referenceNumber	Reference number
	referenceQualifier	Link type, for example "PA"

Parameter	Description	
nassangarTrina	Passenger type	
passengerType	Possible values: see Attachment. Passenger types.	
referenceNumber	Reference number	
referenceQualifier	Link type, for example "TST"	
totalAmount	The total amount of the tariff	
currency	Reservation currency	
fareBasisCodesFlightRefs	Array of objects with information about base rates	
ticketFaresWithoutZapOff	An array of objects with information about tariffs without applying a discount	
baseAmount	Base rate	
passengerReferences	An array of objects with links to passengers	
referenceNumber	Reference number	
referenceQualifier	Link type, for example "PA"	
	Passenger type	
passengerType	Possible values: see Attachment. Passenger types	
referenceNumber	Reference number	
referenceQualifier	Link type, for example "TST"	
totalAmount	The total amount of the tariff	
currency	Reservation currency	
hasSpecialConditions	Sign of the additional conditions	
isRefundAvailable	Sign of the availability of the return	
annulUnavailabilityReason	Reason for unavailability of booking cancellation	

Pa	arameter	Description
	isAnnulAvailable	Indication of availability of booking cancellation
	accountCode	Account code
	tourCode	Tour code
er	rors	Information about errors that occurred during the operation of the service
	ibeCode	Error code, see Attachment. IBE error codes
	description	Error description, see Attachment. IBE error codes
	messages	An array of objects containing errors from Sirena's answer. The array may be empty, it is recommended to analyze the error by the ibeCode field
	code	Sirena error code
	text	Sirena error text

# $full Reservation Flight\ object$

Parameter	Description
aircraftIataCode	IATA aircraft code
referenceNumber	Reference to the current flight segment
origin	Departure airport for the current segment
destination	Destination airport for the current segment
departureDate	Departure date and time for the current segment
arrivalDate	Arrival date and time for the current segment
arrivalDateUtc	Date and time of arrival for the current segment in UTC
departureDateUtc	Departure date and time for the current segment in UTC

Parameter	Description
flightNumber	Flight number
classOfService	Information about the selected tariff
	Marketing airline
marketingCarrier	For example: U6, S7
	The airline actually performing the flight
operatingCarrier	For example: U6, OK
techStops	An array with information about technical landings
arrivalDateTime	Date and time of arrival at the pick-up point
departureDateTime	Date and time of departure from the pick-up point
airportCode	Airport code of the stop
stopDuration	Duration of the stop
flightDurationUntilNextStop	Duration of the flight to the next stop
flightDurationUntilNextStop	Duration of the flight to the next stop
arrivalTerminal	Terminal number at the point of arrival
departureTerminal	Terminal number at the point of departure
hash	Unique hash of the flight
isCancelledByAirline	Sign of cancellation of flights by the airline

# passengerData object

Parameter	Description
id	Passenger's serial number (numbered from 1)
hasInfant	An sign that this passenger has a baby
referenceNumber	Reference to this passenger in the booking
firstName	Passenger's name
middleName	Passenger's patronymic (may be absent)

Parameter	Description
surname	Passenger's surname
	Passenger type
passengerType	Possible values: see <u>Attachment 2. Passenger types</u>
	Whether the passenger is an adult
isAdult	true for ADT/SRC/YTH type passengers
	false for CHD/INF type passengers
birthDate	Date of birth
	Passenger gender
sex	Possible values: see dictionary "gender of passengers"
1	Nationality (country)
nationality	Possible values: dictionary of countries
documentNumber	Document number
J	Document type
documentType	Possible values: dictionary of document types
	Date until which the document is valid
documentExpiryDate	Mandatory only for a foreign passport. For other documents, +10 years from the current date is automatically set
email	Email
phone	Phone
checkedIn	Passenger check-in on flights
checkInHasStarted	Starting check-in on flights
hasPassengersDataErrors	The sign of errors in passengers data.
passengerDataErrors	Array with detailed information of errors in passengers data.
key	The key.
value	The value.

# Service for getting the information about the status of creation of a subsidized reservation v2.3

API service	SubsidiesConfirmationSession
Short description	Service for getting the information about the status of creation of a subsidized reservation with passengers with disabilities or passengers with Kaliningrad's subsidies and Far Eastern Federal District, when a right for using the subsidy should be checked and confirmed.
Supported HTTP(S)- methods	GET, DELETE
Conterminous systems methods used	no

#### GET api/SubsidiesConfirmationSession method

**Description:** let to check information about the status of creating a subsidized reservation (for creating reservations at subsidized fares for passengers with disabilities and reservations with Kaliningrad's subsidies and Far Eastern Federal District).

**Request format** /api/apiVersion/SubsidiesConfirmationSession

#### **Request paramaters**

	Parameter	Description
Ī	CECCIONIA I	Id of the session in which the subsidized reservation confirmation waiting session is performed

#### **Response format**

```
"id": integer,
                 "firstName": string,
                 "middleName": string,
                 "surname": string,
                 "passengerType": integer,
                 "birthDate": datetime,
                 "sex": integer,
                 "nationality": string,
                 "accompaniedPassengerId": integer,
                 "errorCode": string,
                 "status": string
            }
        ],
"errorCode": string,
"bmmUrl": string
    },
"errors": [{
    "ibe(
            "ibeCode": integer,
             "description": string,
            "text": string,
                     "additionalInfo": {
                         "ssrType": string,
                         "info": string
                     }
                 }
            ]
        }
    ],
"success": boolean
}
```

#### **Response parameters**

Parameter		Description
success		Sign of query execution success.
		If errors array is empty, field value will be set to true.
data		Returned data
	pnrNumber	The pnr number of the created reservation (returned if the verification was successful and the reservation was created).
	status	Reservation creation status. See Attachments: Attachment of

Parameter		Description
		the statuses of sessions for creating subsidized reservations with confirmation
	flights	An array of objects with information about the flights on which the booking was created.
	origin	The airport of departure.
	destination	Arrival airport.
	departureDate	Departure date.
	flightNumber	Flight number.
	passengers	An array of objects with information about passengers.
	id	The passenger's number from the booking.
	firstName	The passenger's name.
	middleName	Middle name of the passenger (may be missing).
	surname	The passenger's last name.
	passengerType	The type of passenger.
	birthDate	Date of birth.
	sex	The gender of the passenger.
	nationality	The nationality of the passenger (country).
	accompaniedPassengerId	The number (id) of the accompanied passenger. It's returned for accompanying passengers.
	errorCode	The error code returned when checking the passenger. It's returned if the check of the subsidized passenger ended with an error.

Parameter		Description
	status	Subsidized passenger verification status code. See Attachments: Attachment of subsidized passenger verification statuses.
	errorCode	The resulting error code for checking all passengers.
	bmmUrl	The link to BMM of the created reservation. It's returned if the booking has been successfully created.
errors		Information about errors that occurred during the operation of the service.
ibe	eCode	Error code.
de	scription	Error description.
messages		An array of objects containing errors. The array may be empty, it is recommended to analyze the error by the ibeCode field.
	code	Error code.
	text	Error text.

## **Examples of responses**

The example of a successful response when a booking has been successfully created

```
"destination": "DME",
                 "departureDate": "2024-03-29T09:20:00Z",
                 "flightNumber": "94"
        ],
"passengers": [
                 "id": 1,
                "firstName": "Лариса",
                "middleName": "Адамовна",
                "surname": "Ханипова",
                "passengerType": 25,
                 "birthDate": "1956-05-25T00:00:00",
                 "sex": 1,
                 "nationality": "RU",
                 "status": 2
            }
        ],
"bmmUrl": "https://sirena-bmm-
stage.uralairlines.ru/?pnr=24GC8V&lastName=Ханипова"
   },
"errors": [],
    "success": true
}
The example of a successful response when the verification of subsidized passengers failed
{
    "data": {
        "status": 3,
        "flights": [{
                 "origin": "DME",
                 "destination": "HTA",
                 "departureDate": "2024-03-23T19:40:00Z",
                 "flightNumber": "93"
            }
        ],
"passengers": [{
                 "id": 1,
                 "firstName": "Мила",
                 "middleName": "Андреевна",
                 "surname": "Носкова",
                 "passengerType": 23,
                 "birthDate": "2011-10-20T00:00:00",
                "sex": 1,
                 "nationality": "RU",
                 "errorCode": 9111,
                 "status": 3
        "errorCode": 9111
    "success": true
```

}

#### DELETE api/SubsidiesConfirmationSession method

**Description:** let to cancel the confirmation session for creating a subsidized reservation (to create reservations at subsidized fares for passengers with disabilities)

Request format /api/apiVersion/SubsidiesConfirmationSession

#### **Request parameters**

Parameter Description  Id of the session in which the subsidized reservation confirmation waiting is performed and which need to cancel.	Description		
	coccionid	Id of the session in which the subsidized reservation confirmation waiting session is performed and which need to cancel.	

#### **Response format**

#### **Response parameters**

Parameter		Description	
success		Sign of query execution success.	
		If errors array is empty, field value will be set to true.	
erro	rs	Information about errors that occurred during the operation of the service.	
	ibeCode	Error code.	

Para	meter	eter Description	
description		ption	Error description.
	messa	ages	An array of objects containing errors. The array may be empty, it is recommended to analyze the error by the ibeCode field.
code		code	Error code.
		text	Error text

# Example of a successful response

```
{
    "errors": [],
    "success": true
}
```

#### Services to sort and display additional services v2.3

Method structure is described in api/reservation version 2.3.

#### Changes in GET api/catalogue/GetServiceCategoriesOrder response in version 2.3

The sortedInCategories[] array is added with information about the category of additional services and subspecies related to an additional service, as well as the order in which the subspecies are displayed inside the block

#### Parameters of the sortedInCategories array[]

Parameter	Description	
sortedInCategories	An array of objects with information about additional services, subspecies and their display	
category	Additional services category	
serviceOrder	An array of objects with information about the service code and the order of display on the page	
code	Additional service subspecies code	
order	The additional service subspecies order of display related to other subspecies located in the same serviceOrder array	

# Service for submitting attachments when creating a subsidy application for Kaliningrad, the Far Eastern Federal District, and Pensioners/Youth.

API service	Passenger/AddFiles
	A service for submitting attachments that confirm eligibility for a subsidy. Depending on the subsidy type:
Short description	<ul> <li>For Kaliningrad and Far Eastern Federal District subsidies, files are sent to the CRM system to verify eligibility.</li> <li>For Youth/Pensioners subsidies, files are uploaded to an FTP server for document photo recognition.</li> </ul>
Supported HTTP(S)-methods	POST
Methods of related systems used	CRM

#### Method POST api/Passsenger/AddFiles

**Description:** When creating a booking for passengers eligible for the Kaliningrad and Far Eastern Federal District subsidies, supporting documents confirming the right to the subsidy must be attached. A request is created in the CRM, and the files are submitted for review and verification. Once the eligibility is confirmed in the CRM, a booking number is assigned, making the booking available for issuance.

When creating a booking for passengers eligible for the Pensioners/Youth subsidies, supporting documents must also be attached. After the booking is created, the uploaded files are verified—scanned documents are checked for consistency with the passenger data provided in the request. If at least one passenger's data does not match, the booking is canceled, and the API returns an error code with a description of the discrepancy. If verification is successful, the files are stored on the airline's FTP server for reporting purposes, and the booking becomes available for issuance.

Each subsidy type has its own list of required supporting documents. A maximum of 5 attachments per passenger is allowed. The total file size must not exceed 2.5 MB. Supported file formats: JPG, JPEG, PNG, PDF.

Request format /api/apiVersion/Passenger/AddFiles

#### Request example

The request includes session ID information (obtained from the GET SubsidiesConfirmationSession) as well as details about the attached files.

- For Kaliningrad and Far Eastern Federal District subsidies, providing the session ID is mandatory.
- For Pensioners/Youth subsidies, the session ID is not required.

```
------WebKitFormBoundarySX7SicTkhkQmZBBO
Content-Disposition: form-data; name="files"; filename="file.png"
Content-Type: image/png

-------WebKitFormBoundarySX7SicTkhkQmZBBO
Content-Disposition: form-data; name="details"

{"confirmationSessionId":"45bf2d13-d45e-42df-8c6a-98454814127a","FilesType":1}
-------WebKitFormBoundarySX7SicTkhkQmZBBO--
```

#### **Response format**

```
{
    "data": {
        "isFilesAdded": boolean
    },
    "errors": [],
    "success": boolean
}
```

#### **Response parameters**

Parameter		Description
		Sign of the success of the request.
suc	Cess	If the errors array is empty, then the field value will be true
data		The data returned by the request
	isFilesAdded	Parameter that all attached files were sent with the request
err	ors	Information about errors that occurred during the operation of the

Parameter		ameter	Description
			service
	ib	eCode	Error code, see Attachment 1. IBE error codes
	de	escription	Error description, see Attachment 1. IBE error codes
	messages		An array of objects containing errors from Sirena answer. The array may be empty, it is recommended to analyze the error by the ibeCode field.
		code	Sirena error code
		text	Sirena error text

#### **Response example**

```
Succeed sending files with the request fro approving a subsidy

{
    "data": {
        "isFilesAdded": true
    },
        "errors": [],
        "success": true
}
```

# Service for adding passenger without seat (INF) to already issued booking api/Reservation/AddNewPassenger v2.3

API service	Reservation/AddNewPassengers
Short description	Adding an infant without seat (INF) to booking, also making a connection between INF and adult passenger 18+ years old without related infants.
Supported HTTP(S) methods	POST
Conterminous systems methods used	Sirena: modify_pnr

#### Method POST Reservation/AddNewPassengers

**Description:** Creating an option to add an infant without seat (INF) to booking, also making a connection between INF and adult passenger 18+ years old without related infants. At the next step making available to issue additional ticket for added passenger via usual issuing process.

A data of added passenger is able to check at a response by GET Reservation request.

**Request format**: /api/apiVersion/Reservation/AddNewPassengers

#### **Request parameters**

Parameter	Description	Format	Notes
related Adult Reference Number	ID of an adult passenger at the issued booking that has no accompanted another infants at the booking		
id	Passenger's serial number (numbered from 1)		
firstName	Passenger's name	[A-Z], from two characters	The sum of the full name is no more than 43 characters

Parameter	Description	Format	Notes
middleName	Passenger's patronymic (may be absent)	[A-Z], from one character	The sum of the full name is no more than 43 characters
surname	Passenger's surname	[A-Z], from two characters	The sum of the full name is no more than 43 characters
passengerType	Passenger type		
birthDate	Date of birth		
	Passenger gender		
sex	Possible values: see dictionary "gender of passengers"		
	Nationality (country)		
nationality	Possible values: dictionary of countries		
documentNumber	Document number	For different document types there is different format rules:  • Passport of Russian Federation: 10 chars; • Foreign passport of Russian Federation: 9 chars; • Birth certificate	

Parameter	Description	Format	Notes
		of Russian Federation: ^[IVX]+([A -Яа- Я]{2} [A- Za- z]{2,4})\d{ 6}\$.	
		For documents of other countries there is no special format rules.	
documentType	Document type		
documentExpiryDate	Date until which the document is valid  Mandatory only for a foreign passport of Russian Federation and national passports of other countries. For other documents, it is automatically set by Sirena.		
loyaltyCard	Loyalty card number "Wings"	10 numbers	
loyaltyCardValidTo	Expiration date of the "Wings" loyalty card (transmitted only if serviceClassUpOrdered = true)		
serviceClassUpOrdered	Flag indicating that the owner of the "Wings" gold card wants to upgrade the service class		In developing
email	Email		

Parameter	Description	Format	Notes
phone	Phone		
disability	Information about people with disabilities		
isDeaf	Hearing impairment		
isBlind	Visual impairment		
hasGuideDog	A guide dog must be accompanied, must be sent only together with the isBlind sign		
assistanceType	Passenger assistancetype  Possible values: dictionary of		
	assistancetypes		
	Wheelchair type		
wheelchairType	Possible values: dictionary of wheelchair type		
commentary	Comment (optional)		
socialSecurityNumber	A specific numer of SNILS (optional)	10 digits	
endorsements	Array with information about documents to buy tickets on the subsidized fares or to apply discounts on partner loyalty cards.		
endorsement	The sign that an endorsement is adding to booking.		
isDisability	Disability endorsements.		
endorsementDocNumber	Subsidy document		

Parameter		Description	Format	Notes
		number.		
		E.g disability certificate, ID number or other document confirming the status of a large family.		
	endorsementDocDate	Subsidy document issue date.		
	loyaltyPartnerCard	Loyalty partner card number.		
a	ccompanimentBookingInfo	Information about the reservation containing an accompanying passenger		Currently used when creating reservations for MNN, MNS
	number	PNR of a booking containing an accompanying passenger		
	surname	Last name of the accompanying passenger		
a	ccompaniedPassengerId	Id number of accompanted passenger (related with subsidized booking by Disability subsidies)		
S	SubsidyDocumentNumber	Document number for confirming a right to get a subsidy (related for subsidized booking by Disability subsidies or Kaliningrad's subsidy)		

# Request body

```
"passengers": [
{
 "relatedAdultReferenceNumber": string,
  "id": integer,
  "firstName": string,
  "middleName": string,
  "surname": string,
  "passengerType": integer,
  "birthDate": datetime,
  "sex": integer,
  "nationality": string,
  "documentNumber": string,
  "documentExpiryDate": datetime,
  "loyaltyCard": string,
  "loyaltyCardValidTo": datetime,
  "serviceClassUpOrdered": boolean,
  "email": string,
  "phone": string,
  "documentType": integer,
  "disability": {
   "isDeaf": boolean,
    "isBlind": boolean,
    "hasGuideDog": boolean,
    "assistanceType": integer,
    "wheelchairType": integer,
    "commentary": string
 },
"socialSecurityNumber": string,
  "endorsements": [{
    "endorsement": boolean,
    "isDisability": boolean,
    "endorsementDocNumber": string,
    "endorsementDocDate": datetime,
    "loyaltyPartnerCard": string
 ],
 "accompanimentBookingInfo": [{
    "endorsement": boolean,
    "isDisability": boolean
 "accompaniedPassengerId": number,
 "SubsidyDocumentNumber": string
```

# A format and parameters of a response are the same as for usual response by POST api/Reservation request.

When the passenger will be added to the booking, the next step is issuing the ticket by usual process independed by a price to pay for INF ticket.

A price for INF at Domestic flights has no cost. Issuing the booking by using POST api/Payment/IssueFree/Partial

A price for INF at International flights has a cost. Issuing the booking by usual process of paying for booking or paid additional options.

#### Service for retrieving information about ticket issuance quotas /api/Ticket/Quota

API service	Ticket/Quota
Short description	Allows querying information about the current number of ticket blanks available for issuance, as well as details about the deposit (if applicable).
Supported HTTP(S)-methods	GET
Methods of related systems used	Sirena: get_et_quota

#### **GET Ticket/Quota method**

**Description:** Returns up-to-date information about the ticket issuance quotas and deposit (if applicable) for the PPR from which the request is submitted.

**Request format:** /api/apiVersion/Ticket/Quota

**Request parameters:** Not required. Does not need to obtain a session ID in advance.

#### **Response format**

```
{
    "data": {
        "quota": string,
        "deposit": string
},
    "errors": [],
    "success": boolean
}
```

#### **Response parameters**

Parameter	Description	
success	Sign of query execution success.	
	If errors array is empty, field value will be set to true	
data	Returned data	

Pa	rameter	Description		
q	uota	The number of available ticket blanks. It can be UNLIMITED, UNKNOWN, or a numerical value.		
deposit  Deposit. It can be UNLIMITED, UNKNOWN, or a numerical		Deposit. It can be UNLIMITED, UNKNOWN, or a numerical value.		
С	urrency	Currency of the deposit (e.g., RUB).		
err	rors	Information about errors appeared during query execution.		
il	beCode	IBE error code.		
d	lescription	IBE error description		
n	nessages	Array of objects, containing conterminous system's errors		
		Array might be empty. It is recommended to analyze ibeCode field.		
	code	Error code		
	text	Error text		

#### Example of a successful response

```
{
    "data": {
        "quota": "UNLIMITED",
        "deposit": "UNLIMITED"
    },
    "errors": [],
    "success": true
}
```

#### Example of an unsuccessful request and response

"success": false

# Serivce API methods description

## Retrieve subsidy routes list service

API service	Airports/SubsidiesDirections
Short description	Allows to retrieve a list of subsidized tariff destinations
Supported HTTP(S)-methods	GET

#### **GET SubsidiesDirections method**

**Description:** returns list of airports and its iata codes.

Request format /api/apiVersion/Airports/SubsidiesDirections

#### **Request parameters**

No parameters.

#### **Response format**

```
{
  "departure": string,
  "arrival": [
    string
  ]
}
```

#### **Response parameters**

Parameter		Description
success		Sign of query execution success.
		If errors array is empty, field value is set to true
data	1	Returned data
	departure	IATA-code of the airport of departure
	arrival	IATA-code of the airport of arrival
errors		Information about errors appeared during query execution.
	ibeCode	Error code

description		Code description
messages		Array of objects, containing errors. Array can be empty, it is recommended to analyse errors by ibeCode.
	code	Error code
	text	Error text

# Attachments

**Attachment: Dictionaries** 

# Passenger types

paxType field value	Decryption	Passenger type
0	ADT, adult	Conventional
1	SRC, pensioner	Subsidised
2	YTH, youth	Subsidised
3	CHD, child	Conventional
4	INF, infant	Conventional
5	CNN, child	Subsidised/conventional
6	UMNR, child	Unaccompanied child
7	STR, adult	Subsidised for Far East Region, Kaliningrad's subsidy
8	JNN, child	Subsidised for Far East Region
9	MIL, adult	Military Ministry of Defence of the Russian Federation (in developing)
10*	DIS, adult	Subsidized passenger with II or III disability stage (in developing)
13	INS, infant	Infant with a seat
17	MMI, adult	Passanger by Ministry of Defence
18	MIR, adult	Military Ministry of Internal Affairs of the Russian Federation
19	MNN, child	Military
20	MNS, infant	Military
21	MML, adult	Flies with the military (in developing)
22*	DCD, child	Subsidized disabled-child 2-11 years old (in developing)
23*	DIC, child	Subsidized disabled-child 12-17 years old ((in developing)

24*	DAC, adult	Compainted for disabled passenger with 'I' disability stage - SBK; for disabled-child - DCD or DIC (in developing)
25*	SBK, adult	Subsidized disabled passenger with 'I' disability stage (in developing)
26	CHR, child	Child 2-11 years old is official living at the Kaliningrad city or Kaliningrad region. Kaliningrad's subsidy
27	STU, student	Student 14+ years old is learning at the full-time form or military college at the Kaliningrad city or Kaliningrad region. Kaliningrad's subsidy

 $<sup>\</sup>boldsymbol{\ast}$  this type is not used when creating a reservation, it can be returned in a GET/reservation response

#### Passenger sex

sex field value	Decryption
0	Male
1	Female

#### **Document types**

documentType field value	Decryption
0	Passport (general civil)
1	International passport
2	Birth certificate
3	Other type of document

#### **Passenger assistance types**

assistanceType field value	Decryption
0	Without assistance
1	Wheelchair is needed on the way to/from aircraft
2	Need assistance in getting on and off board

4	Both points 1 and 2
	•

# Wheelchair types

wheelchairType field value	Decryption
0	Manual type
1	Electric type with dry battery
2	Electric type with liquid elements battery

# Auxiliary services types (a part of services are in development)

services.code field value	Category	Decryption
ABAG	luggage	First additional bag
BBAG	luggage	Second additional bag
CBAG	luggage	Third additional bag
DBAG	luggage	Additional bag 10 kg
HBAG	luggage	Extension of additional bag or default luggage (if allowed)
CHML	meal	Child meal
HTML	meal	Hot meal
MOML	meal	Muslim halal meal
SNML	meal	Sandwich meal
SFML	meal	Hot seafood
VGML	meal	Vegeterian meal
CAML	meal	Dessert
KSML	meal	Kosher
BGML	meal	Burger
AVML	meal	Vegetarian Hindu
HNML	meal	Indian Cuisine
VJML	meal	Vegetarian jain

TCML	meal	Hot breakfast
GFML	meal	Gluten free
BBML	meal	Baby meal
CPML	meal	Meat lunnch
RPML	meal	Fish lunch
MPML	meal	Salad "fitness"
GRML	meal	Greek salad
MTML	meal	Roll with chicken
UDML	meal	Poke with chicken
FTML	meal	Fish Steak Meal
ECML	meal	English Breakfast
FCML	meal	French Breakfast
ACML	meal	American Breakfast
RCML	meal	Russian Breakfast
CSML	meal	Caucasian Cuisine
RUML	meal	Russian Cuisine
ORML	meal	Asian Cuisine
MEML	meal	Italian Cuisine
GEML	meal	German Cuisine
ASML	meal	Central Asian Cuisine
CDML	meal	Business set
PETC	pets	Pet transportation
URFL	insurance	Insurance, avia bundle
URTR	insurance	Insurance, travel bundle
SEAT	seat	Seat selection
BLOU	room	Business room
VLOU	room	VIP room
CVID	covidExpress	Rapid analysis for covid-19

XBLL	handLuggage	Hand luggage up to 10 kg in the cabin (luggage in the cabin)
XBLS	handLuggage	Additional piece of carry-on baggage up to 10 kg in the cabin
NYML	meal	New Year meal
CCML	meal	Chocolate Honey Cake
CFML	meal	Assorted macaroons
CTML	meal	Coffee and dessert
ROML	meal	HAM and CHEESE ROLL

# Types of additional services supported by the engine (not sold in the engine) (in development)

Field serviceCategories.code	Category	Description
CBBG	luggage	Luggage in the aircraft cabin with a separate seat
BIKE	luggage	Bicycle in the luggage compartment
SKI	luggage	Ski equipment
BULK	luggage	Additional carry-on baggage
XBAG	luggage	Oversized baggage
HBGS	luggage	Excess baggage
HBGT	luggage	Excess baggage
DBGS	luggage	Increase in baggage weight up to 32 kg
DBGT	luggage	Increase in baggage weight up to 32 kg
FRAG	luggage	Fragile luggage
WBAG	luggage	registration of payment for excess weight of checked baggage from 10 to 23 kg
SRXBLL	luggage	registration of payment for excess weight of hand luggage from 5 to 10 kg, not exceeding dimensions 55*40*20
SRXBLS	luggage	registration of payment for an additional piece of hand luggage weighing no more than 5 kg and not

Field serviceCategories.code	Category	Description
		exceeding dimensions 55*40*20
MEQT	luggage	Medical equipment
WEAP	luggage	Weapon
GOLF	luggage	Golf equipment
SPEQ	luggage	Sport equipment
RVML	meal	Raw vegetarian meal
VLML	meal	Vegetarian lacto-ovo meal
VOML	meal	Vegetarian oriental meal
DBML	meal	Diabetic food
BLML	meal	Diet food
LCML	meal	Low-calorie food
FPML	meal	Fruit nutrition
LFML	meal	Low-fat meals
NLML	meal	Low lactose meals
LSML	meal	Low salt diet
NFML	meal	Fish-free meals
SPML	meal	Special meals
JPML	meal	Japanese food
AVIH	pets	Animal in the hold
SVAN	pets	Animal in the cabin
EXST	seat	Additional free space nearby
STRQ	seat	SEAT REQUEST, Seat
GPST	seat	Group seat request, specify number and preferred location, Seat
RQST	seat	Seat request-include seat number or preference, Seat
CHNM	data	CHANGE NAME, Name change

Field serviceCategories.code	Category	Description
NAMM	data	Payment of the fee for changing the name of the passenger on the ticket
NAME	data	Name - when airline holds reservation under a different name, Passanger's name change
PFEE	data	Payment of the fee for renewal at the call center
CKIN	data	Registration service
BLTW	data	Blocking the nearest seat
UMNR	other	Unaccompanied child
BUSS	other	Transfer by bus
TIME	other	Deferred payment service
WCHR	other	Wheelchair to/from the plane
WCHS	other	Wheelchair to climb/descend the airplane ladder
WCHC	other	Wheelchair for movement on the apron and the cabin of the aircraft
ISMS	other	SMS notification service
UPQE	other	Service for upgrading the class of service.
URFO	insurance	Avia
NSP1	insurance	Cancellation of a trip with insurance coverage of RUB 5,000
NSP2	insurance	Cancellation of a trip with insurance coverage of RUB 10000
NSP3	insurance	Cancellation of a trip with insurance coverage of RUB 20000
NSP4	insurance	Cancellation of a trip with insurance coverage of RUB 30000
NSP5	insurance	Cancellation of a trip with insurance coverage of RUB 40000
EQPT	luggage	Sport equipment transportation option. Available at the "Promo" fare

Field serviceCategories.code	Category	Description
PTWP	luggage	Weapon and ammunition transportation at the luggage option, paid
FTWP	luggage	Weapon and ammunition transportation at the luggage option, for free

# Types of animals

services.text field value	Decryption
DOG	Dog
CAT	Cat
PARROT	Parrot
CANARY	Canary

# Types of Sport equipment for transportation

services.text field value	Decryption
BIKE	Bicycle
SKIS	Ski/Snowboard
SURFING	Surfboard/Water-skiing
FISHING	Fishing equipment
GOLF	Golf equipment
HOCKEY	Hockey equipment
SCOOTER	Scooter

#### Most widely spread Seatmap seat characteristics (in development)

characteristics field value	Decryption
1A	Seat not allowed for infant
1B	Seat not allowed for medical
1C	Seat not allowed for unaccompanied child

1D	Restricted recline seat
1W	Window seat without window
7A	In front of lavatory seat
7B	Behind lavatory seat
A	Aisle seat
AL	Seat adjacent to lavatory
В	Seat with bassinet facility
CC	Center section seat
СН	Chargeable seat
Е	Exit row seat
EK	Economy comfort seat
FC	Front of cabin class/compartment
G	Seat at forward end of cabin
I	Seat suitable for adult with an infant
IE	Seat not suitable for child
J	Rear facing seat
K	Bulkhead seat
L	Leg space seat
LS	Left side of aircraft
9	Middle seat (MS in Sirena)
0	Preferential seat
P	Comfort seat
PC	Pet cabin
Q	Seat in a quiet zone
RS	Right side of aircraft
S	Smoking seat
Т	Rear/Tail section of aircraft
V	Seat to be left or offered last

W	Window seat
X	No facility seat (indifferent seat)

#### **Services statuses**

Status	Description
HN	Service not confirmed
HD	Service confirmed, EMD is required
НК	Service confirmed, EMD is not required
HI	Service paid (registered)
UN	Service denied

# **Promocode statuses (in development)**

promotionStatus field value	Decryption
0	New
1	Used
2	Sent
3	Saved
4	Received
5	Hold

# **Tariff options**

Option code	Category	Decryption
bestSeats	availablePaid	first rows in cabin of economy class (up to 15th row) if available at the moment of registration
upTo5bonuses	bonus	Bonus Accrual up to 5%
upTo10bonuses	bonus	Bonus Accrual up to 10%
upTo15bonuses	bonus	Bonus Accrual up to 15%

flexibilityOnChangesAndCancellations	ffServices	Possibility of ticket change and cancellation
refundExchangeProhibited	ffServices	Ticket refund is prohibitted
handLuggage5kg	handBag	Hand luggage 5 kg
handLuggage15kg	handBag	Hand luggage 15 kg
oneSuitcase10kg	luggage	One suitcase 10 kg
oneSuitcase23kg	luggage	One suitcase 23 kg
oneSuitcase32kg	luggage	One suitcase 32 kg
twoSuitcase32kg	luggage	Two suitcase 32 kg
mealsOnBoard	menu	Standard meal
boarding	priorityBoarding	Priority boarding
checkin	priorityCheckIn	Priority checkin
businessClassCatering	specialMenu	Business class catering
upgradeToBusinessClass	upgradeToBusiness	Upgrade to business class
vipLounges	vipLounge	Vip lounge
twoSeatsOnRow	vipSeats	Two seats on row
vipSeats	vipSeats	Vip seats
noMealsOnBoard	menu	No meals

# Main fare family categories

Category	Decryption
PR	«Promo» tariff
EC	«Econom» tariff
FL	«Premium-Econom» tariff
BS	«Business» tariff
CF	«Business-Lite» tariff
PL	«Promo-lightt» tariff
LC1	«Bagless» tariff

LC2	«Luggage» tariff
SOC	«Subsidised» tariff

#### Statuses of seats on check-in

Status	Description
0	Seat reservation cancelled
1	Seat not selected
2	The seat is reserved free during the online registration
3	The seat is reserved for a fee during online registration
41	The passenger is registered for a free seat
42	The passenger is registered for a paid seat
43	The passenger is registered by an agent
5	The seat is prepaid before registration
6	The passenger is in the process of registering for a seat
7	The seat was pre-added by the agent

# Statuses of sessions for creating subsidized booking with approving

Status	Description
0	Unknown
1	Waiting an approve
2	Confirmed
3	Error
4	Canceled
5	Expired
6	Waiting a decide by CRM side for the request
7	Rejected
8	Waiting Passenger Approval
9	Waiting Files Approval

# Statuses of checking subsidized passengers (for creating booking with subsidized fares and required approving)

Status	Description
0	Unknown
1	Waiting an approve
2	Confirmed
3	Error
4	Skipped (an approve is not required)

### The subsidy types values (for creating booking for subsidized fares)

Numeric / String value	Description
0 / Disability	People with disabilities
1 / Kaliningrad	Kaliningrad
2 / FarEast	Far Eastern District
3 / Age	Age subsidies

#### **Countries**

Country code	Russian name	English name
ABW	Аруба	Aruba
AFG	Афганистан	Afghanistan
AGO	Ангола	Angola
AIA	Ангилья	Anguilla
ALA	Аландские острова	Åland Islands
ALB	Албания	Albania
AND	Андорра	Andorra
ARE	ОАЭ	United Arab Emirates
ARG	Аргентина	Argentina

ARM	Армения	Armenia
ASM	Американское Самоа	American Samoa
ATA	Антарктида	Antarctica
ATF	Французские Южные и Антарктические Территории	French Southern Territories
ATG	Антигуа и Барбуда	Antigua and Barbuda
AUS	Австралия	Australia
AUT	Австрия	Austria
AZE	Азербайджан	Azerbaijan
BDI	Бурунди	Burundi
BEL	Бельгия	Belgium
BEN	Бенин	Benin
BES	Бонэйр Синт-Эстатиус и Саба	Bonaire Sint Eustatius and Saba
BFA	Буркина-Фасо	Burkina Faso
BGD	Бангладеш	Bangladesh
BGR	Болгария	Bulgaria
BHR	Бахрейн	Bahrain
BHS	Багамы	Bahamas
BIH	Босния и Герцеговина	Bosnia and Herzegovina
BLM	Сен-Бартелеми	Saint Barthélemy
BLR	Белоруссия	Belarus
BLZ	Белиз	Belize
BMU	Бермуды	Bermuda
BOL	Боливия	Bolivia
BRA	Бразилия	Brazil
BRB	Барбадос	Barbados
BRN	Бруней	Brunei Darussalam
BTN	Бутан	Bhutan

BVT	Остров Буве	Bouvet Island
BWA	Ботсвана	Botswana
CAF	ЦАР	Central African Republic
CAN	Канада	Canada
CCK	Кокосовые острова	Cocos (Keeling) Islands
CHE	Швейцария	Switzerland
CHL	Чили	Chile
CHN	КНР (Китайская Народная Республика)	China
CIV	Кот-д'Ивуар	Cote D'Ivoire
CMR	Камерун	Cameroon
COD	Демократическая Республика Конго	Congo the Democratic Republic of the
COG	Республика Конго	Congo
COK	Острова Кука	Cook Islands
COL	Колумбия	Colombia
COM	Коморы	Comoros
CPV	Кабо-Верде	Cape Verde
CRI	Коста-Рика	Costa Rica
CUB	Куба	Cuba
CUW	Кюрасао	Curaçao
CXR	Остров Рождества	Christmas Island
CYM	Острова Кайман	Cayman Islands
CYP	Кипр	Cyprus
CZE	Чехия	Czech Republic
DEU	Германия	Germany
DJI	Джибути	Djibouti
DMA	Доминика	Dominica
DNK	Дания	Denmark

DOM	Доминиканская Республика	Dominican Republic
DZA	Алжир	Algeria
ECU	Эквадор	Ecuador
EGY	Египет	Egypt
ERI	Эритрея	Eritrea
ESH	САДР	Western Sahara
ESP	Испания	Spain
EST	Эстония	Estonia
ETH	Эфиопия	Ethiopia
FIN	Финляндия	Finland
FJI	Фиджи	Fiji
FLK	Фолклендские острова	Falkland Islands (Malvinas)
FRA	Франция	France
FRO	Фареры	Faroe Islands
FSM	Микронезия	Micronesia Federated States of
GAB	Габон	Gabon
GBR	Великобритания	United Kingdom
GEO	Грузия	Georgia
GGY	Гернси	Guernsey
GHA	Гана	Ghana
GIB	Гибралтар	Gibraltar
GIN	Гвинея	Guinea
GLP	Гваделупа	Guadeloupe
GMB	Гамбия	Gambia
GNB	Гвинея-Бисау	Guinea-Bissau
GNQ	Экваториальная Гвинея	Equatorial Guinea
GRC	Греция	Greece
GRD	Гренада	Grenada

GRL	Гренландия	Greenland
GTM	Гватемала	Guatemala
GUF	Гвиана	French Guiana
GUM	Гуам	Guam
GUY	Гайана	Guyana
HKG	Гонконг	Hong Kong
HMD	Херд и Макдональд	Heard Island and Mcdonald Islands
HND	Гондурас	Honduras
HRV	Хорватия	Croatia
HTI	Гаити	Haiti
HUN	Венгрия	Hungary
IDN	Индонезия	Indonesia
IMN	Остров Мэн	Isle of Man
IND	Индия	India
IOT	Британская территория в Индийском океане	British Indian Ocean Territory
IRL	Ирландия	Ireland
IRN	Иран	Iran Islamic Republic of
IRQ	Ирак	Iraq
ISL	Исландия	Iceland
ISR	Израиль	Israel
ITA	Италия	Italy
JAM	Ямайка	Jamaica
JEY	Джерси	Jersey
JOR	Иордания	Jordan
JPN	Япония	Japan
KAZ	Казахстан	Kazakhstan

KEN	Кения	Kenya
KGZ	Киргизия	Kyrgyzstan
KHM	Камбоджа	Cambodia
KIR	Кирибати	Kiribati
KNA	Сент-Китс и Невис	Saint Kitts and Nevis
KOR	Республика Корея	Korea Republic of
KWT	Кувейт	Kuwait
LAO	Лаос	Lao People's Democratic Republic
LBN	Ливан	Lebanon
LBR	Либерия	Liberia
LBY	Ливия	Libyan Arab Jamahiriya
LCA	Сент-Люсия	Saint Lucia
LIE	Лихтенштейн	Liechtenstein
LKA	Шри-Ланка	Sri Lanka
LSO	Лесото	Lesotho
LTU	Литва	Lithuania
LUX	Люксембург	Luxembourg
LVA	Латвия	Latvia
MAC	Макао	Macao
MAF	Сен-Мартен	Saint Martin (French part)
MAR	Марокко	Morocco
MCO	Монако	Monaco
MDA	Молдавия	Moldova Republic of
MDG	Мадагаскар	Madagascar
MDV	Мальдивы	Maldives
MEX	Мексика	Mexico
MHL	Маршалловы Острова	Marshall Islands

MKD	Македония	Macedonia the Former Yugoslav Republic of
MLI	Мали	Mali
MLT	Мальта	Malta
MMR	Мьянма	Myanmar
MNE	Черногория	Montenegro
MNG	Монголия	Mongolia
MNP	Северные Марианские Острова	Northern Mariana Islands
MOZ	Мозамбик	Mozambique
MRT	Мавритания	Mauritania
MSR	Монтсеррат	Montserrat
MTQ	Мартиника	Martinique
MUS	Маврикий	Mauritius
MWI	Малави	Malawi
MYS	Малайзия	Malaysia
MYT	Майотта	Mayotte
NAM	Намибия	Namibia
NCL	Новая Каледония	New Caledonia
NER	Нигер	Niger
NFK	Остров Норфолк	Norfolk Island
NGA	Нигерия	Nigeria
NIC	Никарагуа	Nicaragua
NIU	Ниуэ	Niue
NLD	Нидерланды	Netherlands
NOR	Норвегия	Norway
NPL	Непал	Nepal
NRU	Науру	Nauru
NZL	Новая Зеландия	New Zealand

OMN	Оман	Oman
OST	Южная Осетия	South Ossetia
PAK	Пакистан	Pakistan
PAN	Панама	Panama
PCN	Острова Питкэрн	Pitcairn
PER	Перу	Peru
PHL	Филиппины	Philippines
PLW	Палау	Palau
PNG	Папуа — Новая Гвинея	Papua New Guinea
POL	Польша	Poland
PRI	Пуэрто-Рико	Puerto Rico
PRK	КНДР (Корейская Народно- Демократическая Республика)	Korea Democratic People's Republic of
PRT	Португалия	Portugal
PRY	Парагвай	Paraguay
PSE	Государство Палестина	Palestinian Territory Occupied
PYF	Французская Полинезия	French Polynesia
QAT	Катар	Qatar
REU	Реюньон	Reunion
ROU	Румыния	Romania
RUS	Россия	Russian Federation
RWA	Руанда	Rwanda
SAU	Саудовская Аравия	Saudi Arabia
SDN	Судан	Sudan
SEN	Сенегал	Senegal
SGP	Сингапур	Singapore
SGS	Южная Георгия и Южные Сандвичевы Острова	South Georgia and the South Sandwich Islands

SHN	Острова Святой Елены Вознесения и Тристан-да-Кунья	Saint Helena
SJM	Шпицберген и Ян-Майен	Svalbard and Jan Mayen
SLB	Соломоновы Острова	Solomon Islands
SLE	Сьерра-Леоне	Sierra Leone
SLV	Сальвадор	El Salvador
SMR	Сан-Марино	San Marino
SOM	Сомали	Somalia
SPM	Сен-Пьер и Микелон	Saint Pierre and Miquelon
SRB	Сербия	Serbia
SSD	Южный Судан	South Sudan
STP	Сан-Томе и Принсипи	Sao Tome and Principe
SUR	Суринам	Suriname
SVK	Словакия	Slovakia
SVN	Словения	Slovenia
SWE	Швеция	Sweden
SWZ	Свазиленд	Swaziland
SXM	Синт-Мартен	Sint Maarten (Dutch part)
SYC	Сейшельские Острова	Seychelles
SYR	Сирия	Syrian Arab Republic
TCA	Теркс и Кайкос	Turks and Caicos Islands
TCD	Чад	Chad
TGO	Того	Togo
THA	Таиланд	Thailand
TJK	Таджикистан	Tajikistan
TKL	Токелау	Tokelau
TKM	Туркмения	Turkmenistan
TLS	Восточный Тимор	Timor-Leste

TON	Тонга	Tonga
TTO	Тринидад и Тобаго	Trinidad and Tobago
TUN	Тунис	Tunisia
TUR	Турция	Turkey
TUV	Тувалу	Tuvalu
TWN	Китайская Республика	Taiwan
TZA	Танзания	Tanzania United Republic of
UGA	Уганда	Uganda
UKR	Украина	Ukraine
UMI	Внешние малые острова (США)	United States Minor Outlying Islands
URY	Уругвай	Uruguay
USA	США	United States of America
UZB	Узбекистан	Uzbekistan
VAT	Ватикан	Holy See (Vatican City State)
VCT	Сент-Винсент и Гренадины	Saint Vincent and the Grenadines
VEN	Венесуэла	Venezuela
VGB	Виргинские Острова (Великобритания)	Virgin Islands British
VIR	Виргинские Острова (США)	Virgin Islands U.S.
VNM	Вьетнам	Viet Nam
VUT	Вануату	Vanuatu
WLF	Уоллис и Футуна	Wallis and Futuna
WSM	Самоа	Samoa
XKX	Косово	Kosovo
YEM	Йемен	Yemen
ZAF	ЮАР	South Africa
ZMB	Замбия	Zambia
ZWE	Зимбабве	Zimbabwe

# **Attachment: Main IBE error codes**

Error code	Description returned by IBE	Error Description	
	IBE errors		
1000	Unknown IBE error	Unhandled exception, reason unknown.	
1001	Operation can not be performed due to invalid reservation state	Error gets raised if certain API method was called at improper moment in booking flow.  For instance if api/services method was called right after api/session (booking was not created yet)	
1006	Failed to resolve timezone	Error might appear during failed attempt to refresh timezone dictionary	
1007	Session pool is unable to acquire stateful session as it's expired	The engine tries to get information about the session in the Session Pool, but there is no such session.	
1008	Data validation error	Validation error, might appear on all booking steps.  For instance when invalid passenger data is being sent	
1013	Unable to load IBE reservation context	It is not possible to get information on the open session ID of the booking engine.	
1020	Failed to update or retrieve search log data	Service error. Occurs when an attempt to write logs to the database is unsuccessful.	
1021	Failed to update or retrieve reservation log data	Service error. Occurs when an attempt to read logs from the database is unsuccessful.	
1022	Failed connect to redis	Service error. Occurs when an attempt to connect to Redis is unsuccessful.	
1084	Any Fare wasn't found by given reservation params	The error appears if the sent fare doesn't return in recommendations.	
1085	Session is locked by another request	The error appears if the session is locked by another request.	
1098	Airport code not found	The error appears if the airport code not found.	

1500	Failed to receive exchange rates.	Unable to receive information for api/exchangerates.  Method uses API CB RF for receiving of data.	
1810	External system temporary unavailable	The error occurs when the SIG request circuit breaker is triggered.	
1811	Total request process did not complete within the timeout	The error occurs when the total requests processing did not complete within the timeout.	
2000	Unknown Connector error	Unhandled exception, unknown cause.	
2200	Airports service error	Unable to receive information from api/airports method.	
		Method uses API <u>u6.ru</u> for receiving of data.	
2201	Airports cache is empty	API airports method did not return data	
2202	Airports API returned invalid result	API airports method returned invalid data	
9004	Unknown IBE error. Null Ok response.	The error occurs if the response to the request to create a booking is returned empty.	
	OrderInfo errors		
20000	Incorrect login or password.	Occurs when invalid login or password is passed to request.	
4000	OrderInfo proxy service has failed to process request	Occurs when the proxy was unable to process the incoming request.	
4100	OrderInfo service has failed to process request	The error occurs if the GOI-proxy was unable to fulfill the request.	

# Adding services to booking main error codes

Error code	IBE description	Error description
1000	Unknown error	Unknown error. Any error not handled by IBE.
1001	Invalid passenger or segment reference	Error appears when attempting to add service for passenger or segment not existing in booking.

# Error code for determining the online registration restriction when requesting GET api/Checkin

Error code	IBE description	Error description
401033	Web registration is not available	The error (SirenaSoapPassengerAgentTransitBortChanging) is passed to the registrationUnavailableCode parameter to hide the possibility of online registration and display the corresponding message to the passenger.

# **Attachment: Partner's services.**

# **Partner codes**

Partner code	Title
1	Alfastrah
2	Sealine insurance
3	Service
4	Aeroexpress
7	Telemedicine
8	Baggage packing
11	Alfastrah (Anticovid)
12	Sealine (Insurance AntiVirus)
13	Business room
21	Alfamedicine

# Partner types

Partner type	Decryption
1	Insurance
2	Aeroexpress
3	Medicine

# Aeroexpress service codes

N₂	Service code	Tariff decryption
1	STANDARTOW	Standard
2	STANDARTRT	Round trip
3	FAMILYRT	Family: Round trip
4	BUSINESSOW	Business
5	BUSINESSRT	Business: Round trip

Tariff description can be found on official Aeroexpress website: https://aeroexpress.ru/aero/prices.html

# Alfastrah service codes

N₂	Service code	Tariff decryption
1	AVIA	Avia
2	TRAVEL	Travel
3	LUGGAGE	Luggage
4	SPORT	Sport
5	NOFLIGHT	No flight
6	AVIADYNAMIC	Avia with dynamic cost calculation
7	AVIADYNAMICBUS	Avia for Business fares with dynamic cost calculation

Tariff description https://www.uralairlines.ru/passengers-info/partner-services/insurance/

# Alfastrah service codes (Anticovid)

N₂	Service code	Tariff decryption
1	ANTICOVID19	Anticovid Insurance for diclosure of COVID-19

# **Sealine service codes**

Nº	Service code	Tariff decryption	Availablility
1	SLAVIA	Avia	Yes
2	SLAVIAPLUS	Avia+	Yes
3	SLSPORT	Sport	Yes
4	SLPROMO	Promo	Yes
5	SLPROMODYNAMIC	Promo with dynamic cost calculation	Yes
6	SLTRAVEL	Travel	Yes

# **Sealine service codes (COVID insurance)**

Nº	Service code	Tariff decryption
1	SLANTICOVID	Insurance AntiCovid

# **Sberhealth service codes**

Nº	Service code	Tariff decryption	Availablility
1	SBERDOC	Therapist and Pediatrician Online	Yes
2	SBERVET	Veterinarian Online	Yes

# Alfahealth service codes

Nº	Service code	Tariff decryption	Availablility
1	AFLADOC	Therapist and Pediatrician Online	Yes

# **Business rooms service codes**

N₂	Service code	Tariff decryption	Availablility
1	BLN	Business room	Yes
2	VLN	VIP room	Yes

### **Attachment: Service SSR**

IBE adds PNR SSR for technical purposes. Their type, format and purpose is displayed below.

#### Service SSR for discounts

# SSR with information about applied discount

**Description:** SSR is added in tariff booking with discount

Format: DISCOUNT/DSNN/UsageType/CampaignId/LESSX.XXXX/SegmentRefernece/Passe

ngerReference

## **Examples:**

### DISCOUNT/DS20/1/1-5KYLTGV/LESS34.6741/S12/P12

#### DISCOUNT/DS07/0/1-4NJKZL1/LESS6.9954/S12/P12

Field	Description	Comment
DISCOUNT	Constant	-
	DS - constant	Examples:
DSNN	NN - discount percent	DS05, DS15
UsageType	Discount application type	Fare = 0, Order = 1,
CampaignId	CRM discount campaign unique ID	Example: 1-45RT6KP
LESSX.XXXX	X.XXXX - actual percentage of discount from base fare	Example: LESS6.9954
LLSSA,AAA	(taking into account the rounding of the discount amount to a multiple of 5 down)	LESS34.6741
SegmentRefernece	Reference to segment	Discount applies to all segment or not applies at all.
ocginenticientece	reference to segment	Separate SSR is added for each segment.
PassengerReference	Reference to passenger	-

#### SSR with information about actual amount of discoount from base fare

Format: PREVBASEDIFF/XXX

### **Example:**

#### PREVBASEDIFF/305

Field	Description	Comment
PREVBASEDIFF	Constant	-
XXX	Actual amount of discount in rubles after rounding down to a multiple of 5.	-

### SSR with information about "Wings" card

Description: SSR is added in tariff booking with discount

**Format:** type = "FQTV", text="U6XXXXXXXXXXX" (max length of the field text = 18 chars)

**Example:** text = U61000761775

Service SSR for promo codes

**Description:** SSR is added when promo code is applied

### Format of SSR for promo code for flight:

PROMO/Promocode/CampaignId/DSNN/LESSX.XXXX/SegmentRefernece/PassengerReference

Example: PROMO/WWJ0MTMV/1-48MLQR4/DS04/LESS3.7344/S12/P12

Field	Description	Comment
PROMO	Constant	-
Promocode	Applied promo code	Example: IBE21
CampaignId	CRM promo campaign unique ID	Example: 1-45H4OIC
DSNN	DS - constant NN - discount percent	Example: DS05, DS15
LESSX.XXXX	X.XXXX - actual percentage of discount from the base fare	Example: LESS3.7344

	(taking into account the rounding of the discount amount to a multiple of 5 down)	
SegmentRefernece	Reference to segment	Discount applies to all segment or not applies at all.  Separate SSR is added for each
		segment.
PassengerReference	Reference to passenger	-

# **Utility SSRs for partner services**

**Description:** SSR is added when adding a partner service to the booking to send information on the partner service in an sbr file

#### Format:

PTR/PartnerId/ServiceId/Code/OrderId/Currency/Amount/Status/RefundAmount/PassengerReference/InfantFlag/SegmentReference/ppr

# **Example (Aeroexpress):**

"PTR/4/65241A17717E4BEEB378B82763795A03/STANDARTOW/520501/RUB/500.00/1/0.0 0/P2///26250311"

Field	Description	Comment
PTR	Constant	-
PartnerId	Partner's unique identifier	Possible types described in Attachment 3.
ServiceId	Unique order's id	GUID
Code	Partner's service code	Possible types described in Attachment 3
OrderId	Order's id in partner's system	-
Currency	Currency	RUB
Amount	Service cost	Float number
Status	Service status.	Status code number is used in

	Possible values:	remark
	NotIssued = 1, service is added to booking, awaits issuing	If service status is changing old remark is deleted first, then new remark is added with new status code.
	Issued = 2, service is issued, obtained number of report document	code.
	IssueFailed = 3, service is added to booking, but error appeared during service issuing	
	Refunded = 4, service is cancelled, refund initiated	
RefundAmount	Refund amount	If refund was not initiated then field value is set to 0.00
PassengerReference	Reference to passenger for whom service is provided.	If service relates to particular passengers, and not for the whole booking, then references to all corresponding passengers are added.
InfantFlag	Obtains value "I", if service is provided for an infant.	For Aeroexpress: never filled in
SegmentReference	Reference to segment	A link to a segment is not added if the partner service is added to all segments. Currently only used for baggage packing partner.
		Example: S12
IssuedOffice	Ppr of the office under which the partner was added to the booking	-

# Service SSRs for subsidized fares

**Description:** SSRs are added on subsidized fare bookings.

**Format:** type = "SPAX", text="SUBSIDIZED TARIFF".