

# ONLINE-TICKET SYSTEM USER GUIDE

Version 2.6

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## 1. OVERVIEW

This user guide is designed as reference book of settings and data output of Online-ticket system.

Online-ticket system transmits ticket operation data between Global Distribution System "Sirena-Travel" (GDS) and any of the parties concerned: agencies, flight carriers, and points of sale in real time mode.

System supports the following types of tickets:

- air tickets
- Aeroexpress tickets
- train tickets.

System supports the following operations on tickets:

- sales
- exchange
- refund
- insurance.

Online-ticket system workflow is shown on Figure 1.



Figure 1 — Online-ticket system workflow

To use Online-ticket system:

- 1) Order it.
- 2) Install system client.
- 3) Specify client settings.
- 4) Launch the client.

Online-ticket system client establishes the connection to Online-ticket system server by passing authentication.

Online-ticket system server automatically converts operation data to XML file and puts it into message queue. A message is composed of user ID and XML-file.

If Online-ticket system client is launched then user receives the message from the queue. Once a user receives the message, the server deletes it.

If Online-ticket system client is closed then the message remains in the queue (**up to 30 days**) until system client is launched.

Online-ticket system automatically reestablishes server connection in case it breaks.

XML-file is automatically saved in the folder on the user PC. The folder is specified in `-storage` parameter of the configuration file (see Section 2 for details).

## 2. MAIN SETTINGS

There are two types of Online-ticket system client:

- for Windows OS
- for GNU/Linux.

The client includes installation files listed in Table 1.

*Table 1 — Client installation files*

File	Description
Stat_Client.exe (in Windows) Stat_Client (in Linux)	Executable file is included in Online-ticket system installation package
Stat_Client.conf (by default)	Configuration file is included in the e-mail to registered user
Ca.crt	Authentication center core certificate is included in the e-mail to registered user
<User Name>.pem	User certificate is included in the e-mail to registered user
Client.out	Log file is included in Online-ticket system installation package

To view Help, run the executable file with `-help` key. Online-ticket system window will be closed and the Help window will be presented.

To install Online-ticket system:

- 1) Send the order to the Contract Department:
  - by phone: +7 (495) 940-61-40
  - by fax: +7 (495) 782-01-64(54)
  - by e-mail: [ivanova@sirena-travel.ru](mailto:ivanova@sirena-travel.ru)
- 2) Download desired version of Online-ticket system from [the site](#).
- 3) Specify the following necessary parameters in `Stat_Client.conf` file:
  - `Connect` line is included in the e-mail to registered user and specifies server access.
  - `Ca_cert` specifies the path to `Ca.crt` file.
  - `Client_cert` specifies the path to `<User Name>.pem`.
  - `Storage` specifies the path to storage folder for XML-files.
  - `Logger` specifies the path to log file.

Configuration file of installed Online-ticket system contains examples of these parameters.



**Warning!** Restrict the access to `<User Name>.pem` file to secure user data.

There are the following options to launch the client:

- using command line (see Section 3)
- in service mode (see Section 4).

Also, there is the option of launching two clients on a single PC (see Section 5).



**Warning!** Delete daemon files before you install a new version of client.

## 3. LAUNCH USING COMMAND LINE

### 3.1. Launch in Windows OS

To launch Online-ticket system client from command line in Windows OS:

- 1) Open Online-ticket system installation folder.
- 2) Run `Stat_Client.exe`.

If configuration file settings are correct then the black blank window will be opened. Use log file and file storage folder to administrate the workflow.

### 3.2. Launch in \*nix OS Family

To launch Online-ticket system client from the command line in \*nix OS Family:

- 1) Create `/var/lock/` directory or make sure that it is already created.
- 2) Provide access to the `/var/lock/` directory.
- 3) Open Online-ticket system installation folder.
- 4) Run `Stat_Client` file.

If configuration file settings are correct then only the command `Stat_Client` will be displayed. Use log file and file storage folder to administrate the workflow.

To adjust the launch process, use the following keys:

- `-d` to launch daemon
- `-p stat_client.pid` to specify the path and file with *pid*  
(`/var/run/stat_client/` by default)
- `-f stat_client.conf` to specify the path and file with the configuration.

To launch Online-ticket system client with OS loading:

- Include `<path>/Stat_Client` launch command in `/etc/rc.local`.

## 4. LAUNCH IN SERVICE MODE

To launch Online-ticket system client in service mode in Windows OS:

- 1) Use the command `stat_client.exe -i -f Tch.conf`.

The keys mean as follows:

- `-i` for client launch in service mode
  - `-f` for the path and configuration file name (`Stat_Client.conf` by default from the folder with executable file).
- 2) Click **Start**, click **Control Panel**, click **Administrative Tools**, double-click **Services**. The **Services** window will be opened.
  - 3) Locate Online-ticket system client service, right click on the service name, select **Properties** in dropdown list. The **Properties: <Service Name>** window will be opened.
  - 4) Click the **Start** button in the **Service status** section of the window to launch the service.
  - 5) To launch the service with Windows loading, select the **Automatic** option in dropdown list of the **Startup type** section of the window.
  - 6) Click the **OK** button in the bottom section of the window to apply the settings.



## 5. LAUNCH TWO SERVICES/DAEMONS SIMULTANEOUSLY ON SINGLE PC

### 5.1. Two Services Simultaneously in Windows OS

To receive files of two different certificates (e.g. two agencies), launch two daemons simultaneously on a PC.

The first way to do it is to install Online-ticket system two times and perform the following steps:

- 1) Edit configuration files.
- 2) Install two services with different names (see Section 4).

The second way is to create two configuration files in Online-ticket system folder and do the following:

- Launch two services with different names each with own path to specific configuration file (see Section 4).

Contact Help Desk for additional information:

- by phone: +7 (495) 725-09-00
- by e-mail: [helpdesk@sirena-travel.ru](mailto:helpdesk@sirena-travel.ru).



**Warning!** Delete and reinstall the services if Online-ticket system folder is renamed or moved.

### 5.2. Two Daemons Simultaneously in \*nix OS Family

To receive files of two different certificates (e.g. two agencies), launch two daemons simultaneously on a PC.

The first way to do it is to install Online-ticket system two times and perform the following steps:

- 1) Edit configuration files (see Section 3.2 for details).
- 2) Launch required system copy client from the directory where it is installed with `-p` key in the command line.

The second way is to create two configuration files in Online-ticket system folder and do the following:

- 1) Edit configuration files (see Section 3.2 for details).
- 2) Launch Online-ticket system client with specified `-p` and `-f` keys.

Contact Help Desk for additional information:

- by phone: +7 (495) 725-09-00

- 
- by e-mail: [helpdesk@sirena-travel.ru](mailto:helpdesk@sirena-travel.ru).

## 6. ONLINE-TICKET CLIENT STOP

### 6.1. Client Stop in Windows OS

To stop Online-ticket system client:

- Close the client window. The connection breaks and Online-ticket system stops working.

To stop the service mode:

- Use the command `stat_client.exe -u`.

### 6.2. Client Stop in \*nix OS Family

To stop Online-ticket system client:

- Use the command `stat_client -s -p stat_client.pid`.

The keys mean as follows:

- `-s` for the stop command
- `-p stat_client.pid` to specify the path and file with *pid*.

## Appendix 1. XML Format Description of Message File

### Air Ticket Data File

```

<TICKETS version='2.6'>
  <TICKET>
    <TYPE DESC='TICKET, ETICKET, MCO, RECEIPT, EMD'>varchar2(10)</TYPE>
    <SYSTEM id='1H is for GDS, specific ID for others varchar2(3) ' session='(may be absent) varchar2(20) ' bso_id='system code of strict security form (may be absent)' DESC='booking system data'/>
    <CURRENCY DESC='payment currency code (e.g. USD, RUB)'>varchar2(3)</CURRENCY>
    <DEALDATE DESC='operation date'> varchar2(8)</DEALDATE>
    <DEALTIME DESC='operation time'>varchar2(6)</DEALTIME>
    <OPTYPE DESC='SALE,REFUND'>varchar2(10)</OPTYPE>
    <TRANS_TYPE
DESC=' SALE,REFUND,CANCEL,EXCHANGE,ERASE'>varchar2(10)</TRANS_TYPE>
    <MCO_TYPE DESC='PTA, PENALTY, RECEIPT' rfc='Reason-For-Issuance Code varchar2(2) ' rfisc='Reason For Issuance Sub-Code varchar2(4) ' >varchar2(10)</MCO_TYPE>
    <BSONUM DESC='strict security form number (e.g. 4214200000001)'>varchar2(20)</BSONUM>
    <EX_BSONUM DESC='strict security form number of the refunded ticket'>varchar2(20)</EX_BSONUM>
    <FIO DESC='passenger full name'>varchar2(100)</FIO>
    <SURNAME DESC='passenger surname as in PNR'>varchar2(100)</SURNAME>
    <NAME DESC='passenger name as in PNR'>varchar2(100)</NAME>
    <PASS DESC='passenger ID document'>varchar2(100)</PASS>
    <PASSENGER_TYPE DESC='passenger category code'>varchar2(3)</PASSENGER_TYPE>
    <BENEFIT_DOC DESC='discount document data'>varchar2(100)</BENEFIT_DOC>
    <BIRTH_DATE DESC='passenger birth date in DDMMYYYY format'>varchar2(8)</BIRTH_DATE>
    <GENDER DESC='passenger gender (M – male, F – female)'>varchar2(1)</GENDER>
    <CITIZENSHIP DESC='passenger citizenship (country ISO code)'>varchar2(3)</CITIZENSHIP>
    <GENERAL_CARRIER DESC='validating carrier code'>varchar2(10)</GENERAL_CARRIER>
    <RETTYPE DESC='refund type (voluntary=0, forced=1)'>varchar2(1)</RETTYPE>
    <TOURCODE DESC='tour code'>varchar2(15)</TOURCODE>
  </TICKET>
</TICKETS>

```

```

<OCURRENCY DESC='currency code in Air Fare column
(EUR...)'>varchar2(3)</OCURRENCY>

<ORATE DESC='exchange rate from the fare calculation currency to the currency of Air
Fare column (e.g. 0.7103)'>number</ORATE>

<NCURRENCY DESC='currency code of fare calculation (e.g. USD,
RUB)'>varchar2(3)</NCURRENCY>

<NRATE DESC='exchange rate from the fare calculation currency to the payment currency
(e.g. 25.9003)'>number</NRATE>

<OPRATE DESC='exchange rate from the currency of Air Fare column to the payment
currency'>number</OPRATE>

<FARE type='fare type varchar2(15)' vat_amount='fare VAT amount number'
vat_rate='fare VAT rate number' DESC='fare amount in payment
currency'>number</FARE>

<OFARE DESC='fare amount from Air Fare column (e.g. 400.00)'>number</OFARE>

<FARECALC DESC='fare calculation data'>varchar2(400)</FARECALC>

<ENDORS_RESTRE DESC='data from ENDORSEMENTS/RESTRICTION ticket
field'>varchar2(400)</ENDORS_RESTRE>

<PNR DESC='Passenger Name Record'>varchar2(8)</PNR>

<PNR_LAT DESC='PNR in Latin characters'>varchar2(8)</PNR_LAT>

<INV_PNR DESC='Inventory PNR'>varchar2(8)</INV_PNR>

<CONJ DESC='Conjunction Ticket Indicator'>varchar2(100)</CONJ>

<TO_BSONUM DESC='ticket/document number'>varchar2(20)</TO_BSONUM>

<TYP_NUM ser='preprinted ticket series' DESC='preprinted ticket
number'>varchar2(20)</TYP_NUM>

<FCMODE DESC='Fare Calculation Pricing Indicator (AUTO,
MANUAL)'>varchar2(6)</FCMODE>

<COMMISSION type='commission type varchar(10)' currency='commission currency
varchar(3)' amount='commission amount number' rate='commission rate number'
DESC='agency commission (only for BSP session)'/>

<BOOK agency='agent code varchar(6)' date='booking date by console local time
varchar2(8)' disp='booking operator ID varchar(15)' opr_num='booking operator
number number' stamp='Agent Numeric Code varchar(15)' tap='booking console
varchar(15)' time='booking time by console local time varchar2(6)' utc='booking UTC
date and time in ISO format (YYYYMMDDThhmmss) varchar2(15)' DESC='booking data' />

<DEAL agency='agent code varchar(6)' date='operation date by console local time
varchar2(8)' disp='operator ID varchar(15)' opr_num='operator number number'
stamp='Agent Numeric Code varchar(15)' tap='console varchar(15)'
time='operation time by console local time varchar2(6)' utc='operation UTC date and
time in ISO format (YYYYMMDDThhmmss) varchar2(15)' ersp='Approved Location Numeric

```

```

Code varchar(15) ' pcc=' Pseudo City Code (airline computer code for local office)
varchar(15) ' DESC=' operation data ' />
  <SALE agency=' agent code varchar(6) ' date=' sale date by console local time
varchar2(8) ' disp=' sale operator ID varchar(15) ' opr_num=' operator number
number ' stamp=' Agent Numeric Code varchar(15) ' tap=' sale console varchar(15) '
time=' sale time by console local time varchar2(6) ' utc=' sale UTC date and time in ISO
format (YYYYMMDDThmmss) varchar2(15) ' DESC=' sale data ' />
  <EMDCOUPONS DESC=' EMD coupons (only for EMD) ' >
    <EMDCOUPON>
      <COUPON_NO DESC=' coupon number ' >number</COUPON_NO>
      <VALUE DESC=' if EMD is priced by coupons then VALUE is EMD coupon price else VALUE
is 0 ' >number</VALUE>
      <REMARK DESC=' coupon remark ' >varchar2(140) </REMARK>
      <RELATED coupon=' coupon document number that is related to EMD coupon '
DESC=' document number that is related to the coupon ' >varchar2(20) </RELATED>
      <REASON rfisc=' Reason For Issuance Sub-Code ' airline=' carrier code that is
related to RFISC ' DESC=' Reason For Issuance description ' >varchar2(120) </REASON>
      <XBAGGAGE number=' excess baggage amount ' qualifier=' excess baggage units (P
- baggage pieces, L - lb, K - kg, S - seats) ' rpu=' excess baggage unit fare '
currency=' currency code of excess baggage unit fare ' DESC=' excess baggage data, all
parameters are required if excess baggage service is included in the coupon ' />
    </EMDCOUPON>
  </EMDCOUPONS>
  <SEGMENTS DESC=' flight segment batch (for MCO, RECEIPT, EMD documents may be
absent) ' >
    <SEGMENT>
      <SEGNO DESC=' flight segment number ' >number</SEGNO>
      <SEG_BSONUM DESC=' segment ticket list number ' >varchar2(20) </SEG_BSONUM>
      <COUPON_NO DESC=' coupon number ' >number</COUPON_NO>
      <IS_VOID DESC=' flight segment status: F - flight, V - VOID, S -
Surface ' >varchar2(1) </IS_VOID>
      <STPO DESC=' Stopover flag (0 - granted, 1 - denied) ' >number</STPO>
      <CITY1CODE DESC=' departure city code as on the ticket (e.g.
SIP) ' >varchar2(3) </CITY1CODE>
      <CITY2CODE DESC=' arrival city code as on the ticket (e.g.
VKO) ' >varchar2(3) </CITY2CODE>
      <PORT1CODE DESC=' departure airport code as on the ticket (e.g.
SIP) ' >varchar2(3) </PORT1CODE>
      <PORT2CODE DESC=' arrival airport code as on the ticket (e.g.
VKO) ' >varchar2(3) </PORT2CODE>
      <TERM1 DESC=' departure terminal ' >varchar2(6) </TERM1>

```

```

    <TERM2 DESC='arrival terminal'>varchar2(6)</TERM2>
    <CARRIER DESC='carrier code on the coupon (e.g. S7)'>varchar2(2)</CARRIER>
    <CLASS DESC='service class (e.g. X, N)'>varchar2(2)</CLASS>
    <REIS DESC='flight number'>varchar2(5)</REIS>
    <FLYDATE DESC='departure date' changed_to='new departure date (may not be
specified) in case of the schedule change known at the ticketing time
varchar2(8)'>varchar2(8)</FLYDATE>
    <FLYTIME DESC='departure time'>varchar2(4)</FLYTIME>
    <ARRDATE DESC='arrival date'>varchar2(8)</ARRDATE>
    <ARRTIME DESC='arrival time'>varchar2(4)</ARRTIME>
    <BASICFARE DESC='fare basis'>varchar2(13)</BASICFARE>
    <NFARE DESC='fare in calculation currency (e.g. 400.00)'>number</NFARE>
    <BAGGAGE number='baggage amount' qualifier='baggage units (P — baggage
pieces, L — lb, K — kg, S — seats)' DESC='baggage data, all parameters may be absent' />
    <FFP_INFO number='frequent flyer bonus card number' certificate='frequent flyer
certificate number' DESC='frequent flyer data' />
  </SEGMENT>
</SEGMENTS>
  <TAXES vat_amount='VAT amount on airport government taxes' vat_rate='VAT
interest rate on airport government taxes'>
    <TAX vat_amount='VAT amount on charges other than airport government taxes'
vat_rate='VAT interest rate on charges other than airport government taxes'>
      <SEGNO DESC='flight segment number'>number</SEGNO>
      <CODE DESC='charge code (e.g. RU, YQ...)'>varchar2(20)</CODE>
      <AMOUNT DESC='charge amount in payment currency (e.g.
389.00)'>number</AMOUNT>
      <NAMOUNT DESC='charge amount in charge base currency (e.g.
15.00)'>number</NAMOUNT>
      <NCURRENCY DESC='charge base currency code (e.g. USD,
RUB)'>varchar2(3)</NCURRENCY>
      <NRATE DESC='exchange rate from charge base currency to payment currency (e.g.
25.9003)'>number</NRATE>
      <OAMOUNT DESC='charge amount in report currency (e.g.
510.00)'>number</OAMOUNT>
      <OCURRENCY DESC='report currency code (e.g. EUR)'>varchar2(3)</OCURRENCY>
      <ORATE DESC='exchange rate from charge base currency to report currency (e.g.
0.7103)'>number</ORATE>
      <OPRATE DESC='exchange rate from report currency to payment currency (e.g.
25.9003)'>number</OPRATE>
    </TAX>
  </TAXES>

```

```

<FOPS>
  <FOP>
    <TYPE DESC='payment type (e.g. CA, CC, IN)'>varchar2(50)</TYPE>
    <ORG DESC='institution (e.g. Ministry of Defense, Ministry of Interior, it is used for
mutual payments between the institution and the carrier)'>varchar2(100)</ORG>
    <DOC SER DESC='document series'>varchar2(10)</DOC SER>
    <DOC NUM DESC='document number'>varchar2(20)</DOC NUM>
    <AUTH_INFO code='authentication code ' varchar2(8) ' currency='payment
currency code ' varchar2(3) ' amount='payment amount ' number' DESC='payment card
data' provider='authorization center code for payment cards ' varchar2(2) ' />
    <DOC INFO DESC='payment card full description'>varchar2(200)</DOC INFO>
    <AMOUNT DESC='total amount in payment currency (e.g. 389.00)'>number</AMOUNT>
  </FOP>
</FOPS>
<CONTACTS>
  <CONTACT DESC='contact details'>varchar2(50)</CONTACTS>
</CONTACTS>
<AGN_INFO>
  <CLIENT_NUM DESC='client number'>varchar2(50)</CLIENT_NUM>
  <RESERV_NUM DESC='PNR (Passenger Name Record)'>varchar2(50)</RESERV_NUM>
  <INFO DESC='SSR (Special Service Remarks)'>varchar2(200)</INFO>
</AGN_INFO>
<EXCH_TICKET>
  <FIO DESC='passenger full name'>varchar2(100)</FIO>
  <AMOUNT DESC='ticket exchange amount'>number</AMOUNT>
  <SEGMENTS DESC='exchanged ticket segment batch'>
    <SEGMENT>
      <SEGNO DESC='flight segment number'>number</SEGNO>
      <CITY1CODE DESC='departure city code'>varchar2(3)</CITY1CODE>
      <CITY2CODE DESC='arrival city code'>varchar2(3)</CITY2CODE>
      <PORT1CODE DESC='departure airport code'>varchar2(3)</PORT1CODE>
      <PORT2CODE DESC='arrival airport code'>varchar2(3)</PORT2CODE>
      <CARRIER DESC='carrier code'>varchar2(2)</CARRIER>
      <CLASS DESC='service class'>varchar2(2)</CLASS>
      <REIS DESC='flight number'>varchar2(5)</REIS>
      <FLYDATE DESC='departure date'>varchar2(8)</FLYDATE>
      <FLYTIME DESC='departure time'>varchar2(4)</FLYTIME>
      <BASICFARE DESC='fare code'>varchar2(13)</BASICFARE>
    </SEGMENT>
  </SEGMENTS>
  <TAXES DESC='exchanged ticket tax batch'>

```



```

<TAX>
  <SEGNO DESC='flight segment number'>number</SEGNO>
  <CODE DESC='tax code'>varchar2(20)</CODE>
  <AMOUNT DESC='tax amount in payment currency'>number</AMOUNT>
  <NAMOUNT DESC='tax amount in tax base currency'>number</NAMOUNT>
  <NCURRENCY DESC='tax base currency code'>varchar2(3)</NCURRENCY>
  <NRATE DESC='exchange rate from tax base currency to payment
currency'>number</NRATE>
</TAX>
</TAXES>
</EXCH_TICKET>
</TICKET>
</TICKETS>

```

## Booking Data File

It is sent by agent request.

To send the booking data file to OLT, enter the *OB* command in the text console.

The system response is "BOOKING INFORMATION SENT TO OLT".

```

<BOOKINGS version='2.6'>
  <BOOKING>
    <TYPE DESC='BOOKING'>varchar2(10)</TYPE>
    <SYSTEM id='1H is for GDS, specific ID for others varchar2(3)' session='(may be
absent) varchar2(20)' DESC='booking system data' />
    <INFODATE DESC='file creation date in GDS'>varchar2(8)</INFODATE>
    <INFOTIME DESC='file creation time in GDS'>varchar2(6)</INFOTIME>
    <PNR DESC='Passenger Name Record'>varchar2(8)</PNR>
    <PNR_LAT DESC='PNR in Latin characters'>varchar2(8)</PNR_LAT>
    <INV_PNR DESC='Inventory PNR in Latin characters'>varchar2(8)</INV_PNR>
    <BOOK agency='agent code varchar(6)' date='booking date by console local time
varchar2(8)' disp='booking operator ID varchar(15)' opr_num='booking operator
number number' stamp='Agent Numeric Code varchar(15)' tap='booking console
varchar(15)' time='booking time by console local time varchar2(6)' utc='booking UTC
date and time in ISO format (YYYYMMDDThhmmss) varchar2(15)' DESC='booking data' />
    <SEGMENTS DESC='flight segment batch'>
      <SEGMENT>
        <SEGNO DESC='flight segment number'>number</SEGNO>
        <CITY1CODE DESC='departure city code'>varchar2(3)</CITY1CODE>
        <CITY2CODE DESC='arrival city code'>varchar2(3)</CITY2CODE>

```

```

<PORT1CODE DESC='departure airport code'>varchar2(3)</PORT1CODE>
<PORT2CODE DESC='arrival airport code'>varchar2(3)</PORT2CODE>
<TERM1 DESC='departure terminal'>varchar2(6)</TERM1>
<TERM2 DESC='arrival terminal'>varchar2(6)</TERM2>
<FLYDATE DESC='departure date in the DDMMYYYY format'>varchar2(8)</FLYDATE>
<FLYTIME DESC='departure time'>varchar2(4)</FLYTIME>
<ARRDATE DESC='arrival date in the DDMMYYYY format'>varchar2(8)</ARRDATE>
<ARRTIME DESC='arrival time'>varchar2(4)</ARRTIME>
<CLASS DESC='booking class'>varchar2(2)</CLASS>
<CARRIER DESC='carrier code'>varchar2(2)</CARRIER>
<FLIGHT DESC='flight number'>varchar2(5)</FLIGHT>
<STATUS DESC='segment status code'>varchar2(3)</STATUS>
<TYPE DESC='FLY,ARNK'>varchar2(10)</TYPE>
</SEGMENT>
</SEGMENTS>
<PASSENGERS DESC='passenger data batch'>
  <PASSENGER>
    <PASSNO DESC='passenger number'>number</PASSNO>
    <SURNAME DESC='passenger surname'>varchar2(100)</SURNAME>
    <NAME DESC='passenger name (and patronimic name if exists)'>varchar2(100)</NAME>
    <BIRTH_DATE DESC='passenger birthdate in the DDMMYYYY format'>varchar2(8)</BIRTH_DATE>
    <GENDER DESC='passenger gender (M/F)'>varchar2(1)</GENDER>
    <TYPE DESC='ADT,CNN,INF'>varchar2(10)</TYPE>
  </PASSENGER>
</PASSENGERS>
<CONTACTS DESC='contact information batch'>
  <CONTACT DESC='contact details'>varchar2(50)</CONTACT>
</CONTACTS>
</BOOKING>
</BOOKINGS>

```

## Insurance Data File

```

<TICKETS version='2.6'>
  <TICKET>
    <TYPE DESC='INSURCAR, EINSURCAR'>varchar2(10)</TYPE>
    <SYSTEM id='1H is for GDS, specific ID for others varchar2(3) ' session='(may be absent) varchar2(20) ' DESC='CRS (computer reservation system) data' />

```

```

<DEALDATE DESC='operation date'>varchar2(8)</DEALDATE>
<DEALTIME DESC='operation time'>varchar2(6)</DEALTIME>
<OPTYPE DESC='operation type (SALE or REFUND)'>varchar2(10)</OPTYPE>
<TRANS_TYPE DESC='SALE, REFUND , ERASE, CANCEL'>varchar2(10)</TRANS_TYPE>
<BSONUM DESC='insurance certificate series and number' ser='blank series
varchar2(10)'>varchar2(20)</BSONUM>
<PRODUCT_CODE DESC='insurance product code'>varchar2(4000)</PRODUCT_CODE>
<FIO DESC='passenger full name'>varchar2(100)</FIO>
<PASS DESC='passenger ID data'>varchar2(100)</PASS>
<BIRTH_DATE DESC='passenger birth date in DDMYYYYY
format'>varchar2(8)</BIRTH_DATE>
<GENDER DESC='passenger gender (M – male, F – female)'>varchar2(1)</GENDER>
<CITIZENSHIP DESC='passenger citizenship (country ISO
code)'>varchar2(3)</CITIZENSHIP>
<PNR DESC='PNR in Cyrillic characters'>varchar2(8)</PNR>
<PNR_LAT DESC='PNR in Latin characters'>varchar2(8)</PNR_LAT>
<CARRIER DESC='carrier code'>varchar2(2)</CARRIER>
<REIS DESC='flight number'>varchar2(5)</REIS>
<FLYDATE DESC='departure date'>varchar2(8)</FLYDATE>
<FLYTIME DESC='departure time'>varchar2(4)</FLYTIME>
<CITY1CODE DESC='departure city code'>varchar2(3)</CITY1CODE>
<CITY2CODE DESC='arrival city code'>varchar2(3)</CITY2CODE>
<FARE DESC='insurance cover amount'>number</FARE>
<FARE_CURRENCY DESC='insurance cover amount
currency'>varchar2(3)</FARE_CURRENCY>
<CURRENCY DESC='insurance payment currency'>varchar2(3)</CURRENCY>
<AMOUNT DESC='insurance amount'>number</AMOUNT>
<TO_BSONUM DESC='ticket number with attached
insurance'>varchar2(20)</TO_BSONUM>
<INSURER DESC='insurance company name'>varchar2(40)</INSURER>
<INSURTYPE DESC='insurance type code'>varchar2(2)</INSURER>
<INSURCODE DESC='insurance cover code'>varchar2(2)</INSURCODE>
<INSURORDER DESC='insurance ID for several flight
segments'>varchar2(20)</INSURORDER>
<DEAL agency='agent code varchar(6)' date='operation date by console local time
varchar2(8)' disp='operator ID varchar(15)' opr_num='operator number number'
stamp='Agent Numeric Code varchar(15)' tap='console varchar(15)'
time='operation time by console local time varchar2(6)' utc='operation UTC date and
time in ISO format (YYYYMMDDThhmmss) varchar2(15)' DESC='operation data' />

```

```

    <SALE agency='agent code varchar(6)' date='sale date by console local time
varchar2(8)' disp='sale operator ID varchar(15)' opr_num='operator number
number' stamp='Agent Numeric Code varchar(15)' tap='sale console varchar(15)'
time='sale time by console local time varchar2(6)' utc='sale UTC date and time in ISO
format (YYYYMMDDThhmmss) varchar2(15)' DESC='sale data' />

    <SEGMENTS DESC='data batch of segments with issued insurance (for the sale operation
only)'>
        <SEGMENT>
            <SEGNO DESC='flight segment number'>number</SEGNO>
            <CITY1CODE DESC='departure city code'>varchar2(3)</CITY1CODE>
            <CITY2CODE DESC='arrival city code'>varchar2(3)</CITY2CODE>
            <PORT1CODE DESC='departure airport code'>varchar2(3)</PORT1CODE>
            <PORT2CODE DESC='arrival airport code'>varchar2(3)</PORT2CODE>
            <CARRIER DESC='marketing carrier code'>varchar2(2)</CARRIER>
            <REIS DESC='flight number'>varchar2(5)</REIS>
            <FLYDATE DESC='departure date in the DDMMYYYY
format'>varchar2(8)</FLYDATE>
            <FLYTIME DESC='departure time in the HHMM format'>varchar2(4)</FLYTIME>
            <ARRDATE DESC='arrival date in the DDMMYYYY format'>varchar2(8)</ARRDATE>
            <ARRTIME DESC='arrival time in the HHMM format'>varchar2(4)</ARRTIME>
        </SEGMENT>
    </SEGMENTS>

    <RAILSEGMENTS DESC='data batch of train ticket segments with issued insurance (for the
sale operation only)'>
        <RAILSEGMENT DESC='train ticket segment'>
            <RAILSEGNO DESC='train ticket segment number'>number</SEGNO>
            <DEPDATE DESC='departure date in the DDMMYYYY
format'>varchar2(8)</DEPDATE>
            <DEPTIME DESC='departure time in the HHMM format'>varchar2(8)</DEPTIME>
            <DEPPORT DESC='departure point code'>varchar2(80)</DEPPORT>
            <ARRDATE DESC='arrival date in the DDMMYYYY format'>varchar2(8)</ARRDATE>
            <ARRTIME DESC='arrival time in the HHMM format'>varchar2(8)</ARRTIME>
            <ARRPORT DESC='arrival point code'>varchar2(80)</ARRPORT>
            <TRAIN DESC='train number'>varchar2(20)</TRAIN>
            <COACH num='coach number' type='coach type' />
            <CLASS DESC='train service class'>varchar2(20)</CLASS>
            <SEATS>
                <SEAT DESC='seat number' tier='seat tier'>varchar2(8)</SEAT>
            </SEATS>
        </RAILSEGMENT>
    </RAILSEGMENTS>

```

```

<SERVICES DESC='insurance data batch'>
  <SERVICE>
    <TYPE DESC='service type'>varchar2(10)</TYPE>
    <FARE DESC='insurance cover amount'>number</FARE>
    <FARE_CURRENCY DESC='insurance cover amount
currency'>varchar2(3)</FARE_CURRENCY>
    <AMOUNT DESC='insurance amount'>number</AMOUNT>
  </SERVICE>
</SERVICES>
<CONTACTS DESC='contact information batch'>
  <CONTACT DESC='contact details'>varchar2(50)</CONTACT>
</CONTACTS>
<FOPS>
  <FOP>
    <TYPE DESC='payment type (e.g. CA, CC, IN)' >varchar2(50)</TYPE>
    <ORG DESC='institution (e.g. Ministry of Defense, Ministry of Interior, it is used for
mutual payments between the institution and the carrier)'>varchar2(100)</ORG>
    <DOC SER DESC='document series'>varchar2(10)</DOC SER>
    <DOC NUM DESC='document number'>varchar2(20)</DOC NUM>
    <DOC INFO DESC='payment document full description'>varchar2(200)</DOC INFO>
    <AMOUNT DESC='insurance total amount in payment currency (e.g.
389.00)'>number</AMOUNT>
    <AUTH_INFO code='authentication code ' varchar2(8) ' currency='payment
currency code ' varchar2(3) ' amount='payment amount ' number' DESC='payment card
data' provider='authorization center code for payment cards ' varchar2(2) ' />
  </FOP>
</FOPS>
</TICKET>
</TICKETS>

```

## Aeroexpress Ticket Data File

```

<TICKETS version='2.6'>
  <TICKET>
    <TYPE DESC='AE_TICKET'>varchar2(10)</TYPE>
    <SYSTEM id='1H is for GDS, specific ID for others ' varchar2(3) ' session='(may be
absent) ' varchar2(20) ' DESC='CRS (computer reservation system) data' />
    <DEALDATE DESC='operation date'>varchar2(8)</DEALDATE>
    <DEALTIME DESC='operation time'>varchar2(6)</DEALTIME>
    <OPTYPE DESC='SALE, REFUND'>varchar2(10)</OPTYPE>
  </TICKET>
</TICKETS>

```

```

<TRANS_TYPE DESC='SALE, REFUND'>varchar2(10)</TRANS_TYPE>
<EMD_NUM DESC='EMD (Electronic Miscellaneous Document)
number'>varchar2(20)</EMD_NUM>
<TICKNUM DESC='ticket number'>varchar2(20)</TICKNUM>
<ORDER_NUM DESC='Aeroexpress order number'>varchar2(20)</ORDER_NUM>
<PNR DESC='PNR in Cyrillic characters'>varchar2(8)</PNR>
<PNR_LAT DESC='PNR in Latin characters'>varchar2(8)</PNR_LAT>
<FARE DESC='fare amount in payment currency'>varchar2(100)</FARE>
<CURRENCY DESC='payment currency'>varchar2(100)</CURRENCY>
<FARETYPE DESC='fare type (list of available values: full, child, roundtrip,
family)'>varchar2(100)</FARETYPE>
<DEAL agency='agent code varchar(6)' date='operation date by console local time
varchar2(8)' disp='operator ID varchar(15)' opr_num='operator number number'
stamp='Agent Numeric Code varchar(15)' tap='console varchar(15)'
time='operation time by console local time varchar2(6)' utc='operation UTC date and
time in ISO format (YYYYMMDDThhmmss) varchar2(15)' DESC='operation data' />
<SALE agency='agent code varchar(6)' date='sale date by console local time
varchar2(8)' disp='sale operator ID varchar(15)' opr_num='operator number
number' stamp='Agent Numeric Code varchar(15)' tap='sale console varchar(15)'
time='sale time by console local time varchar2(6)' utc='sale UTC date and time in ISO
format (YYYYMMDDThhmmss) varchar2(15)' DESC='sale data' />
<SEGMENTS DESC='trip segments'>
  <SEGMENT DESC='trip segment'>
    <SEGNO DESC='segment number (always 1)'>number</SEGNO>
    <DEPDATE DESC='departure date'>varchar2(8)</DEPDATE>
    <DEPTIME DESC='departure time'>varchar2(8)</DEPTIME>
    <DEPPORT DESC='departure point code'>varchar2(80)</DEPPORT>
    <ARRPORT DESC='arrival point code'>varchar2(80)</ARRPORT>
    <CLASS DESC='service class (common or business)'>varchar2(8)</CLASS>
    <SEAT DESC='seat number'>varchar2(8)</SEAT>
  </SEGMENT>
</SEGMENTS>
<FOPS DESC='payment types'>
  <FOP DESC='payment type'>
    <TYPE DESC='payment type (e.g. CA, CC, IN; CA only for
now)'>varchar2(50)</TYPE>
    <ORG DESC='institution code'>varchar2(100) </ORG>
    <DOC SER DESC='document series'>varchar2(10)</DOC SER>
    <DOCNUM DESC='document number'>varchar2(20)</DOCNUM>
    <DOCINFO DESC='payment document full description'>varchar2(200)</DOCINFO>

```

```

    <AMOUNT DESC='total amount in payment currency (e.g.
389.00)'>number</AMOUNT>
    <AUTH_INFO code='authentication code varchar2(8) ' currency='payment
currency code varchar2(3) ' amount='payment amount number' DESC='payment card
data' provider='authorization center code for payment cards varchar2(2) ' />
    </FOP>
    </FOPS>
    </TICKET>
</TICKETS>

```

## Train Ticket Data File

```

<TICKETS version='2.6'>
  <TICKET>
    <TYPE DESC='TRAIN_TICKET'>varchar2(10)</TYPE>
    <SYSTEM id='1H is for GDS, specific ID for others varchar2(3) ' session='(may be
absent) varchar2(20) ' DESC='CRS (computer reservation system) data' />
    <DEALDATE DESC='operation date'>varchar2(8)</DEALDATE>
    <DEALTIME DESC='operation time'>varchar2(6)</DEALTIME>
    <OPTYPE DESC='SALE, REFUND'>varchar2(10)</OPTYPE>
    <TRANS_TYPE DESC='SALE, REFUND'>varchar2(10)</TRANS_TYPE>
    <EMD_NUM DESC='EMD (Electronic Miscellaneous Document)
number'>varchar2(20)</EMD_NUM>
    <TICKNUM DESC='ticket number'>varchar2(20)</TICKNUM>
    <ORDER_NUM DESC='train ticket order number'>varchar2(20)</ORDER_NUM>
    <PNR DESC='PNR in Cyrillic characters'>varchar2(8)</PNR>
    <PNR_LAT DESC='PNR in Latin characters'>varchar2(8)</PNR_LAT>
    <FARETYPE DESC='fare type'> varchar2(100)</FARETYPE>
    <FARE vat_amount='VAT amount' vat_rate='VAT rate'
DESC='fare'>number</FARE>
    <FARE_CURR DESC='fare currency'>varchar2(100)</FARE_CURR>
    <INSURANCE DESC='insurance amount in fare currency'>number</INSURANCE>
    <SERVICES DESC='service amount in fare currency' vat_amount='service VAT amount'
vat_rate='service VAT rate'>number</SERVICES>
    <COMMISSION DESC='commission amount in fare currency'>number</COMMISSION>
    <CURRENCY DESC='payment currency'>varchar2(100)</CURRENCY>
    <TOTAL DESC='total amount in payment currency'
commission_fee_vat_amount='VAT amount on refund commission fee'
commission_fee_vat_rate='VAT rate on refund commission fee'

```

```

refund_tax_vat_amount='VAT amount on refund tax' refund_tax_vat_rate='VAT rate
on refund tax'>number</TOTAL>

  <CARRIER_VAT_ID DESC='carrier taxpayer
number'>varchar2(50)</CARRIER_VAT_ID>

  <DEAL agency='agent code varchar(6)' date='operation date by console local time
varchar2(8)' disp='operator ID varchar(15)' opr_num='operator number number'
stamp='Agent Numeric Code varchar(15)' tap='console varchar(15)'
time='operation time by console local time varchar2(6)' utc='operation UTC date and
time in ISO format (YYYYMMDDThhmmss) varchar2(15)' DESC='operation data' />

  <SALE agency='agent code varchar(6)' date='sale date by console local time
varchar2(8)' disp='sale operator ID varchar(15)' opr_num='operator number
number' stamp='Agent Numeric Code varchar(15)' tap='sale console varchar(15)'
time='sale time by console local time varchar2(6)' utc='sale UTC date and time in ISO
format (YYYYMMDDThhmmss) varchar2(15)' DESC='sale data' />

  <SEGMENTS DESC='trip segments'>
    <SEGMENT DESC='trip segment'>
      <SEGNO DESC='segment number (always 1)'>number</SEGNO>
      <DEPDATE DESC='departure date'>varchar2(8)</DEPDATE>
      <DEPTIME DESC='departure time'>varchar2(8)</DEPTIME>
      <DEPPORT DESC='departure point code'>varchar2(80)</DEPPORT>
      <ARRDATE DESC='arrival date'>varchar2(8)</ARRDATE>
      <ARRTIME DESC='arrival time'>varchar2(8)</ARRTIME>
      <ARRPORT DESC='arrival point code'>varchar2(80)</ARRPORT>
      <TRAIN DESC='train number'>varchar2(20)</TRAIN>
      <COACH num='coach number' type='coach type' />
      <CLASS DESC='train service class'>varchar2(20)</CLASS>
      <SEATS>
        <SEAT DESC='seat number' tier='seat tier'>varchar2(8)</SEAT>
      </SEATS>
    </SEGMENT>
  </SEGMENTS>

  <PASSENGERS DESC='passenger data batch'>
    <PASSENGER DESC='passenger data'>
      <PASSNO DESC='passenger number'>number</PASSNO>
      <FIO DESC='passenger full name'>varchar2(100)</FIO>
      <SURNAME DESC='passenger surname'>varchar2(100)</SURNAME>
      <NAME DESC='passenger name and patronymic name'>varchar2(100)</NAME>
      <PASS DESC='passenger ID'>varchar2(100)</PASS>
      <GENDER DESC='passenger gender (M – male, F –
female)'>varchar2(1)</GENDER>

```



```
<CITIZENSHIP DESC='passenger citizenship (country ISO
code) '>varchar2 (3) </CITIZENSHIP>
</PASSENGER>
</PASSENGERS>
</TICKET>
</TICKETS>
```

## Appendix 2. XML Document Line Description

### Air Ticket Data

The **TICKETS** is the root node of XML-file. It consists of the **TICKET** operation data block.

Table 2 — The **TICKET** operation data block

Line	Description
<b>TYPE</b>	Document type: <ul style="list-style-type: none"> <li>– TICKET</li> <li>– ETICKET</li> <li>– MCO (Miscellaneous Charges Order)</li> <li>– RECEIPT</li> <li>– EMD (Electronic Miscellaneous Document)</li> </ul>
<b>SYSTEM</b>	Reservation system data: <ul style="list-style-type: none"> <li>– <i>id</i> (system code, 1H for GDS, specific ID for others)</li> <li>– <i>session</i> (may be absent)</li> <li>– <i>bsc_id</i> (inner system number of strict security form)</li> </ul>
<b>CURRENCY</b>	Payment currency code (e.g. USD, RUB)
<b>DEALDATE</b>	Operation date
<b>DEALTIME</b>	Operation time
<b>OPTYPE</b>	Operation type: <ul style="list-style-type: none"> <li>– SALE (money from client)</li> <li>– REFUND (money to client)</li> </ul>
<b>TRANS_TYPE</b>	Transaction type: <ul style="list-style-type: none"> <li>– SALE</li> <li>– REFUND</li> <li>– CANCEL</li> <li>– EXCHANGE</li> <li>– ERASE</li> </ul>
<b>MCO_TYPE</b>	MCO type (for MCO/EMD): <ul style="list-style-type: none"> <li>– PTA (Prepaid Ticket Advice)</li> <li>– RECEIPT</li> <li>– PENALTY</li> <li>– EXC_BAGG</li> <li>– REF_NOTICE</li> <li>– USED_NOTICE</li> <li>– RAILWAY</li> <li>– SERVICE</li> </ul> Also included: <ul style="list-style-type: none"> <li>– <i>rfic</i> (Reason-For-Issuance Code)</li> <li>– <i>rfisc</i> (Reason For Issuance Sub-Code, this parameter is obsolete and will be removed in Online-ticket system's next version: <b>rfisc</b> parameter of <b>EMDCOUPON</b> line's <b>REASON</b> data should be used)</li> </ul>
<b>BSONUM</b>	Strict security form number (e.g. 4214200000001). It consists of carrier accounting code and ticket number without spaces
<b>EX_BSONUM</b>	Strict security form number of refunded ticket. It is used for ticket exchange
<b>FIO</b>	Passenger full name
<b>SURNAME</b>	Passenger surname from PNR
<b>NAME</b>	Passenger name from PNR
<b>PASS</b>	Passenger ID
<b>PASSENGER_TYPE</b>	Passenger category code (used when there is available data for it)
<b>BENEFIT_DOC</b>	Discount document
<b>BIRTH_DATE</b>	Passenger birth date in DDMMYYYY format (e.g. 25011950)

Line	Description
<b>GENDER</b>	Passenger gender (M – male, F – female)
<b>CITIZENSHIP</b>	Passenger citizenship (country ISO code)
<b>GENERAL_CARRIER</b>	Validating carrier (e.g. 421)
<b>RETTYE</b>	Refund type: <ul style="list-style-type: none"> <li>– 0 — voluntary</li> <li>– 1 — forced</li> </ul>
<b>TOURCODE</b>	Tour code
<b>OCURRENCY</b>	Currency code in the <b>Air Fare</b> column (e.g. EUR, USD, RUB)
<b>ORATE</b>	Exchange rate from the fare calculation currency to the currency of the <b>Air Fare</b> column (e.g. 0.7103)
<b>OPRATE</b>	Exchange rate from the currency of the <b>Air Fare</b> column to the payment currency
<b>NCURRENCY</b>	Currency code of fare calculation (e.g. USD, RUB)
<b>OFARE</b>	Fare amount from <b>Air Fare</b> column (e.g. 400.00)
<b>FARE</b>	Fare amount in payment currency (e.g. 10360.00) has the following properties: <ul style="list-style-type: none"> <li>– <i>type</i> (FREE for free ticket, IT for IT fare, BT for BT fare (if the <b>Air Fare</b> column has Category 35 value then the <i>type</i> is set on this value))</li> <li>– <i>vat_amount</i> (fare VAT amount)</li> <li>– <i>vat_rate</i> (fare VAT interest rate)</li> </ul>
<b>NRATE</b>	Exchange rate from the fare calculation currency to the payment currency (e.g. 25.9003)
<b>PNR</b>	Passenger Name Record
<b>PNR_LAT</b>	Passenger Name Record in Latin characters
<b>INV_PNR</b>	Inventory PNR
<b>CONJ</b>	Conjunction Ticket Indicator
<b>TO_BSONUM</b>	Main ticket number for MCO
<b>TYP_NUM</b>	Preprinted ticket number (the <i>ser</i> property is for preprinted ticket series)
<b>SEGMENTS</b>	Flight segment data (it may be absent or it has one or few lines)
<b>TAXES</b>	Tax data (it may be absent or it has one or few lines) has the following properties: <ul style="list-style-type: none"> <li>– <i>vat_amount</i> (total VAT of carrier taxes)</li> <li>– <i>vat_rate</i> (VAT interest rate of carrier taxes)</li> </ul>
<b>FOPS</b>	Payment type data (it may be absent or it has one or few lines)
<b>FCMODE</b>	Fare Calculation Pricing Indicator: <ul style="list-style-type: none"> <li>– AUTO</li> <li>– MANUAL</li> </ul>
<b>COMISSION</b>	Agent comission has the following properties: <ul style="list-style-type: none"> <li>– <i>type</i> (comission type: <i>fixed</i> or <i>percent</i>)</li> <li>– <i>currency</i> (comission currency code)</li> <li>– <i>amount</i> (comission amount)</li> <li>– <i>rate</i> (comission interest rate)</li> </ul> It is used only in the BSP session
<b>BOOK</b>	Booking data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (booking date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (booking console)</li> <li>– <i>time</i> (booking time)</li> <li>– <i>utc</i> (booking UTC date and time in YYYYMMDDThhmmss format)</li> </ul>

Line	Description
<b>DEAL</b>	Operation data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (operation date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>ersp</i> (Approved Location Numeric Code, it may be absent)</li> <li>– <i>pcc</i> (Pseudo City Code, it may be absent and is used for B1G session)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (operation console)</li> <li>– <i>time</i> (operation time)</li> <li>– <i>utc</i> (operation UTC date and time in <i>YYYYMMDDThhmmss</i> format)</li> </ul>
<b>SALE</b>	Sale data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (sale date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (sale console)</li> <li>– <i>time</i> (sale time)</li> <li>– <i>utc</i> (sale UTC date and time in <i>YYYYMMDDThhmmss</i> format)</li> </ul>
<b>FARECALC</b>	The <b>Fare calculation</b> line
<b>ENDORS_RESTR</b>	Data from the <b>ENDORSEMENTS/RESTRICTION</b> ticket field
<b>CONTACTS</b>	Contact data batch with the <b>CONTACT</b> fields
<b>EXCH_TICKET</b>	Ticket exchange data (it is used in exchange operations only)

Table 3 — Flight segment data lines

Line	Description
<b>SEGNO</b>	Flight segment number
<b>SEG_BSONUM</b>	Segment ticket list number
<b>COUPON_NO</b>	Coupon number
<b>IS_VOID</b>	Flight segment status: <ul style="list-style-type: none"> <li>– <i>F</i> (flight)</li> <li>– <i>V</i> (void)</li> <li>– <i>S</i> (surface)</li> </ul>
<b>STPO</b>	Stopover flag: <ul style="list-style-type: none"> <li>– <i>0</i> – granted</li> <li>– <i>1</i> – denied</li> </ul>
<b>CITY1CODE</b>	Departure city code as on the ticket (e.g. <i>LED</i> )
<b>CITY2CODE</b>	Arrival city code as on the ticket (e.g. <i>MOW</i> )
<b>PORT1CODE</b>	Departure airport code as on the ticket (e.g. <i>PUL</i> )
<b>PORT2CODE</b>	Arrival airport code as on the ticket (e.g. <i>VKO</i> )
<b>TERM1</b>	Departure terminal
<b>TERM2</b>	Arrival terminal
<b>CARRIER</b>	Carrier code on the coupon (e.g. <i>S7</i> )
<b>CLASS</b>	Service class (e.g. <i>X,N</i> )
<b>REIS</b>	Flight number
<b>FLYDATE</b>	Departure date in <i>DDMMYYYY</i> format. The <i>changed_to</i> property may be included. It contains new departure date in case of the schedule change known at the ticketing time
<b>FLYTIME</b>	Departure time in <i>HHMM</i> format
<b>ARRDATE</b>	Arrival date in <i>DDMMYYYY</i> format
<b>ARRTIME</b>	Arrival time in <i>HHMM</i> format
<b>BASICFARE</b>	Fare basis

Line	Description
<b>FFP_INFO</b>	Frequent flyer data has the following properties: <ul style="list-style-type: none"> <li>– <i>number</i> (bonus card number)</li> <li>– <i>certificate</i> (certificate number)</li> </ul>
<b>NFARE</b>	Fare in calculation currency (e.g. 400.00)
<b>BAGGAGE</b>	Baggage data has the following properties that may be absent: <ul style="list-style-type: none"> <li>– <i>number</i> (baggage amount)</li> <li>– <i>qualifier</i> (baggage units: P — baggage pieces, L — lb, K — kg, S — seats)</li> </ul>

Table 4 — Tax data lines

Line	Description
<b>TAX</b>	VAT on charges other than airport government taxes (TCH taxes (ZZ) only in present) has the following properties: <ul style="list-style-type: none"> <li>– <i>vat_amount</i> (VAT amount)</li> <li>– <i>vat_rate</i> (VAT interest rate)</li> </ul>
<b>SEGNO</b>	Flight segment number
<b>CODE</b>	Tax code (e.g. RU, YQ)
<b>AMOUNT</b>	Charge amount in payment currency (e.g. 389.00)
<b>NAMOUNT</b>	Charge amount in charge base currency (e.g. 15.00)
<b>NCURRENCY</b>	Charge base currency code (e.g. EUR, USD)
<b>NRATE</b>	Exchange rate from charge base currency to payment currency (e.g. 1.33)
<b>OAMOUNT</b>	Charge amount in report currency (e.g. 500.00)
<b>OCURRENCY</b>	Report currency code (e.g. EUR, USD)
<b>ORATE</b>	Exchange rate from charge base currency to report currency (e.g. 1.56)
<b>OPRATE</b>	Exchange rate from report currency to payment currency

Table 5 — Payment type data lines

Line	Description
<b>TYPE</b>	Payment type (e.g. CA, CC, INV)
<b>ORG</b>	Institution (e.g. Ministry of Defense, Ministry of Interior, it is used for mutual payments between the institution and the carrier)
<b>DOCSE</b>	Document series
<b>DOCNUM</b>	Document number
<b>DOCINFO</b>	Payment card full description
<b>AUTH_INFO</b>	Payment card properties: <ul style="list-style-type: none"> <li>– <i>code</i> (authentication code)</li> <li>– <i>currency</i> (payment currency code)</li> <li>– <i>amount</i> (payment amount)</li> <li>– <i>provider</i> (authorization center code for payment cards, it is provided when its data is available)</li> </ul>
<b>AMOUNT</b>	Total amount in payment currency (e.g. 389.00)

Table 6 — Agent data lines

Line	Description
<b>CLIENT_NUM</b>	Client number
<b>RESERV_NUM</b>	PNR (Passenger Name Record)
<b>INFO</b>	SSR (Special Service Remarks)

Table 7 — Exchanged ticket data lines

Line	Description
<b>FIO</b>	Passenger full name
<b>AMOUNT</b>	Ticket exchange amount
<b>SEGMENTS</b>	Exchanged ticket segment batch
<b>TAXES</b>	Exchanged ticket tax batch

Table 8 — Flight segment data lines of exchanged ticket

Line	Description
<b>SEGNO</b>	Flight segment number
<b>CITY1CODE</b>	Departure city code
<b>CITY2CODE</b>	Arrival city code
<b>PORT1CODE</b>	Departure airport code
<b>PORT2CODE</b>	Arrival airport code
<b>CARRIER</b>	Carrier code
<b>CLASS</b>	Service class
<b>REIS</b>	Flight number
<b>FLYDATE</b>	Departure date in <i>DDMMYYYY</i> format
<b>FLYTIME</b>	Departure time in <i>HHMM</i> format
<b>BASICFARE</b>	Fare code

Table 9 — Tax data lines of exchanged ticket

Line	Description
<b>SEGNO</b>	Flight segment number
<b>CODE</b>	Tax code
<b>AMOUNT</b>	Tax amount in payment currency (e.g. 389.00)
<b>NAMOUNT</b>	Tax amount in charge base currency (e.g. 15.00)
<b>NCURRENCY</b>	Tax base currency code (e.g. EUR, USD)
<b>NRATE</b>	Exchange rate from tax base currency to payment currency (e.g. 1.33)

## Insurance Data

Insurance data is included in the **TICKET** block of the **TICKETS** root node in XML-file.

Table 10 — Insurance data lines in the *TICKET* block

Line	Description
<b>TYPE</b>	Document type: <ul style="list-style-type: none"> <li>– INSURCAR</li> <li>– EINSURCAR</li> </ul>
<b>SYSTEM</b>	CRS (Computer Reservation System) has the following properties: <ul style="list-style-type: none"> <li>– <i>id</i> (system code: 1H for GDS, specific ID for others)</li> <li>– <i>session</i> (may be absent)</li> </ul>

Line	Description
<b>CURRENCY</b>	Insurance payment currency (e.g. USD, RUB)
<b>DEALDATE</b>	Operation date
<b>DEALTIME</b>	Operation time
<b>OPTYPE</b>	Operation type has the following properties: <ul style="list-style-type: none"> <li>– SALE (money from client)</li> <li>– REFUND (money to client)</li> </ul>
<b>TRANS_TYPE</b>	Transaction type (SALE, REFUND, ERASE, CANCEL)
<b>BSONUM</b>	Insurance certificate series and number. The blank series are specified in the <i>ser</i> property
<b>PRODUCT_CODE</b>	Insurance product code (used for insurances issued online while interacting with the insurance provider)
<b>FIO</b>	Passenger full name
<b>PASS</b>	Passenger ID data
<b>BIRTH_DATE</b>	Passenger birth date in <i>DDMMYYYY</i> format (e.g. 25011950)
<b>GENDER</b>	Passenger gender (M – male, F – female)
<b>CITIZENSHIP</b>	Passenger citizenship (country ISO code)
<b>CARRIER</b>	Carrier code
<b>REIS</b>	Flight number
<b>FLYDATE</b>	Departure date in <i>DDMMYYYY</i> format
<b>FLYTIME</b>	Departure time in <i>HHMM</i> format
<b>CITY1CODE</b>	Departure city code
<b>CITY2CODE</b>	Arrival city code
<b>FARE</b>	Insurance cover amount
<b>FARE_CURRENCY</b>	Insurance cover amount currency
<b>AMOUNT</b>	Insurance amount
<b>PNR</b>	PNR (Passenger Name Record) in Cyrillic characters
<b>PNR_LAT</b>	PNR (Passenger Name Record) in Latin characters
<b>TO_BSONUM</b>	Ticket number with attached insurance
<b>INSURER</b>	Insurance company name
<b>INSURTYPE</b>	Insurance type code
<b>INSURCODE</b>	Insurance cover code
<b>INSURORDER</b>	Insurance ID for several flight segments
<b>FOPS</b>	Payment type data batch
<b>DEAL</b>	Operation data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (operation date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>ersp</i> (Approved Location Numeric Code, it may be absent)</li> <li>– <i>pcc</i> (Pseudo City Code, it may be absent and is used for B1G session)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (operation console)</li> <li>– <i>time</i> (operation time)</li> <li>– <i>utc</i> (operation UTC date and time in <i>YYYYMMDDThhmmss</i> format)</li> </ul>
<b>SALE</b>	Sale data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (sale date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (sale console)</li> <li>– <i>time</i> (sale time)</li> <li>– <i>utc</i> (sale UTC date and time in <i>YYYYMMDDThhmmss</i> format)</li> </ul>
<b>SERVICES</b>	Insurance service data batch
<b>CONTACTS</b>	Contact data batch with the <b>CONTACT</b> fields

Table 11 — Insurance data lines in the SEGMENT block (used for the sale operation only)

Line	Description
<b>SEGNO</b>	Flight segment number
<b>CITY1CODE</b>	Departure city code
<b>CITY2CODE</b>	Arrival city code
<b>PORT1CODE</b>	Departure airport code
<b>PORT2CODE</b>	Arrival airport code
<b>CARRIER</b>	Marketing carrier code
<b>REIS</b>	Flight number
<b>FLYDATE</b>	Departure date in the <i>DDMMYYYY</i> format
<b>FLYTIME</b>	Departure time in the <i>HHMI</i> format
<b>ARRDATE</b>	Arrival date in the <i>DDMMYYYY</i> format
<b>ARRTIME</b>	Arrival time in the <i>HHMI</i> format

Table 12 — Insurance data lines in the RAILSEGMENT block (used only for the sale operation of the insurances issued online while interacting with the insurance provider)

Line	Description
<b>SEGNO</b>	Train ticket segment number
<b>DEPPORT</b>	Departure point code
<b>ARRPORT</b>	Arrival point code
<b>CLASS</b>	Train service class
<b>SEATS</b>	Seat data (in the <b>SEAT</b> blocks): – <i>seat number</i> – <i>seat tier</i>
<b>DEPDATE</b>	Departure date in the <i>DDMMYYYY</i> format
<b>DEPTIME</b>	Departure time in the <i>HHMI</i> format
<b>ARRDATE</b>	Arrival date in the <i>DDMMYYYY</i> format
<b>ARRTIME</b>	Arrival time in the <i>HHMI</i> format
<b>TRAIN</b>	Train number
<b>COACH</b>	Coach number ( <i>num</i> ) and type ( <i>type</i> )

Table 13 — Insurance data lines in the SERVICE block

Line	Description
<b>TYPE</b>	Service type: – <i>ACCIDENT</i> – <i>LUGGAGE</i>
<b>FARE</b>	Insurance cover amount
<b>FARE_CURRENCY</b>	Insurance cover amount currency
<b>AMOUNT</b>	Insurance amount

Table 14 — Insurance data lines in the FOP block

Line	Description
<b>TYPE</b>	Payment type (e.g. <i>CA</i> , <i>CC</i> , <i>INV</i> )
<b>ORG</b>	Institution (e.g. Ministry of Defense, Ministry of Interior, it is used for mutual payments between the institution and the carrier)
<b>DOC SER</b>	Document series
<b>DOC NUM</b>	Document number
<b>DOC INFO</b>	Payment card full description



Line	Description
<b>AUTH_INFO</b>	Payment card properties: <ul style="list-style-type: none"> <li>– <i>code</i> (authentication code)</li> <li>– <i>currency</i> (payment currency code)</li> <li>– <i>amount</i> (payment amount)</li> <li>– <i>provider</i> (authorization center code for payment cards, it is provided when its data is available)</li> </ul>
<b>AMOUNT</b>	Total amount in payment currency (e.g. 389.00)

## Aeroexpress Ticket Data

Aeroexpress ticket data is included in the **TICKET** block of the **TICKETS** root node in XML-file.

Table 15 — Aeroexpress ticket data lines in the *TICKET* block

Line	Description
<b>TYPE</b>	Document type (AE TICKET)
<b>SYSTEM</b>	CRS (Computer Reservation System) has the following properties: <ul style="list-style-type: none"> <li>– <i>id</i> (system code: 1H for GDS, specific ID for others)</li> <li>– <i>session</i> (may be absent)</li> </ul>
<b>CURRENCY</b>	Payment currency (e.g. USD, RUB)
<b>DEALDATE</b>	Operation date
<b>DEALTIME</b>	Operation time
<b>OPTYPE</b>	Operation type has the following properties: <ul style="list-style-type: none"> <li>– <i>SALE</i> (money from client)</li> <li>– <i>REFUND</i> (money to client)</li> </ul>
<b>TRANS_TYPE</b>	Transaction type (SALE, REFUND)
<b>EMD_NUM</b>	EMD (Electronic Miscellaneous Document) number if it is issued
<b>TICKNUM</b>	Ticket number
<b>ORDER_NUM</b>	Aeroexpress order number
<b>FARE</b>	Fare amount in payment currency
<b>FARETYPE</b>	Fare type has the following values: <ul style="list-style-type: none"> <li>– <i>full</i></li> <li>– <i>child</i></li> <li>– <i>roundtrip</i></li> <li>– <i>family</i></li> </ul>
<b>PNR</b>	PNR (Passenger Name Record) in Cyrillic characters if it is present
<b>PNR_LAT</b>	PNR (Passenger Name Record) in Latin characters if it is present
<b>FOPS</b>	Payment type data batch
<b>DEAL</b>	Operation data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (operation date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>ersp</i> (Approved Location Numeric Code, it may be absent)</li> <li>– <i>pcc</i> (Pseudo City Code, it may be absent and is used for B1G session)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (operation console)</li> <li>– <i>time</i> (operation time)</li> <li>– <i>utc</i> (operation UTC date and time in YYYYMMDDThmmss format)</li> </ul>

Line	Description
<b>SALE</b>	Sale data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (sale date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (sale console)</li> <li>– <i>time</i> (sale time)</li> <li>– <i>utc</i> (sale UTC date and time in <i>YYYYMMDDThhmmss</i> format)</li> </ul>
<b>SEGMENTS</b>	Trip segment data batch

Table 16 — Aeroexpress ticket data lines in the SEGMENT block

Line	Description
<b>SEGNO</b>	Trip segment number (always 1)
<b>DEPPORT</b>	Departure point code
<b>ARRPORT</b>	Arrival point code
<b>CLASS</b>	Service class
<b>SEAT</b>	Seat number
<b>DEPDATE</b>	Departure date in <i>DDMMYYYY</i> format
<b>DEPTIME</b>	Departure time in <i>HHMM</i> format

Table 17 — Aeroexpress ticket data lines in the FOP block

Line	Description
<b>TYPE</b>	Payment type (e.g. <i>CA</i> , <i>CC</i> , <i>INV</i> )
<b>ORG</b>	Institution (e.g. Ministry of Defense, Ministry of Interior, it is used for mutual payments between the institution and the carrier)
<b>DOC SER</b>	Document series
<b>DOCNUM</b>	Document number
<b>DOCINFO</b>	Payment card full description
<b>AUTH_INFO</b>	Payment card properties: <ul style="list-style-type: none"> <li>– <i>code</i> (authentication code)</li> <li>– <i>currency</i> (payment currency code)</li> <li>– <i>amount</i> (payment amount)</li> <li>– <i>provider</i> (authorization center code for payment cards, it is provided when its data is available)</li> </ul>
<b>AMOUNT</b>	Total amount in payment currency (e.g. 389.00)

## Train Ticket Data

Train ticket data is included in the **TICKET** block of the **TICKETS** root node in XML-file.

Table 18 — Train ticket data lines in the TICKET block

Line	Description
<b>TYPE</b>	Document type ( <i>TRAIN_TICKET</i> )

Line	Description
<b>SYSTEM</b>	CRS (Computer Reservation System) has the following properties: <ul style="list-style-type: none"> <li>– <i>id</i> (system code: 1H for GDS, specific ID for others)</li> <li>– <i>session</i> (may be absent)</li> </ul>
<b>CURRENCY</b>	Payment currency (e.g. USD, RUB)
<b>DEALDATE</b>	Operation date
<b>DEALTIME</b>	Operation time
<b>OPTYPE</b>	Operation type: <ul style="list-style-type: none"> <li>– SALE (money from client)</li> <li>– REFUND (money to client)</li> </ul>
<b>TRANS_TYPE</b>	Transaction type: <ul style="list-style-type: none"> <li>– SALE</li> <li>– REFUND</li> </ul>
<b>EMD_NUM</b>	EMD (Electronic Miscellaneous Document) number
<b>TICKNUM</b>	Ticket number
<b>ORDER_NUM</b>	Train ticket order number
<b>FARE</b>	Fare amount in payment currency. May include: <ul style="list-style-type: none"> <li>– <i>vat_amount</i> – VAT amount</li> <li>– <i>vat_rate</i> – VAT rate is specified only if it is provided by the carrier</li> </ul>
<b>FARETYPE</b>	Fare type
<b>FARE_CURR</b>	Fare currency
<b>PNR</b>	PNR (Passenger Name Record) in Cyrillic characters if it is present
<b>PNR_LAT</b>	PNR (Passenger Name Record) in Latin characters if it is present
<b>INSURANCE</b>	Insurance amount in fare currency
<b>SERVICES</b>	Service amount in fare currency. May include (only if provided by the carrier): <ul style="list-style-type: none"> <li>– <i>vat_amount</i> – service VAT amount</li> <li>– <i>vat_rate</i> – service VAT rate</li> </ul>
<b>COMMISSION</b>	Commission amount in fare currency
<b>TOTAL</b>	Total amount in payment currency. May include (only if provided by the carrier): <ul style="list-style-type: none"> <li>– <i>commission_fee_vat_amount</i> – VAT amount on refund commission fee</li> <li>– <i>commission_fee_vat_rate</i> – VAT rate on refund commission fee</li> <li>– <i>refund_tax_vat_amount</i> – VAT amount on refund tax</li> <li>– <i>refund_tax_vat_rate</i> – VAT rate on refund tax</li> </ul>
<b>CARRIER_VAT_ID</b>	Carrier taxpayer number
<b>DEAL</b>	Operation data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (operation date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>ersp</i> (Approved Location Numeric Code, it may be absent)</li> <li>– <i>pcc</i> (Pseudo City Code, it may be absent and is used for B1G session)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (operation console)</li> <li>– <i>time</i> (operation time)</li> <li>– <i>utc</i> (operation UTC date and time in YYYYMMDDThhmmss format)</li> </ul>
<b>SALE</b>	Sale data has the following properties: <ul style="list-style-type: none"> <li>– <i>agency</i> (agent code)</li> <li>– <i>date</i> (sale date)</li> <li>– <i>disp</i> (operator ID)</li> <li>– <i>opr_num</i> (operator number)</li> <li>– <i>stamp</i> (Agent Numeric Code)</li> <li>– <i>tap</i> (sale console)</li> <li>– <i>time</i> (sale time)</li> <li>– <i>utc</i> (sale UTC date and time in YYYYMMDDThhmmss format)</li> </ul>
<b>SEGMENTS</b>	Trip segment data batch
<b>PASSENGERS</b>	Passenger data batch

Table 19 — Train ticket data lines in the SEGMENT block

Line	Description
<b>SEGNO</b>	Trip segment number (always 1)
<b>DEPPORT</b>	Departure point code
<b>ARRPORT</b>	Arrival point code
<b>CLASS</b>	Service class
<b>SEATS</b>	Seat data (in the <b>SEAT</b> blocks): <ul style="list-style-type: none"> <li>– <i>seat number</i></li> <li>– <i>seat tier</i></li> </ul>
<b>DEPDATE</b>	Departure date in <i>DDMMYYYY</i> format
<b>DEPTIME</b>	Departure time in <i>HHMM</i> format
<b>ARRDATE</b>	Arrival date in <i>DDMMYYYY</i> format
<b>ARRTIME</b>	Arrival time in <i>HHMM</i> format
<b>TRAIN</b>	Train number
<b>COACH</b>	Coach number ( <i>num</i> ) and type ( <i>type</i> )

Table 20 — Train ticket data lines in the PASSENGER block

Line	Description
<b>PASSNO</b>	Passenger number
<b>FIO</b>	Passenger full name
<b>SURNAME</b>	Passenger surname
<b>NAME</b>	Passenger name and patronymic name
<b>PASS</b>	Passenger ID
<b>GENDER</b>	Passenger gender (M – male, F – female)
<b>CITIZENSHIP</b>	Passenger citizenship (country ISO code)

## Appendix 3. Operation Properties

### PTA MCO Issuance

One message with printed MCO is formed with the following properties:

- **/TICKETS/TICKET/TYPE** = 'MCO'
- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TRANS\_TYPE** = 'SALE'
- **/TICKETS/TICKET/MCO\_TYPE** = 'PTA'.

### Ticketing

One or two messages are formed with the following properties:

- 1st message includes printed ticket data
  - **/TICKETS/TICKET/TYPE** = 'TICKET' or 'ETICKET'
  - **/TICKETS/TICKET/OPTYPE** = 'SALE'
  - **/TICKETS/TICKET/TRANS\_TYPE** = 'SALE'
  - **/TICKETS/TICKET/MCO\_TYPE** = *null*
- 2nd message includes receipt data (only for K95 receipt)
  - **/TICKETS/TICKET/TYPE** = 'RECEIPT'
  - **/TICKETS/TICKET/OPTYPE** = 'SALE'
  - **/TICKETS/TICKET/TRANS\_TYPE** = 'SALE'
  - **/TICKETS/TICKET/TAXES/TAX** consists of receipt tax data
  - **/TICKETS/TICKET/MCO\_TYPE** = 'RECEIPT'.

### EMD or MCO Issuance on Agent Fee

One message is formed with the following properties:

- **/TICKETS/TICKET/TYPE** = 'EMD' or 'MCO'
- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TRANS\_TYPE** = 'SALE'
- **/TICKETS/TICKET/TAXES/TAX** consists of fee data
- **/TICKETS/TICKET/MCO\_TYPE** = 'RECEIPT'.

### Ticket Exchange

Ticket exchange operation is used for:

- flight and/or date change

- passenger data change.

Only one message with newly issued ticket data is formed with the following properties:

- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TRANS\_TYPE** = 'EXCHANGE'
- newly charge and payment type data only
- **/TICKETS/TICKET/FOPS/FOP/TYPE** = 'EX' (see Appendix 4)
- **/TICKETS/TICKET/TYPE** = 'TICKET' or 'ETICKET'
- **/TICKETS/TICKET/MCO\_TYPE** = *null*.

## Ticket Void

One message with refunded ticket data is formed with the following properties:

- **/TICKETS/TICKET/TRANS\_TYPE** = 'CANCEL'
- **/TICKETS/TICKET/OPTYPE** = 'REFUND'
- **/TICKETS/TICKET/TYPE** = 'TICKET' or 'ETICKET'
- **/TICKETS/TICKET/SALE** tag is filled
- **/TICKETS/TICKET/MCO\_TYPE** = *null*.

## Ticket Refund

One or two messages are formed with the following properties:

- 1st message includes printed ticket data
  - **/TICKETS/TICKET/TRANS\_TYPE** = 'REFUND'
  - **/TICKETS/TICKET/OPTYPE** = 'REFUND'
  - **/TICKETS/TICKET/SALE** tag is filled
  - **/TICKETS/TICKET/MCO\_TYPE** = *null*
- 2nd message includes receipt data (only for K95 receipt or MCO)
  - **/TICKETS/TICKET/TRANS\_TYPE** = 'REFUND'
  - **/TICKETS/TICKET/OPTYPE** = 'SALE' or 'MCO'
  - **/TICKETS/TICKET/TYPE** = 'REF\_NOTICE'
  - **/TICKETS/TICKET/MCO\_TYPE** = 'RECEIPT'
  - **/TICKETS/TICKET/TO\_BSONUM** is filled with strict security form number of refunded ticket (for the connection between MCO and refunded ticket by their **TO\_BSONUM** and **BSONUM** values).

## EMD Report Issuance on Ticket Refund

One message with refunded ticket data is formed with the following properties:

- **/TICKETS/TICKET/TRANS\_TYPE** = 'REFUND'
- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TYPE** = 'EMD'
- **/TICKETS/TICKET/MCO\_TYPE** = 'REF\_NOTICE'
- **/TICKETS/TICKET/TO\_BSONUM** is filled with strict security form number of refunded ticket (for the connection between EMD and refunded ticket by their **TO\_BSONUM** and **BSONUM** values).

## Penalty Issuance

One message with MCO or EMD data is formed with the following properties:

- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TYPE** = 'EMD' or 'MCO'
- **/TICKETS/TICKET/MCO\_TYPE** = 'PENALTY'
- **/TICKETS/TICKET/TO\_BSONUM** is filled with strict security form number of penalty ticket
- **/TICKETS/TICKET/TRANS\_TYPE** = 'EXCHANGE' (on exchanged ticket) or 'REFUND' (on refunded ticket)
- **/TICKETS/TICKET/SEGMENTS** tag is not filled if penalty is not divided by flight segments.

## Ticket Form Replacement

One message with damaged ticket form data is formed with the following properties:

- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TRANS\_TYPE** = 'ERASE'
- **/TICKETS/TICKET/MCO\_TYPE** = *null*.

## Issuance of Used Transportation Receipt on EMD

One message with used transportation receipt data is formed with the following properties:

- **/TICKETS/TICKET/TRANS\_TYPE** = 'EXCHANGE'
- **/TICKETS/TICKET/OPTYPE** = 'SALE'

- **/TICKETS/TICKET/TYPE** = 'EMD'
- **/TICKETS/TICKET/MCO\_TYPE** = 'USED\_NOTICE'
- **/TICKETS/TICKET/TO\_BSONUM** is filled with strict security form number of refunded ticket (for the connection between EMD and refunded ticket by their **TO\_BSONUM** and **BSONUM** values).

## MCO Issuance on Excess Baggage

One message with MCO data is formed with the following properties:

- **/TICKETS/TICKET/TRANS\_TYPE** = 'SALE'
- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TYPE** = 'MCO'
- **/TICKETS/TICKET/MCO\_TYPE** = 'EXC\_BAGGAGE'.

## EMD Issuance on Special Services

One message with EMD data is formed with the following properties:

- **/TICKETS/TICKET/TRANS\_TYPE** = 'SALE'
- **/TICKETS/TICKET/OPTYPE** = 'SALE'
- **/TICKETS/TICKET/TYPE** = 'EMD'
- **/TICKETS/TICKET/MCO\_TYPE** = 'SERVICE'.



## Appendix 4. Content Remarks

### Pay Form (<FOP> Tag) Structure for Payment Cards

Payment document data and payment card number should match.

The system checks this condition automatically in two steps:

- 1) 'AADDDDDDDDDDDDDDDDD' format match check
  - A for letter
  - D for digit
  - AA must have one of the values: 'VI', 'CA', 'JC', 'DC' or 'AX'.
- 2) Check of attachment between payment card and payment service.

If the test is passed then payment card number (without letters) is included in <DOCNUM>DDDDDDDDDDDDDDDDDD</DOCNUM> tag.

If payment service or data line size are mismatched then analyzed data line is placed in <DOCINFO> tag. <DOCNUM>, <DOCSE>, <ORG> tags are filled if payment document properties are defined by GDS.



**Note.** All payment card numbers are masked using digit 9 in accordance with the "6+4" rule: first 6 digits and last 4 digits remain original, and others are "replaced" with digit 9.

### Pay Form (<FOP> Tag) Structure for Exchange (EX)

#### Payment Type

The properties of the 'EX' payment type in the <FOP> block are as follows:

- 1) **TYPE** = 'EX'
- 2) **AMOUNT** = '0.00'
- 3) **DOCNUM** has AAABBBBBBBBBBCDDDD format:
  - AAA for carrier code
  - BBBBBBBBBBB for exchanged document number
  - C for number check digit
  - DDDD for exchanged ticket coupon numbers.



**Note.** Number check digit is calculated by IATA rule: it is the excess of the division AAABBBBBBBBBBB number by 7 (for numeric codes) or the excess of the division BBBBBBBBBBB number by 7 (for alphanumeric codes).

## MCO\_TYPE Values

The values of MCO\_TYPE (/TICKETS/TICKET/MCO\_TYPE) line are as follows:

- 'PTA' for MCO on PTA
- 'RECEIPT' for K95/MCO/EMD receipt on agent fees
- 'PENALTY' for MCO/EMD issuance on the penalty
- 'EXC\_BAGG' for MCO/EMD issuance on excess baggage
- 'REF\_NOTICE' for K95/MCO/EMD report on ticket refund
- 'USED\_NOTICE' for MCO/EMD issuance on used transportation receipt.

## FARE Value on Private Fares

FARE (/TICKETS/TICKET/FARE) value is fare amount used for the ticketing. It may be absent or equals to 0.

Fare type (/TICKETS/TICKET/FARE type) value is fare type from ticket **Air Fare** column (e.g. 'IT', 'BT', negotiated fares).