



**Ministry of Transport of the Russian Federation**

**FSUE «ZaschitaInfoTrans»**

**Government Information System for Transport Security**

**Automated Centralized Databases of Personal Data on  
Passengers and Personnel (Crew Members) of Means of  
Transportation**

Requirements on Advance Passenger Information Transmission  
for Maritime Passenger Transportation

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## **General Notes**

This manual is addressed to maritime transportation operators to provide implementation guidelines for preparation and transfer of advance passenger information (API) to the Automated Centralized Databases of Personal Data on Passengers and Personnel (Crew Members) of Means of Transportation (ACDPDP). Russian text of the requirements has a superiority to the text in this manual.

## 1. Common requirements

1.1. Submission of information on passenger transportation is carried out when conducting loggable operations while issuing travel documents (tickets) for transportation of passengers via predetermined routes.

1.2. Types of loggable operations are shown in the Appendix 2.

1.3. Data on passenger transportation should be submitted to Automated Centralized Databases of Personal Data on Passengers and personnel (crew members) of means of transportation (ACDPDP) in form of CSV (Comma Separated Values) exchange files (see Article 2).

1.4. Transmission of data is conducted via the ACDPDP interaction subsystem (gateway), to which the Transmitting party connects:

- on the network level – using VPN (Virtual Private Network) technology (see Article 4);
- on the application level – using FTP servers of the ACDPDP gateway.

1.5. Personal data should be transmitted to ACDPDP in accordance with the following timeframe:

- for international transportations to Russia personal data on passengers and crew should be transmitted to ACDPDP not later than in 24 hours prior to arrival at the first port of destination in Russia;

- for international transportations from Russia personal data on passengers and crew should be transmitted to ACDPDP not later than 24 hours prior to the departure;

- in case of changes (additions) to the crew, the data on any crew member added to the vehicle team is submitted to ACDPDP immediately, but no later than the time of departure;

1.6. Data transmission from Transmitting Party's information system is carried out on a round-the-clock basis.

1.7. Internet is used for data transmission. In order to transmit data, Transmitting party should create a main and a backup transmission channel, with connection via different network providers.

1.8. Transmission of exchange files on the application level is carried out in course of regular transmission sessions to FTP servers of the ACDPDP gateway. A transmission session is comprised of the following consecutive operations:

- initialization of a connection session by Transmitting Party's information system with an FTP server of the ACDPDP gateway;
- upload of exchange files by Transmitting Party's information system to a pre-set directory of the ACDPDP gateway FTP server;
- closure of the connection session by Transmitting Party's information system.

1.9. Receiving of exchange files on the application level is carried out by ACDPDP gateway tools after upload sessions are completed and closed by Transmitting Party's information system. Receiving is comprised of the following consecutive operations:

- verification of uploaded exchange files by ACDPDP gateway tools;
- processing of received data and formation of a return receipt file (see Article 3) with processing results;
- publication of the receipt file of the ACDPDP gateway, deletion of the exchange file.

1.10. In course of a session, Transmitting Party's information system tools should check for available receipts for previously uploaded files, receive receipts containing processing results and log the exchange files processing results. In case of error during processing of exchange file data, steps should be taken to correct those errors and re-upload the data.

## 2. Exchange Files

2.1. Data on passenger transportation should be submitted to ACDPDP in form of CSV (Comma Separated Values) exchange files, as per RFC 4180. Use semicolon as separator. First line in the file should contain field names in accordance with Appendix 1. Field names are case sensitive.

2.2. Scope of information to be transmitted (with field formats) is provided in Appendix 1. When filling the fields, use field code reference tables provided in Appendix 2.

2.3. All timings in reference tables (when another thing is not provided) should be indicated in Coordinated Universal Time (UTC) (YYYY-MM-DDTHH:mmZ) or in local time with UTC offset (YYYY-MM-DDTHH:mm±hh:mm).

2.4. When preparing the information for subsequent submission to ACDPDP, use UTF-8 codepage as per RFC 3629 and ISO/IEC 10646 Annex D, without byte ordering mark (BOM).<sup>1</sup>

2.5. Before transmission to ACDPDP, each CSV file should be compressed utilizing the ZIP algorithm, per “ZIP File Format Specification, Version: 6.3.3”.

2.6. CSV files have to be named as per the following template:

ID\_YYYY\_MM\_DD\_HH\_mm\_ss\_mss.csv, where:

- ID – unique carrier ID (transport infrastructure entity ID)<sup>2</sup>;
- YYYY – year (i.e. 2014);
- MM – month (01 to 12);
- DD – day (01 to 31);
- HH – hour (00 to 23);
- mm – minutes (00 to 59);
- ss – seconds (00 to 59);
- mss – milliseconds (00 to 999).

Date and time in the filename should correspond to the date and time of its creation.

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<sup>1</sup> Free software Notepad++ can be advised to encode a text file to UTF-8 without BOM.

<sup>2</sup> Assigned by the Receiving party.

2.7. Compressed files containing exchange data are to be named using the following template: <csv\_name>.zip, where <csv\_name> is a name of the CSV file as per template above, including file extension.

Size of the resulting archive file should not exceed 1Mb for personal data on passengers and 20Mb for references and schedules. One file with personal data cannot contain more than 99999 entries of personal data on passengers.

2.8. Each file is to be created with a unique name. If a filename is not unique, an error message will be given, stating that file with such name was already uploaded.

### 3. Receipt Files

3.1. Receipt file name are generated based on the following template:

PD\_SHIP\_<csv\_name>.zip.ack, where <csv\_name> is a name of the CSV exchange file (for which the return receipt is generated).

Example: *PD\_SHIP\_00000\_2013\_10\_18\_23\_51\_25\_116.csv.zip.ack*

3.2. Receipt file contains the results of processing of information from the exchange file. Format of the receipt file contents is XML. Language of data transmitted is Russian. UTF-8 codepage is used, as per RFC 3629 and ISO/IEC 10646 Annex D, without byte ordering mark (BOM). Examples of receipt files are provided in Appendix 3.



## 4. Secure Data Transmission to ACDPDP via Internet

4.1. Protection of personal data of passengers during its transmission to ACDPDP from Transmitting Party's information system via Internet should be ensured by means of virtual private network (VPN), based on IPsec protocol using AES symmetric encryption algorithms and asymmetric RSA encryption.

To connect to a VPN network of the ACDPDP, the Transmitting Party can use the following products:

- gateways implementing VPN according to published IPsec standards (RFC 2401-2412), for example, Cisco, Juniper, etc.;
- Juniper Pulse software.

VPN gateways are purchased by the Transmitting Party. Juniper Pulse software is provided by the ACDPDP operator (FSUE "ZashchitaInfoTrans").

4.2. To create a VPN Using Juniper Pulse Software FSUE "ZashchitaInfoTrans" provides the Transmitting Party with:

- Juniper Pulse software;
- Login/password;
- IP address of the ACDPDP VPN Gateway.

4.3. In order to create a VPN, the ACDPDP operator provides the following information:

- IP address of the ACDPDP VPN gateway;
- IP addresses of tunneled resources;
- parameters of protected coordination and delivery of the identified material for the security association.

To establish VPN connection with ACDPDP, the Transmitting Party should provide the following information:

- IP address of the its VPN gateway (white IP);
- IP address of the gateway to its workstations (white IP).

## **5. Technical Support**

If something is unclear or looks like something went wrong address a detailed message with an appropriate screenshots by electronic mail to support staff at [support@z-it.net](mailto:support@z-it.net).

## Appendix 1. Field Formats for the Data Package

Table 1.1 — Field Formats for the Data Package

Field name	Type	Status	Description
<b>Personal data on passenger or crew member</b>			
surname	VARCHAR2(40)	M	Surname
name	VARCHAR2(30)	M	Name
patronymic	VARCHAR2(30)	M	Patronymic or middle name
birthdate	DATE	M	Date of birth. Format YYYY-MM-DD
docType	NUMBER(2)	M	Type of identifying document. Document code as per reference table 2.1 in Appendix 2.
docNumber	VARCHAR2(20)	M	Identifying document number Input digits of document number without separators.
documentAdditionalInfo	VARCHAR2(200)	C	Additional document information, including date and place of issuance (if available)
citizenship	VARCHAR2(3)	M	Citizenship. Country code alpha-2 or alpha-3 in accordance with ISO 3166
gender	NUMBER(1)	M	Gender. In accordance with the table 2.5 in Appendix 2
departPlace	VARCHAR2(20)	M	Port of departure (UN/LOCODE) This is the last port of call in Russia when leaving Russia or the last port of call out of Russia when entering Russia

Field name	Type	Status	Description
arrivePlace	VARCHAR2(20)	M	Port of arrival (UN/LOCODE) This is the first port of call in Russia when entering Russia or the first port of call out of Russia when leaving Russia
departDate	TIMESTAMP	M	Date and time of departure
arriveDate	TIMESTAMP	M	Date and time of arrival to port of destination (per schedule)
recType	NUMBER(1)	M	0 – crew member; 1 – passenger.
<b>On crew member only</b>			
rank	VARCHAR2(20)	M	Position held by the crew member in the vessel team
<b>Data on logged operation</b>			
operationType	NUMBER(2)	M	Loggable operation type. Code as per reference table 2.3 in Appendix 2.
operatorId	NUMBER(5)	M	Transport operator ID. Assigned by the ACDPDP operator.
shipClass	NUMBER(1)	C	Ship class (by navigation area). In accordance with Table 2.4 in Appendix 2.
shipNumber	VARCHAR2(8)	M	IMO number
shipName	VARCHAR2(20)	M	Name of ship
flagState	VARCHAR2(3)	M	Transport means nationality code. Country code alpha-3 or alpha-3 in accordance with ISO 3166

Field name	Type	Status	Description
reservedSeatsCount	VARCHAR2(2)	C	Number of seats reserved per one reservation (if available)
registerTimeIS	TIMESTAMP	M	Date and time of event registration in the automated information system of the transport operator
operatorVersion	Number(2)	C	Version number (of the exchange file format). Current version is 20.
routeType	Number(1)	C	Route type. In accordance with Table 2.2 in Appendix 2.
routeName	VARCHAR2(200)	M	Voyage name or number
<b>On passenger only</b>			
buyDate	TIMESTAMP	M	Transaction date and time.
termNumOrSurname	VARCHAR2(20)	M	Point-of-sale terminal number or surname of the cashier who sold the ticket

Note: In the Status column **M** stands for Mandatory use, **C** – for Conditional use.

## Appendix 2. Reference Tables for Encoding Data Fields

Table 2.1 — Codes of Identifying Documents

Code	Name
0	Internal passport of Russian citizen
1	Seaman's passport
2	Foreign passport of Russian citizen
3	Passport of foreign citizen other than Russia
4	Certificate of birth
5	Identity card of military man
6	Identity card of person without citizenship
7	Temporary identity card issued by internal affairs bodies
8	Military registration card of military man of involuntary service
9	Residence permit of foreign citizen or person without citizenship
10	Certificate of release from prison
11	Passport of the USSR citizen
12	Diplomatic passport
13	Service passport (except for seaman passport and diplomatic passport)
14	Certificate of return from CIS countries
15	Certificate of passport loss
18	Certificate of temporary asylum
99	Other documents (according to Russian legislation)

Table 2.2 — Codes of Types of Shipping Routes, for Submission to ACDPDP

Code	Name
0	Nonstop
1	Transit

Table 2.3 — Codes of Types of Operations with Travel Documents

Code	Name
0	Ticket reservation
1	Ticket purchasing
2	Ticket return
3	Reissue (without changing seat numbers)
4	Registration
5	Special control
6	Embarkation
7	Disembarkation
8	Ticket clearance

<b>Code</b>	<b>Name</b>
9	Order cancellation
10	Internet reservation
11	On-line registration
12	Advance reservation
13	Advance reservation cancellation
14	Departure
15	Departure cancellation
16	Registration reservation
17	Data correction
50	Crew member addition
51	Crew member exclusion

Table 2.4 — Ship Class (by navigation area), for Submission to ACDPDP

<b>Code</b>	<b>Vessel classification</b>
0	Marine (long range, unrestricted, coastwise)
1	Estuary
2	Inland navigation (river, lake)
3	Mixed navigation (river - sea)

Table 2.5 — Codes of Passenger Gender, for Submission to ACDPDP

<b>Code</b>	<b>Name</b>
M	Male
F	Female

### Appendix 3. Receipt Files

Sample receipt file with errors detected during file processing:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns2:ImportAck errorCode="-2" archiveId="e13b4af3-4ada-48b6-a256-c9d6f546f9af"
xmlns:ns2="http://www.egis-otb.ru/gtimport/">
  <entry fileName="22007_2014_02_03_14_04_57_56.csv" errorCode="-1004">
    <fault description="No route specified" errorCode="-2002" line="2"/>
    <fault description="Incorrect date of birth" errorCode="-2002" line="2"/>
    <fault description="Transport operator not found in reference table" errorCode="-2001"
line="2"/>
  </entry>
</ns2:ImportAck>
```

Sample receipt file with a message on successful processing of a file:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ns3:ImportAck errorCode="0" archiveId="810b9a36-ac84-4dec-a67d-14a17c4552b9"
xmlns:ns3="http://www.egis-otb.ru/gtimport/">
  <entry fileName="22005_2013_11_27_06_36_32_000.xml" errorCode="0"/>
</ns3:ImportAck>
```

Error codes used in the receipt files are indicated in the Appendix 4.

Receipt files are formed in accordance with the scheme, which can be provided for the Transmitted Party by request.



## Appendix 4. Error Codes

Table 4.1 — Error codes in receipt files

Code	Description
<b>Error codes for whole file or archive</b>	
0	Processing successful
-1	Error opening archive. Or archive broken; unknown compression algorithm; archive empty (no files inside). File/archive not processed.
-2	Errors in archived files. Archive unpacked, but unpacked files contain errors.
-3	Empty file. Archive has zero byte filesize. File/archive not processed.
-999	Internal error during parsing. File/archive not processed.
<b>Error codes for files in archive</b>	
-1000	File parsing error. No entries/structures parsed in file. File data not added to the system.
-1001	Empty file. File data not added to the system.
-1002	No valid entries in file. Entries parsed, but none fit for adding. File data not added to the system.
-1003	Incorrect document encoding. Files should be submitted in UTF-8 without BOM. File data not added to the system.
-1004	Entry parsing error.
-1005	Incorrect file format. File data not added to the system.
-10000	CSV header missing, or header has no defined fields. File data not added to the system.
-10001	Header contains excessive fields not defined by Requirements. Data in excessive fields will be ignored.
<b>Error codes for entries within a file</b>	
-2000	Entry parsing error. Entry data not added to the system.
-2001	Error in referenced data. Value not found in reference tables.
-2002	Validation error. All errors except 2001 and those with an individual code.
-2003	Mix of Russian and Roman symbols in fields surname, name, patronym.
-2004	Duplicate entry. If a file contains two or more entries with identical sets of main fields.
-9998	Warning. No error, but a warning during data parsing.
-9999	Additional information.
-11001	Contains fields not present in file header. Excessive fields discarded;

	information provided on their detection.
-11002	Fields missing. Field set in header is larger than that of in data.
<b>Gateway error codes</b>	
-100000	Got a receipt with status "false" without errorCode.
-100001	Got a receipt without status and without errorCode.
-100002	Filename inconsistent with the template. File not processed.
-100003	Repeated file upload. File with that name already uploaded to the server. File not processed.
-100004	No settings found for uploaded file. File not processed.
-100005	Incorrect date of uploaded file (either file date differs by 2 weeks from the actual date or file is "from the future"). Date in filename should be in UTC format. File not processed.
	In case of a repeat upload of a file already uploaded an FTP protocol error "552 File already exists" may occur.
	In case of an FTP server error during file upload an FTP protocol error "552 Error" may occur.