



Ministry of Transport of the Russian Federation

FSUE «ZaschitaInfoTrans»

**Integrated 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

Version SHIP-03.04.2018

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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).¹

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)²;
- 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.

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

² 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

4.1. Protection of information in ACDPDP and during information exchange is carried out in accordance with the legislation of the Russian Federation.

4.2. IGIS TS operator, providers and users of information in the collection, storage, processing and transfer of personal data of passengers are required to follow the Federal Law of July 27, 2006 No. 152-FZ "On personal data", Federal Law of July 27, 2006 No. 149-FZ "On information, information technology and data protection", the Regulation on the security of personal data during their processing in the information systems of personal data, enacted by the resolution of the Government of the Russian Federation of November 17, 2007 No. 781, and the "Procedure of formation and maintenance of automated centralized databases of personal data on passengers and of provision of data contained therein" approved by the Order of Russian Ministry of Transport on July 19, 2012, No. 243.

Security of personal data during their processing in ACDPDP and during the information exchange within the scope of responsibility of the participants is provided through a system of protection of personal data, which includes organizational measures and means of protection of information (including cryptography) and information technologies used. Selection and implementation of information security measures in the information system are based on the determined by the IGIS TS operator and information exchange participants threats to personal data security (threat models) and depending on the class of the information system, as determined in accordance with the Procedure of the classification of personal data information systems, enacted by the joint order of the Federal Service for Technical and Export Control, Federal Security Service of the Russian Federation and the Ministry of Communication and Mass Media of the Russian Federation of February 13. 2008 No. 55/86/20.

4.3. ACDPDP data are provided to users in accordance with the Regulation on the security of personal data during their processing in personal data information systems,

enacted by the resolution of the Government of the Russian Federation of November 17, 2007 No. 781.

4.4. Processing of passenger data in ACDPDP is carried out in accordance with Part 2 Art. 5 of the Federal Law of July 27, 2006 No. 152-FZ "On personal data."

4.5. The method of protecting the data transmission channel is determined by the IGIS TS service operator by negotiation with the information provider. Possible options for protecting the data transmission channel are presented on the page "Connection Procedure" at web-site www.z-it.ru.

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.

Appendix 1. Field Formats for the Data Package

Table 1.1 — Field Formats for the Data Package

| Field name | Type | Status | Description |
|--|---------------|--------|--|
| Personal data on passenger or crew member | | | |
| 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. |
| On crew member only | | | |
| rank | VARCHAR2(20) | M | Position held by the crew member in the vessel team |
| Data on logged operation | | | |
| 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 |
| On passenger only | | | |
| 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 | Documents | Input Masks |
|------|---|---|
| 0 | Internal passport of Russian citizen | Ten digits. Sample: 0123456789 |
| 1 | Seaman's passport | |
| 2 | Foreign passport of Russian citizen | Nine digits. Sample: 123456789 |
| 3 | Passport of foreign citizen other than Russia | |
| 4 | Certificate of birth (Russia) | Two Latin characters (Roman numerals), two Cyrillic characters, six digits. Sample: XXЪЖ123456 |
| 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 | Two Cyrillic characters, seven digits. Sample: ЪЖ1234567 |
| 9 | Residence permit of foreign citizen or person without citizenship | |
| 10 | Certificate of release from prison | |
| 11 | Passport of the USSR citizen | Two Latin characters (Roman numerals), two Cyrillic characters, six digits. Sample: XXЪЖ123456 |
| 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 | Routes |
|------|---------|
| 0 | Nonstop |
| 1 | Transit |

Table 2.3 — Codes of Types of Operations with Travel Documents

| Code | Operations |
|------|--------------------|
| 0 | Ticket reservation |

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

| Code | Vessel classification |
|-------------|--|
| 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

| Code | Gender |
|-------------|---------------|
| 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 |
|--|---|
| Error codes for whole file or archive | |
| 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. |
| Error codes for files in archive | |
| -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. |
| Error codes for entries within a file | |
| -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. |
| Gateway error codes | |
| -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. |