Approved by the order of the State Fiscal Service of Ukraine No. 867 dated 27.12.2018

**Structure and format of preliminary information on goods accepted for shipping in containers to the port of destination on the customs territory of Ukraine**

Preliminary information on goods accepted for shipping in containers to the port of destination in Ukraine, which is provided by the agency organizations (hereinafter - maritime agents) to the State Fiscal Service of Ukraine (hereinafter - Preliminary information), is sent to the SFS web service for the exchange of customs information.

1. General issues

Preliminary information is sent via the SOAP web service, located at the address <http://sw2.sfs.gov.ua/AskCustoms.asmx>. The name of the web method is AskCustoms1.

The Request should be:

- signed by the EDS initiator (State standards of Ukraine - SSU);

- encrypted (AES) by the session key that the request initiator offers, and which is encrypted on the SFS technology key (RSA).

The Response should be:

- signed by the SFS technological EDS (SSU);

- encrypted by the same session key.

1. Request specifications.
   1. The request contains information according to the table 1.

Table 1. Data format of the request

| **№** | **Tag** | **Data Type** | **Cardinality** | **Explanation** |
| --- | --- | --- | --- | --- |
| 1 | MessageBody | byte[] | Так | body of the request |
| 2 | MessageType | string(128) | Так | UA.SFS.REQ.N.V, where N is type of request according to the Dictionary, starting with 1, V - version number |
| 3 | MessageID | guid | Так | request ID |
| 4 | Initiator | string(10) | Так | TRN (Taxpayer Registration Number) of the requester |
| 5 | SignCertificate | byte[] | Ні | Key certificate for which the request is signed. Mandatory if the signature does not contain a certificate |
| 6 | Signature | byte[] | Так | The EDS value of the request |
| 7 | SessionKey | byte[] | Так | Encrypted session key of the encryption |
| 8 | CryptKeyID | guid | Так | SFS key ID for which the message is encrypted \* |

\*The current SFS key identifier is 3faf09b8-5b24-4534-b382-9960dca30544.

It corresponds to this public key:

<RSAKeyValue><Modulus>uJU/Ccqro+Tysmta1GQ2fZznfJ1bF+lgQmmNnCa1jsVbiA04bvWVyxSRCOBLLwdnpS+PESlg7c3/HqGcjjlhJ5zUPaM1yQF+qhRtaHT1uJDXiaP/ah0xpINQPfeGubst6mkXg3laae+TnbUQSnqV7+jaBV8/CE6+LsJY+0JFq4YmYsCsp8HCxqSbI/+87tY/Pesb2GfMdXx041VZB2DVQnJuUzQjWq+JxMjZSBbG2vSdTjWrIsFepZFOOYBQPTrqrC044V4VbaJVssaP9EO1I6ogI1gA6uzUMyVAEjCE0kkUpZv5wTjFOOkrn+RFovZofFQmxaCgFE6sNSwTd7MyWQ==</Modulus><Exponent>AQAB</Exponent></RSAKeyValue>.

* 1. The body of the request is formed in the following manner:
     1. It is formed an XML that contains the data according to the table 2. The request type for the preliminary information is 5 and version is 1;
     2. The XML is compressed using the ZIP algorithm;
     3. The resulting sequence of bytes is signed by the requestor key. The value of the EDS is transmitted in the Signature tag;
     4. It is generated a random session key for the AES algorithm;
     5. The key is encrypted using the RSA algorithm, the resulting value is written into the SessionKey tag;
     6. The compressed XML is encrypted using the AES algorithm applying the session key, the resulting value is written into the MessageBody tag.

Table 2. Structure of the message data (request body)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tag** | | **Description** | | | **Note** |
| CTS\_declarations | | Ship calls | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality**  - ? = (0,1);  - 1 = 1;  - \* = (0…);  - + = (1…). | **Note** |
| 1 | declaration | Ship call | declaration | + |  |
| **Tag** | | **Description** | | | **Note** |
| declaration | | Ship call | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | header | Information on electronic message and  ship call | header | 1 | This segment contains the general information about the declaration |
| 2 | containers | Information on containers | containers | ? | This segment contains all the information related to the containers associated to this declaration including the empty containers |
| 3 | bol | Information on bills of lading | bol | 1 | This segment contains detailed data for each transport document |
| **Tag** | | **Description** | | | **Note** |
| header | | Information on electronic message and  ship call | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | sender\_id | USREOU code (Unified State Register of Enterprises and Organizations of Ukraine) | Varchar(10) | 1 | This is the sender’s USREOU code |
| 2 | recipient\_id | ID of automated system to which information is provided | Varchar(6) | 1 | CTS-UA for Ukraine |
| 3 | datetime\_preparation | The actual date and time of preparation of the declaration | DateTime | 1 | Use format: YYMMDDHHmm |
| 4 | declaration\_id | Unique identifier for the declaration that is assigned by the data provider | Varchar(70) | 1 | In case of any amendment to a bill or container entry from this declaration, the original declaration id will be repeated in the messages with amendments. |
| 5 | declaration\_function | The function of the declaration | Varchar(1) | 1 | Use O for an original declaration or A for an amendment.  NOTE: accepted values O and A. |
| 6 | declaration\_type | The type of declaration. | Varchar(1) | 1 | Use **I** for entry declaration and **E** for exit declaration. |
| 7 | datetime\_submission | The actual date and time of submission of the declaration. | DateTime | 1 | In case there are multiple declarations under the same file the value will be the same for the submission time.  Use format: YYMMDDHHmm. |
| 8 | declaration\_office | This is used to identify the office of declaration. | Varchar(5) | 1 | UN/LOCODE.  For example, UAODS |
| 9 | transport\_details | Information on ship call | transport\_details | 1 |  |
| **Tag** | | **Description** | | | **Note** |
| transport\_details | | Information on ship call | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | carrier | Carrier Identifier | Varchar(17) | 1 |  |
| 2 | carrier\_name | Carrier Name | Varchar(35) | 1 |  |
| 3 | voyage\_number | The actual Voyage Number | Varchar(17) | 1 |  |
| 4 | transportmeans\_identifier | IMO number of the vessel | Varchar(35) | 1 | The actual IMO number of the vessel |
| 5 | transportmeans\_nationality | The transport means registration country | Varchar(2) | ? | Use ISO country code two characters for the transport means registration country |
| 6 | transportmeans\_name | The name of the vessel | Varchar(140) | ? |  |
| 7 | datetime\_arrival | The actual date and time of the vessel arrival in the port | DateTime | ? | Use format: YYMMDDHHmm.  This value needs to be sent only for an entry declaration. |
| 8 | datetime\_departure | Date and time of expected departure of the vessel | DateTime | ? | Use format: YYMMDDHHmm.  This value needs to be sent only for an exit declaration. |
| **Tag** | | **Description** | | | **Note** |
| containers | | Information on containers | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | container | Information on containers | container | + |  |
| **Tag** | | **Description** | | | **Note** |
| container | | Information on container | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | equipment\_identifier | The actual container number | Varchar(17) | 1 |  |
| 2 | submission\_type | The type of submission. | Varchar(1) | 1 | If the container is provided for the first time the value will be: **O** .  If the information is amended the value will be **A**.  If the entry is deleted from the list the value **D** will be sent. |
| 3 | equipment\_sizetype | The container size and type | Varchar(10) | 1 | Use ISO container size and type. ISO 6346 format |
| 4 | fullempty\_indicator | The full empty indicator for the container | Varchar(3) | 1 | The accepted values are:  LCL - less than full container ;  FCL - full container load;  E - empty; |
| 5 | seals | Information on seals | seals | ? | It will be sent if there is at least one seal associated with the equipment. It will contain one seal entry for each seal. |
| **Tag** | | **Description** | | | **Note** |
| seals | | Information on seals | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | seal | Seal | seal | + |  |
| **Tag** | | **Description** | | | **Note** |
| seal | | Seal | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | seal\_number | The actual seal number | Varchar(35) | 1 |  |
| 2 | sealing\_party | The seal issuer | Varchar(2) | ? | Accepted values are:  AA Consolidator  AB Unknown  AC Quarantine agency  CA Carrier  CU Customs  SH Shipper  TO Terminal operator |
| **Tag** | | **Description** | | | **Note** |
| bol | | Information on bills of lading | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | bol\_id | Information on bill of lading | bol\_id | + |  |
| **Tag** | | **Description** | | | **Note** |
| bol\_id | | Information on bill of lading | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | bill\_number | Number | Varchar(70) | 1 |  |
| 2 | submission\_type | The type of submission | Varchar(1) | 1 | If the bill of lading is provided for the first time the value will be: O .  If the information is amended the value will be A.  If the entry is deleted from the list the value D will be sent. |
| 3 | bill\_type | The type of bill of landing | Varchar(2) | 1 | MB – Master Bill of Lading  HB – House Bill of Lading |
| 4 | master\_bill\_number | Master bill number | Varchar(17) | ? | This will be sent only in case of House Bills, it will contain the Master bill number. |
| 5 | package\_number | Number of packages | Number(18) | 1 | The actual number of packages for the consignment |
| 6 | origin\_location | Place at which the goods are taken over for carriage | Varchar(5) | ? | Place at which the goods are taken over for carriage (operational term), if different from the transport contract place of acceptance. Synonym: Place of origin of carriage. Bill of lading place of receipt. UNLOCODE value expected. |
| 7 | original\_port\_of\_loading | Original port of loading | Varchar(5) | ? | Original port of loading. The port where the goods were first loaded on a vessel. First port where the consignment was ever loaded onto a ship. UNLOCODE value expected. |
| 8 | port\_of\_loading | Port where the consignment was loaded onto the current vessel | Varchar(5) | ? | Place of loading [3334] .  Port where the consignment was loaded onto the current vessel. UNLOCODE value expected |
| 9 | port\_of\_discharge | Port where the consignment will be unloaded from the current vessel | Varchar(5) | ? | Place of discharge [3392]. Port where the consignment will be unloaded from the current vessel. UNLOCODE value expected |
| 10 | final\_port\_of\_discharge | Final port where the consignment will ever be unloaded from a ship | Varchar(5) | ? | Place of delivery (3246). Final port where the consignment will ever be unloaded from a ship. UNLOCODE value expected. |
| 11 | place\_delivery | Place of ultimate destination of goods. | Varchar(5) | ? | Place of ultimate destination of goods. Place where goods will ultimately be delivered. Bill of lading place of delivery. UNLOCODE value expected. |
| 12 | involved\_parties | Clients related to transportation | involved\_parties | 1 |  |
| 13 | consignment\_items | Goods | consignment\_items | 1 |  |
| **Tag** | | **Description** | | | **Note** |
| involved\_parties | | Clients related to transportation | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | party | Client | party | + |  |
| **Tag** | | **Description** | | | **Note** |
| party | | Client | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | type | Client type | Varchar(2) | 1 | Will have one of the following values based on the involved party type:  CZ - Consignor  CN - Consignee  FW - freight forwarder  NI - notify party |
| 2 | name | The actual client name | Varchar(140) | 1 |  |
| 3 | address | The client address | Varchar(135) | 1 |  |
| **Tag** | | **Description** | | | **Note** |
| consignment\_items | | Goods | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | consignment\_item | Goods | consignment\_item | + |  |
| **Tag** | | **Description** | | | **Note** |
| consignment\_item | | Goods | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality** | **Note** |
| 1 | submission\_type | The type of submission | Varchar(1) | 1 | If the container is provided for the first time the value will be: **O** .  If the information is amended the value will be **A**.  If the entry is deleted from the list the value **D** will be sent. |
| 2 | sequence | Item number in the bill of lading | Number(10) | 1 | A unique value at level of each consignment item associated to the same bill. Auto Increment values are suggested. |
| 3 | equipment\_identifier | The actual container number | Varchar(17) | ? | It will be used to link the consignment item to a container.  This is a mandatory tag if the goods are shipped in a container. |
| 4 | package\_number | The actual number of packages | Number(18) | 1 | The actual number of packages for the consignment item |
| 5 | package\_type | The type of packaging | Varchar(10) | ? | The type of packaging used for the consignment item according to the packing types classifier |
| 6 | goods\_description | The actual goods description | Varchar(512) | 1 |  |
| 7 | UCR | Unique Consignment Reference | Varchar(512) | ? |  |
| 8 | volume | The consignment item gross volume in MTQ | Varchar(10) | 1 |  |
| 9 | weight | The consignment item gross weight in KG | Varchar(10) | 1 |  |
| 10 | dangerous\_goods\_class | The class of Dangerous Goods | Varchar(5) | ? | It will be sent only if the consignment item contains dangerous goods. |
| 11 | dangerous\_goods\_imdg | International Maritime dangerous Goods Code | Varchar(7) | ? | IMDG Code or International Maritime Dangerous Goods Code is accepted as an international guideline to the safe transportation or shipment of dangerous goods or hazardous materials by water on vessel. It will be sent only if the consignment item contains dangerous goods. |
| 12 | dangerous\_goods\_ungd | UNDG number | Varchar(4) | ? | The unique serial number assigned within the United Nations to substances and articles contained in a list of the dangerous goods most commonly carried. It will be sent only if the consignment item contains dangerous goods. |
| 13 | package\_identification | Shipping marks | Varchar(35) | ? | It will be send only if available. |
| 14 | hs\_code | The 6 digit HS code | Varchar(6) | 1 |  |

1. Response specifications.
   1. The response to the request contains information according to the table 3.

Table 3. Data format of the response

| **№** | **Tag** | **Type** | **Cardinality** | **Note** |
| --- | --- | --- | --- | --- |
| 1 | MessageBody | byte[] | No | Body of the response.  It is absent in the case of error or if the response is not required. |
| 2 | MessageType | string(128) | Yes | UA.SFS.RSP.M.W, where M is type of response according to the Dictionary, starting with 1, W - version number. |
| 3 | SignCertificate | byte[] | No | Key certificate that signed the response.  It used only if the signature does not contain a certificate.  It is absent in the case of error or if the response is not required. |
| 4 | Signature | byte[] | No | The EDS value of the response. It is absent in the case of error or if the response is not required. |
| 5 | ErrorNumber | number(5) | Yes | Error code. If the request is processed without errors the value will be 0. |
| 6 | ErrorMessage | string(2000) | No | Description of the error. |
| 7 | RequestRegNo | number(20) | Yes | Registration number of the request |

* 1. The body of the response is formed in the following manner:
     1. It is formed an XML that contains the data according to the table;
     2. The XML is compressed using the ZIP algorithm;
     3. The resulting sequence of bytes is signed by the SFS key. The value of the EDS is transmitted in the Signature tag.
     4. The compressed XML is encrypted using the AES algorithm with applying the session key proposed in the request, the resulting value is written into the MessageBody tag.

Table 4. Receipt structure (body of the response)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tag** | | **Description** | | | **Note** |
| confirmation | | The result of the message processing | | |  |
| **№** | **Tag** | **Description** | **Type** | **Cardinality**  **- ? = (0,1);**  **- 1 = 1;**  **- \* = (0…);**  **- + = (1…).** | **Note** |
| 1 | message\_id | Message file name | Varchar(35) | 1 |  |
| 2 | process\_date | Date and time of message processing in the SFS | DateTime | 1 | YYYY-MM-DDTHH:MI:SS |
| 3 | result | Error code | Int16 | 1 | 0 – the message is processed without errors  > 0 – error code |
| 4 | error\_description | Description of the error | Varchar(MAX) | ? | Description of the error |