TSS API Reference

How-to Guide

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Trader Support Service

HM Revenue & Customs

Contents

1. Background

The Trader Support Service (TSS) has been set up to support businesses affected by the Northern Ireland Protocol, including submitting Entry summary declarations (ENS) and customs declarations (such as simplified frontier declarations (SFD) and supplementary declarations) to HMRC systems. TSS released an API upload facility to make the process for submitting large numbers of line items and declarations easier for traders. The initial API release allowed the creation and submission of ENS declarations only. The updated API facility will now also allow reading and updating of these plus SFDs and supplementary declarations. Future releases will continue to add functionality to align with the portal functionality.

2. Purpose

The purpose of this document is to give those interested in using the API visibility of its details. It is provided to allow you to design and begin development or customisation of your systems to use the API.

3. Scope

The scope of this document is limited to the functionality and definition of the external Upload API. The API is provided as is and is not available for change. The document describes how the API should be used but not how it functions internally nor how you should configure your system(s) in order to use it.

4. Document structure

The document is broken down into various sections which provide information about the API including such items as credential requirements, endpoints, and different functional calls that can be made to the API. The endpoints provided will be for both a test environment and the production system when authorisation to use this is given.

'Legacy' refers to the Initial Release configuration of the API; this will continue to function with only minimal change. Going forward this will be deprecated therefore should not be used for new API configurations. There is no time scale for this deprecation.

5. Related documents

The following documents should be referred to for further clarification.

Title	URL
Introduction to the Trader Support Service	https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/introduction-to-the-trader-support-service/
Registering Your Business	https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/registering-your-business/
An Introduction to Customs	https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/an-introduction-to-customs/
Declaration data requirements: ENS Safety & Security declarations	https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/declaration-data-requirements-ens-safety-security-declarations/
Declaration data requirements: Supplementary declarations	https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/declaration-data-requirements-supplementary-declarations/
Supplementary declarations: Guide to preparation steps	https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/supplementary-declarations-guide-to-preparation-steps/
Documents for GB:NI goods movement	https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/documents-for-gbni-goods-movement/

An online version of this document in order to obtain the latest version can be found at

https://www.nicustomstradeacademy.co.uk/resources/how-to-guides/upload-api-reference/

***Note**: Please check back regularly for updates to this document as minor releases, which might still contain field changes will not be emailed out and may affect the success of your payloads.*

6. Intended audience

This document is intended to be read by both process and technical staff belonging to interested organisations.

Organisations interested in using this API can register for access via their Company Profile in the TSS portal. Organisations will be kept informed of major updates to this document and any other developments related to the API, however, please check regularly online for updates to this document.

7. Future changes to the API and this document

As this API reflects an upload capability that mirrors the TSS portal, changes to this document will be required if and when the portal changes.

Any changes will be version controlled and major changes communicated to businesses which have registered for the API upload facility.

Where possible API functionality will be increased and not removed, though on occasions, where functionality in the portal changes significantly then this may not be possible. Traders will be given as much notice as possible to allow for changes to the API to be incorporated. These will generally be notified by early release of this document and then the API functionality being deployed to the TEST instance before finally being released to Production 2 to 4 weeks later.

Although the legacy marked API calls in this document will still work it is strongly advised that traders migrate to the new API calls as the legacy calls are likely to be deprecated at the next release or when HMRC introduces functionality or policies that are not backward compatible with those API calls.

8. Process for requesting access

API management is available in the Company Profile section of the TSS portal. Here you are able to register for test API access. This will generate a set of API credentials in our test environment and give your company's primary contact access to the TSS test portal with their existing login details, allowing you to submit data via the API and then have the primary contact check the submissions via the TSS test portal. Any further contacts can register for the test environment via the Additional User Registration process on the TSS test portal landing page.

Note, the testing performed is for the API message and the API message payload validation only. There is no onward processing of any API messages to HMRC systems in the API test environment. Onward submission to the HMRC systems would only be done in the live production environment.

Once you are satisfied with your testing, you can then register for the production API from the Company Profile section of the TSS portal, the same place you registered for test.

API management within Company Profile will also allow you to change the password of the API account in the appropriate environment.

9. Declaration creation process

The process required to submit a complete declaration is as follows

- Request to create a header. This is the container required in order to add a number of consignments. When this request is received if the provided information is validated correctly then a header reference number will be returned.
- Request to create a consignment. Multiple consignments can be requested but they all need to be requested against a currently open header previously created. If the supplied header number and all other required fields pass validation then a consignment reference number is returned. These will be needed in order to send through the items that belong to each consignment as below.
- Add an item. This is used to add items to a consignment. The consignment number and all the required item fields will need to be supplied. If the consignment and the fields are all valid then individual item reference numbers will be returned.
- Items and consignments can be added in any order as long as the required information is provided and they exist under an open header.
- When all goods items have been successfully added then a consignment can be submitted. This is done by sending an update to the consignment number that was supplied at the beginning.
- After a consignment has been submitted no further items can be added to it.
- Once an ENS has received initial Authorisation for Movement, a simplified frontier declaration is created automatically, which is used to track the approval by CDS
- Once goods have arrived at their destination, either based on original expected Arrivial Date/Time or confirmation from GVMS, a supplementary declaration record is created and the simplified frontier declaration set to a status of “Arrived”.
- The supplementary declaration requires additional mandatory information which is not captured on simplified frontier declarations, relating to the goods, domestic status and values.
- The supplementary declaration shall be used to calculate the duty, if applicable, to the goods within the consignment.

10. Protocols and authorisation

10.1. Protocol details

The API uses an https based REST protocol and thus a JSON structure for the payload.

Authentication is via Basic Authentication with a Username and Password provided during the requesting process defined above. This should be included in the header as Authorization. An example is given below, the username:password must be encoded with Base64 and be prefixed with "Basic ".

Due to the addition of a new API resource structure there will be new credentials required to use them. The credentials used for the legacy API calls, which look like ***API0010026*** should only be used for the legacy API resources, if they are used for any of the new resources they will either not work or may cause errors. The new credentials required for the new API calls will have a structure similar to ***API.TSS0010026***.

The http header should have the following set, you must change the Authorisation header to suit your credentials.

Accept	application/json
Content-Type	application/json
Request	application/json
Authorisation	Basic ZXhhbXBsZVVzZXI6ZXhhbXBsZVBhc3N3b3Jk

Both the POST and GET methods are available for use in different circumstances. The POST is used when data is being sent into the system either for example to create a new record or to update an existing one. The GET method is used if you require to retrieve some information back such as the details of an existing record or to update your list of available choices for various fields.

Within each section it will describe whether POST or GET are available and how to use them in each case.

Attachments are not permitted and will be ignored but may cause the transaction to be rejected.

11. URL details

The URLs for the various declaration API call details are shown below. Due to the increase in declaration functionality through the API, the structure of the calls and therefore the resources available have changed. The original style calls, ie those supplied at version 1.6 will still be supported while possible but no further enhancements will be made to them. These are now marked in this document as legacy. Any new functionality will be introduced in the new versions of the API calls only.

11.1. Environments

When building either the old or the new style URLs the instance details are as per the table below.

Where *<instance_name>* is mentioned, replace this with the instance name for the environment you wish to access.

Environment	Instance name	Usage
TEST	api.tsstestenv.co.uk	To be used when approval has been granted to send test data to the declaration import API
PROD	api.tradersupportservice.co.uk	To be used ONLY when final approval has been given and after the agreed go-live date for sending live submissions via the declaration import API

11.2. Legacy resources

The legacy resources all utilise a POST method and the structure follows the format below:

https://*<instance_name>*/api/now/import/*<request_type>*

Where:

<instance_name> will be according to the table above

<request_type> will be the suffix based on the type of record being requested as per below

Request Type	URL suffix	Usage
Declaration Header	x_fhmrc_tss_api_declaration_import	To request a declaration ready to add consignments to
Consignment Request	x_fhmrc_tss_api_consignment_import	To request a consignment under an existing declaration
Goods Items	x_fhmrc_tss_api_goods_import	To add goods to an existing consignment
Consignment submission	x_fhmrc_tss_api_consignment_submit	To be used to submit a complete consignment

11.3. New resources

New API calls have been created in order to provide both additional functionality to the existing records types, such as reading and/or updating a header or consignment for example. Plus there are some additional API calls that have been added for additional record types that have been released. Some of these calls use the POST method and some use GET, please read each one for details. The ability to update already created records is now available. Generally you will need to supply all the fields for an update operation that you would provide for a create operation, even if they have not changed. This is to ensure the correct level of validation can be performed.

The new URL structure to use is as follows:

```
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/<resource>?<parameters>
```

Where:

<instance_name> will be according to the table above entitled “Environments”

<resource> will be the resource column for the API call required from the table below

<parameters> some resources may require parameters, read the Resource Definitions section below for each resource and method used

API call	Resource	Usage
Declaration Header	headers	To create, update, cancel or read a Declaration Header (replaces x_fhmrc_tss_api_declaration_import)
Consignment	consignments	To create, update, cancel, read or submit a Consignment (replaces x_fhmrc_tss_api_consignment_import)
Goods Item	goods	To create, update, delete or read a Goods Item either ENS, SFD or Supplementary Declaration related (replaces x_fhmrc_tss_api_goods_import)
Simplified frontier declaration (SFD)	simplified_frontier_declarations	To lookup, update or read a simplified frontier declaration number
Supplementary declaration (SDI)	supplementary_declarations	To lookup, update or read a supplementary declaration

Note, for some of the API calls, especially the GET functions to read back records, there will be additional parameters that may be mandatory to be supplied. Please read each API call section for the full details.

12. Payload information

12.1. Explanation of table columns

- Field Name – this is the system field name to be used in the JSON payload.
    - Please refer to the "TSS How-To Guides Declaration data requirements: Safety & Security declarations" document for more detailed information on the use and meaning of the fields. The names of the fields in that document represent the labels of the fields that you will see on the TSS portal user interface. The field names and labels are in many cases the same or very similar.
- Format – this describes field validation that will be applied. Your data should conform to the validation requirements.
- Mandatory – whether the field is mandatory or not. In some cases the field is mandatory if another field contains a specific value. So some attention needs to be given to the conditions under which a field is mandatory or not.
- Usage – a simple usage or meaning of the field. Where the field is a choice field then there is an indication of this with a pointer to the location of the choice field data.
    - Please refer to the "TSS How-To Guides Declaration data requirements: Safety & Security declarations" document for more detailed information on the use and meaning of the fields. The names of the fields in that document represent the labels of the fields that you will see on the TSS portal user interface. The field names and labels are in many cases the same or very similar.

12.2. Declaration header (Legacy)

The payload to be sent in order to generate a header will be in the following format

Field Name	Format	Mandatory	Usage
movement_type	String (40)	Yes	Download a list of available choices as per Section 13
identity_no_of_transport	Alpha Numeric (27)	Yes No if “Air” is selected as movement_type	The identity number of the transport
nationality_of_transport	Alpha (2)	No If movement_type is Ro/Ro (Accompanied / Unaccompanied) this field is mandatory, otherwise it is not required and will not be processed	See mandatory requirements. Download a list of available choices as per Section 13
conveyance_ref	Alpha Numeric (35) if movement_type is Air, conveyance ref has a limit of 8 chars	No Yes if “Air” is selected as movement_type and should be the IATA number	Identification of the journey of the means of transport for example voyage, flight or trip number.
arrival_date_time	Date/Time (GMT) dd/mm/yyyy hh:mm:ss	Yes	Date and time of arrival. Cannot be in the past. Must be after 01/01/2021 00:00:00 and cannot be more than 14 days in the future.
arrival_port	String(200)	Yes	Download a list of available choices as per Section 13
place_of_loading	Alpha Numeric (33)	Yes	Place(s) where goods will be loaded
place_of_unloading	Alpha Numeric (33)	Yes	Place(s) where unloading will occur
seal_number	String(100)	No	The identification numbers of the seals affixed to the transport equipment
route	String(20)	Yes	Download a list of available choices as per Section 13

transport_charges	String(40)	Yes	Download a list of available choices as per Section 13
carrier_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes	Carrier EORI. GB EORIs are not accepted, use the XI version instead. The following address fields are not required if using an XI carrier EORI.
carrier_name	String(35)	No Yes if carrier EORI does not begin 'XI'	Carrier name
carrier_street_number	String(35)	No Yes if carrier EORI does not begin 'XI'	Carrier street and number
carrier_city	String(35)	No Yes if carrier EORI does not begin 'XI'	Carrier city
carrier_postcode	String(9)	No Yes if carrier EORI does not begin 'XI'	Carrier postcode
carrier_country	Alpha (2)	No Yes if carrier EORI does not begin 'XI'	Download a list of available choices as per Section 13

An example header payload might look like the following:

```
{
"movement_type":"3",
"identity_no_of_transport":"xy12345",
"nationality_of_transport":"GB",
"conveyance_ref":"",
"arrival_date_time":"25/01/2021 10:00:00",
"arrival_port":"GBAUBELBELBEL",
"place_of_loading":"Birkenhead",
"place_of_unloading":"Belfast",
"seal_number":"s123456",
"route":"gb-ni",
"transport_charges":"Y",
"carrier_eori":"XI123456789012",
"carrier_name":"",
"carrier_street_number":"",
"carrier_city":"",
"carrier_postcode":"",
"carrier_country":""
}
```

A successful insert of a declaration header will return a payload similar to the below:


```
{
  "import_set": "ISET0010509",
  "staging_table": "x_fhmrc_tss_api_declaration_import",
  "result": [  {
    "transform_map": "Declaration Header Import",
    "table": "sn_customerservice_entry_summary_declarations",
    "display_name": "number",
    "display_value": "ENS000000000001152",
    "record_link": "https://api.tsstestenv.co.uk/api/now/table/sn_customerservice_entry_summary_declarations",
    "status": "inserted",
    "sys_id": "ff48d6ab2fc82c50aa92d5ccf699b65a",
    "process_message": "SUCCESS"
  }]
}
```


The key fields in the response payload to check are:

a) The *status* says “inserted”
b) The *display_value* will hold the number of the declaration header to be used when requesting consignments
c) The *process_message* says “SUCCESS”

12.3. Request to create a consignment (Legacy)

In order to add a consignment to an existing registered header the following must be sent, along with a header reference for the header to which this consignment is being added.

Field Name	Format	Mandatory	Usage
declaration_number	String (40)	Yes	The previous supplied number of the declaration that this consignment belongs to
goods_description	String(4000)	Yes	A description of the goods that will be in this consignment
transport_document_reference	Alpha Numeric (35)	Yes	The transport document number
consignor_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes - If EORI is not supplied then the following consignor fields are ALL mandatory	GB EORIs are not accepted, use the XI version instead. European EORIs are accepted If EORI is not supplied then the following consignor fields are ALL mandatory
consignor_name	String(35)	Yes - if EORI is not known	Consignor name only required if EORI is not known
consignor_street_number	String(35)	Yes - if EORI is not known	Consignor street and number only required if EORI is not known
consignor_city	String(35)	Yes - if EORI is not known	Consignor city only required if EORI is not known
consignor_postcode	String(9)	Yes - if EORI is not known	Consignor postcode only required if EORI is not known
consignor_country	Alpha (2)	Yes - if EORI is not known	Consignor country only required if EORI is not known. Download a list of available choices as per Section 13
consignee_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes - If EORI is not supplied then the following consignee fields are ALL mandatory	GB EORIs are not accepted, use the XI version instead. European EORIs are accepted If EORI is not supplied then the following consignee fields are ALL mandatory

consignee_name	String(35)	Yes - if EORI is not known	Consignee name only required if EORI is not known
consignee_street_number	String(35)	Yes - if EORI is not known	Consignee street and number only required if EORI is not known
consignee_city	String(35)	Yes - if EORI is not known	Consignee city only required if EORI is not known
consignee_postcode	String(9)	Yes - if EORI is not known	Consignee postcode only required if EORI is not known
consignee_country	Alpha (2)	Yes - if EORI is not known	Consignee country only required if EORI is not known. Download a list of available choices as per Section 13
importer_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes - If EORI is not supplied then the following importer fields are ALL mandatory	EORI of the party legally responsible for the import declaration. XI EORIs are not accepted, use the GB version instead. European EORIs are accepted If EORI is not supplied then the following importer fields are ALL mandatory
importer_name	String(35)	Yes - if EORI is not known	Importer name only required if EORI is not known
importer_street_number	String(35)	Yes - if EORI is not known	Importer street and number only required if EORI is not known
importer_city	String(35)	Yes - if EORI is not known	Importer city only required if EORI is not known
importer_postcode	String(9)	Yes - if EORI is not known	Importer postcode only required if EORI is not known
importer_country	Alpha (2)	Yes - if EORI is not known	Importer country only required if EORI is not known. Download a list of available choices as per Section 13
exporter_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes - If EORI is not supplied then the following exporter fields are ALL mandatory	XI EORIs are not accepted, use the GB version instead. European EORIs are accepted

			If EORI is not supplied then the following exporter fields are ALL mandatory
exporter_name	String(35)	Yes - if EORI is not known	Exporter name only required if EORI is not known
exporter_street_number	String(35)	Yes - if EORI is not known	Exporter street and number only required if EORI is not known
exporter_city	String(35)	Yes - if EORI is not known	Exporter city only required if EORI is not known
exporter_postcode	String(35)	Yes - if EORI is not known	Exporter postcode only required if EORI is not known
exporter_country	Alpha (2)	Yes - if EORI is not known	Exporter country only required if EORI is not known. Download a list of available choices as per Section 13

An example payload might look like the following:


```
{
"declaration_number":"ENS000000000001577",
"goods_description":"Car parts",
"transport_document_reference":"REF12345",
"consignor_eori":"XI123456789012",
"consignor_name":"",
"consignor_street_number":"",
"consignor_city":"",
"consignor_postcode":"",
"consignor_country":"",
"consignee_eori":"",
"consignee_name":"John Doe",
"consignee_street_number":"12 Street",
"consignee_city":"Belfast",
"consignee_postcode":"BT1 1AA",
"consignee_country":"GB",
"importer_eori":"GB1234567890123",
"importer_name":"",
"importer_street_number":"",
"importer_city":"",
"importer_postcode":"",
"importer_country":"",
"exporter_eori":"GB12345678901234",
"exporter_name":"",
"exporter_street_number":"",
"exporter_city":"",
"exporter_postcode":"",
"exporter_country":""
}
```

A successful insert of a consignment record will return a payload similar to this:


```
{
  "import_set": "ISET0010509",
  "staging_table": "x_fhmrc_tss_api_consignment_import",
  "result": [  {
    "transform_map": "Consignment Import",
    "table": "sn_customerservice_consignment_information",
    "display_name": "number",
    "display_value": "DEC000000000001425",
    "record_link": "https://api.tsstestenv.co.uk/api/now/table/sn_customerservice_consignment_information
/ff48d6ab2fc82c50aa92d5ccf699b65a",
    "status": "inserted",
    "sys_id": "ff48d6ab2fc82c50aa92d5ccf699b65a",
    "process_message": "SUCCESS"
  }]
}
```


The key fields to check in the response payload are:

a) The *status* says “inserted”
b) The *display_value* will hold the number of the consignment to be used when adding goods to it
c) The *process_message* says “SUCCESS”

12.4. Add goods to a consignment (Legacy)

There is a maximum of 99 goods per consignment. To add goods to an existing consignment use the following:

Field Name	Format	Mandatory	Usage
consignment_number	String (40)	Yes	The previous supplied number of the consignment that these goods belong to
equipment_number	Alpha Numeric (17)	No	Equipment number if the goods are containerized
un_dangerous_goods_code	String (4)	No	The UN Dangerous Goods Code if required
type_of_packages	String(40)	Yes	Download a list of available choices as per Section 13
number_of_packages	Numeric (5)	Yes	The number of packages in this goods note. Minimum of 1.
number_of_individual_pieces	Numeric (5)	No	The number of individual pieces in this goods note. Minimum of 1.
package_marks	Alpha Numeric (140)	Yes	Any markings on the packages to be aware of. If not known please enter “ADDR”
gross_weight_kg	Numeric (5)	Yes	Weight rounded up to nearest Kg
goods_description	Alpha Numeric (280)	Yes	A description of the goods
invoice_number	String(35)	No	Invoice number if known
controlled_goods	Boolean (true/false) (5)	Yes	Are these items deemed controlled goods? A value of TRUE or FALSE.
controlled_goods_type	String (40)	No Yes if controlled_goods is ‘true’	Download a list of available choices as per Section 13
commodity_code	String (10)	No Yes if controlled_goods is ‘true’	Download a list of available choices as per Section 13

country_of_origin	Alpha (2)	No Yes if controlled_goods is 'true'	Download a list of available choices as per Section 13
country_of_preferential_origin	Alpha (2)	No	Download a list of available choices as per Section 13. Only processed if controlled_goods is true.
item_invoice_amount	String (100)	No Yes if controlled_goods is 'true'	Invoice amount. Max of 2 decimal places, no commas.

An example goods payload might look like the following:

```
{
"consignment_number":"DEC000000000002051",
"equipment_number":"",
"un_dangerous_goods_code":"",
"type_of_packages":"boxes",
"number_of_packages":"1",
"number_of_individual_pieces":"",
"package_marks":"ADDR",
"gross_weight_kg":"400",
"goods_description":"Car parts",
"invoice_number":"INV123",
"controlled_goods":"true",
"controlled_goods_type":"weapons",
"commodity_code":"106120000",
"country_of_origin":"ES",
"country_of_preferential_origin":"",
"item_invoice_amount":"100.00"
}
```

A successful receipt of a goods record will return a payload similar to this:


```
{
  "import_set": "ISET0010509",
  "staging_table": "x_fhmrc_tss_api_goods_import",
  "result": [  {
    "transform_map": "Goods Import",
    "table": "sn_customerservice_declaration_goods",
    "display_name": "u_goods_description",
    "display_value": "Car parts",
    "record_link": "https://api.tsstestenv.co.uk/api/now/table/sn_customerservice_declaration_goods",
    "status": "inserted",
    "sys_id": "ff48d6ab2fc82c50aa92d5ccf699b65a",
    "process_message": "SUCCESS"
  }]
}
```


The key fields to check in the response payload are:

a) The *status* says “inserted”
b) The *process_message* says “SUCCESS”

12.5. Submit a consignment (Legacy)

To submit a fully completed consignment and the goods records under it, the following payload should be sent:

Field Name	Format	Mandatory	Usage
consignment_number	String (40)	Yes	The previous supplied number of the consignment that is to be submitted
submit	String (6)	Yes	This MUST have the value of 'SUBMIT'

An example payload might look like the following:

```
{
"consignment_number":"DEC000000000001149",
"submit":"SUBMIT"
}
```

A successful submission of a completed consignment will return a payload similar to this:


```
{
  "import_set": "ISET0010509",
  "staging_table": "x_fhmrc_tss_api_consignment_submit",
  "result": [  {
    "transform_map": "Consignment Submit",
    "table": "sn_customerservice_consignment_information",
    "display_name": "number",
    "display_value": "DEC000000000001149",
    "record_link": "https://api.tsstestenv.co.uk/api/now/table/sn_customerservice_consignment_information",
    "status": "updated",
    "process_message": "SUCCESS",
    "sys_id": "ff48d6ab2fc82c50aa92d5ccf699b65a"
  }]
}
```


The key fields to check in the response payload are:

a) The *status* says “updated”
b) The *display_value* should contain the name that you supplied
c) The *process_message* says “SUCCESS”

12.6. Declaration header (create, update)

In order to create a new or update an existing declaration header a POST method must be sent. The content of the data payload should be in the following format. The mandatory status applies to both create and update, however, all fields you require populated must be sent for an update. This means if you leave an optional field empty it will be blanked or set back to the systems default value. If you wish to empty an optional field then leave it blank, if you need it to stay the same then send the existing value. Updates can only be performed under certain circumstances, please check in the guides mentioned at the beginning of this document for details. If an update is not allowed then an error will be returned.

Field Name	Format	Mandatory	Usage
op_type	String Value supplied must be "create" or "update"	Yes	This will be used to indicate the type of transaction being sent. See mandatory requirements to check which fields are required for each op_type.
declaration_number	String (40)	No – create Yes – update	The reference number of the Declaration Header previous supplied.
movement_type	String (40)	Yes	Download a list of available choices as per Section 13
identity_no_of_transport	String (27)	Yes Not required if "Air" is selected as movement_type	The identity number of the transport
nationality_of_transport	Alpha (2)	No Yes If movement_type is Ro/Ro (Accompanied / Unaccompanied) this field is mandatory, otherwise it is not required and will not be processed	See mandatory requirements. Download a list of available choices as per Section 13
conveyance_ref	Alpha Numeric (35) if movement_type is Air, conveyance ref has a limit of 8 chars	No Yes if "Air" is selected as movement_type and should be the IATA number	Identification of the journey of the means of transport for example voyage, flight or trip number.
arrival_date_time	Date/Time (GMT) dd/mm/yyyy hh:mm:ss	Yes	Date and time of arrival. Cannot be in the past. Must be after 01/01/2021

			00:00:00 and cannot be more than 14 days in the future.
arrival_port	String(200)	Yes	Download a list of available choices as per Section 13
place_of_loading	Alpha Numeric (33)	Yes	Place(s) where goods will be loaded
place_of_unloading	Alpha Numeric (33)	Yes	Place(s) where unloading will occur
seal_number	String(20)	No	The identification numbers of the seals affixed to the transport equipment
route	String(20)	Yes	Download a list of available choices as per Section 13
transport_charges	String(40)	Yes	Download a list of available choices as per Section 13
carrier_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes	Carrier EORI. GB EORIs are not accepted, use the XI version instead. The following address fields are not required if using an XI carrier EORI.
carrier_name	String(35)	No Yes if carrier EORI does not begin 'XI'	Carrier name
carrier_street_number	String(35)	No Yes if carrier EORI does not begin 'XI'	Carrier street and number
carrier_city	String(35)	No Yes if carrier EORI does not begin 'XI'	Carrier city
carrier_postcode	String(9)	No Yes if carrier EORI does not begin 'XI'	Carrier postcode
carrier_country	Alpha (2)	No Yes if carrier EORI does not begin 'XI'	Download a list of available choices as per Section 13
haulier_eori	String (200)	No	Haulier EORI if different from carrier

An example declaration header record payload (for a create) might look like the following:

```
{
"op_type":"create",
“declaration_number”:””,
"movement_type":"3",
"identity_no_of_transport":"xy12345",
"nationality_of_transport":"GB",
"conveyance_ref":"",
"arrival_date_time":"25/01/2021 10:00:00",
"arrival_port":"GBAUBELBELBEL",
"place_of_loading":"Birkenhead",
"place_of_unloading":"Belfast",
"seal_number":"s123456",
"route":"gb-ni",
"transport_charges":"Y",
"carrier_eori":"XI123456789012",
"carrier_name":"",
"carrier_street_number":"",
"carrier_city":"",
"carrier_postcode":"",
"carrier_country":"",
"haulier_eori":""
}
```

A successful insert of a declaration header will return a payload similar to the below:

```
{"result": {
    "status": "created",
    "process_message": "SUCCESS",
    "reference": "ENS000000000001152"
}}
```

The fields in the response payload to check are:

a) The *status* says “created” or “updated”
b) The *process_message* says “SUCCESS”
c) The *reference* will hold the number of the declaration header that was either created or updated. This can then be used when creating consignments.

12.7. Declaration header (cancel)

In order to cancel an existing declaration header a POST method must be sent. The content of the data payload should be in the following format. A cancel can only be performed under certain circumstances, please check in the guides mentioned at the beginning of this document for details. If a cancel is not allowed then an error will be returned.

Field Name	Format	Mandatory	Usage
op_type	String Value supplied must be "cancel"	Yes	This will be used to indicate the type of transaction being sent
declaration_number	String (40)	Yes	The reference number of the Declaration

An example header payload might look like the following:

```
{
"op_type":"cancel",
"declaration_number":"ENS000000000001152"
}
```

A successful cancel of a declaration header will return a payload similar to the below:

```
{"result": {
    "status": "cancelled",
    "process_message": "SUCCESS",
    "reference": "ENS000000000001152"
}}
```

The fields in the response payload to check are:

a) The *status* says "updated"
b) The *process_message* says "SUCCESS"
c) The *reference* will hold the number of the declaration header that was cancelled.

12.8. Declaration header (read)

In order to read an existing declaration header a GET method must be sent. The GET will be structured as below. You can read back any of the fields that you may have supplied previously plus any of the additional fields listed in the table below.

GET https://*<instance_name>*/api/x_fhmrc_tss_api/v1/tss_api/headers?*<parameters>*

Where;

<instance_name> will be according to the table above entitled "Environments"

<parameters> the parameters required are

reference This is the reference number of the declaration header

fields This is a comma separated list of the fields to that you want their values to be returned. If no fields are provided then no fields will be returned, therefore a minimum of one field must be specified.

Additional fields that may be requested:

Field Name	Format	Usage
status	String	The current status of the declaration header

An example read request might look like the following:

GET https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/headers?reference=ENS000000000001152&fields=status,arrival_port,seal_number,route,carrier_eori

A successful request will return a payload similar to the example below, errors are explained in Section 12.22 below:

```
{"result": {
        "reference":"ENS000000000001152",
        “status”:”cancelled”,
        "arrival_port":"GBAUBELBELBEL",
        "seal_number":"s123456",
        “route”:”gb-ni”,
        "carrier_eori":"XI123456789012"
}}
```

12.9. Consignment (create, update)

In order to add a consignment to an existing registered declaration header or update an existing consignment that you have created a POST method must be used and the following data payload must be sent. The mandatory status applies to both create and update, though, all fields you require populated must be sent for an update. This means if you leave an optional field empty it will be blanked or set back to the systems default value. If you wish to empty an optional field then leave it blank, if you need it to stay the same then send the existing value. Updates can only be performed under certain circumstances, please check in the guides mentioned at the beginning of this document for details. If an update is not allowed then an error will be returned.

Field Name	Format	Mandatory	Usage
op_type	String Value supplied must be create or update	Yes	This will be used to indicate the type of transaction being sent. See mandatory requirements to check which fields are required for each op_type.
declaration_number	String (40)	Yes - create No - update	The previous supplied number of the declaration that this consignment belongs to. This must be blank for an update.
consignment_number	String (40)	No - create Yes - update	The number of the consignment you wish to update
goods_description	String(254)	Yes	A description of the goods that will be in this consignment
transport_document_number	Alpha Numeric (35)	Yes	The transport document number
controlled_goods	yes/no	Yes	Set to “yes” if this Consignment contains controlled goods or “no” if it does not.
goods_domestic_status	String(1)	Yes If controlled goods is true	Download a list of available choices as per Section 13
supervising_customs_office	String(8)	No Optional if controlled goods is true	Download a list of available choices as per Section 13

customs_warehouse_identifier	String(18)	No Optional if controlled goods is true	Identifier for the customs warehouse
ducr	String(35)	No Optional if controlled goods is true	Declaration Unique Consignment Reference
consignor_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes If EORI is not supplied then the following consignor fields are ALL mandatory	GB EORIs are not accepted, use the XI version instead. European EORIs are accepted If EORI is not supplied then the following consignor fields are ALL mandatory
consignor_name	String(35)	Yes if EORI is not known	Consignor name only required if EORI is not known
consignor_street_number	String(35)	Yes if EORI is not known	Consignor street and number only required if EORI is not known
consignor_city	String(35)	Yes if EORI is not known	Consignor city only required if EORI is not known
consignor_postcode	String(9)	Yes if EORI is not known	Consignor postcode only required if EORI is not known
consignor_country	Alpha (2)	Yes if EORI is not known	Consignor country only required if EORI is not known. Download a list of available choices as per Section 13
consignee_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes If EORI is not supplied then the following consignee fields are ALL mandatory	GB EORIs are not accepted, use the XI version instead. European EORIs are accepted If EORI is not supplied then the following consignee fields are ALL mandatory
consignee_name	String(35)	Yes if EORI is not known	Consignee name only required if EORI is not known
consignee_street_number	String(35)	Yes if EORI is not known	Consignee street and number only required if EORI is not known
consignee_city	String(35)	Yes if EORI is not known	Consignee city only required if EORI is not known
consignee_postcode	String(9)	Yes if EORI is not known	Consignee postcode only required if EORI is not known

consignee_country	Alpha (2)	Yes if EORI is not known	Consignee country only required if EORI is not known. Download a list of available choices as per Section 13
importer_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes If EORI is not supplied then the following importer fields are ALL mandatory	EORI of the party legally responsible for the import declaration. XI EORIs are not accepted, use the GB version instead. European EORIs are accepted If EORI is not supplied then the following importer fields are ALL mandatory
importer_name	String(35)	Yes if EORI is not known	Importer name only required if EORI is not known
importer_street_number	String(35)	Yes if EORI is not known	Importer street and number only required if EORI is not known
importer_city	String(35)	Yes if EORI is not known	Importer city only required if EORI is not known
importer_postcode	String(9)	Yes if EORI is not known	Importer postcode only required if EORI is not known
importer_country	Alpha (2)	Yes if EORI is not known	Importer country only required if EORI is not known. Download a list of available choices as per Section 13
exporter_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes - If EORI is not supplied then the following exporter fields are ALL mandatory	XI EORIs are not accepted, use the GB version instead. European EORIs are accepted If EORI is not supplied then the following exporter fields are ALL mandatory
exporter_name	String(35)	Yes if EORI is not known	Exporter name only required if EORI is not known
exporter_street_number	String(35)	Yes if EORI is not known	Exporter street and number only required if EORI is not known
exporter_city	String(35)	Yes if EORI is not known	Exporter city only required if EORI is not known

exporter_postcode	String(35)	Yes if EORI is not known	Exporter postcode only required if EORI is not known
exporter_country	Alpha (2)	Yes if EORI is not known	Exporter country only required if EORI is not known. Download a list of available choices as per Section 13
header_previous_document	Nested field (see example below)		This is a header for the header previous document data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or delete	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below).
previous document_ref	String (35)	No	Previous document reference. This field will be used as the unique reference for updates and deletes.
previous document class	String(1)	No	Download a list of available choices as per Section 13
previous_document_type	String(3)	No	Download a list of available choices as per Section 13
holder_of_authorisation	Nested field (see example below)		This is a header for the holder of authorisation data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or delete	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
auth_role_id	String(17)	No	Authorisation Role ID. This field will be used as the unique reference for updates and deletes.
auth_type_code	String(5)	No	Download a list of available choices as per Section 13

An example consignment record payload (for a create) might look like the following:


```
{
"op_type":"create",
"declaration_number":"ENS000000000001577",
“consignment_number”:””,
"goods_description":"Car parts",
"transport_document_number":"REF12345",
"controlled_goods":"no",
"goods_domestic_status":"D",
"supervising_customs_office":"",
"customs_warehouse_identifier":"",
"ducr":"",
"consignor_eori":"XI123456789012",
"consignor_name":"",
"consignor_street_number":"",
"consignor_city":"",
"consignor_postcode":"",
"consignor_country":"",
"consignee_eori":"",
"consignee_name":"John Doe",
"consignee_street_number":"12 Street",
"consignee_city":"Belfast",
"consignee_postcode":"BT1 1AA",
"consignee_country":"GB",
"importer_eori":"GB1234567890123",
"importer_name":"",
"importer_street_number":"",
"importer_city":"",
"importer_postcode":"",
"importer_country":"",
"exporter_eori":"GB12345678901234",
```


```
"exporter_name":"",
"exporter_street_number":"",
"exporter_city":"",
"exporter_postcode":"",
"exporter_country":"",
"header_previous_document": [
        {
        "op_type": "create",
        "previous_document_class": "X",
        "previous_document_type": "355",
        "previous_document_ref": "80085"
        }
],
"holder_of_authorisation": [
        {
        "op_type": "create",
        "auth_role_id": "GB000012340001",
        "auth_type_code": "SDE"
        }
]
}
```


A successful insert of a consignment record will return a payload similar to below:


```
{"result": {
    "status": "created",
    "process_message": "SUCCESS",
    "reference": "DEC000000000001425"
}}
```

The fields in the response payload to check are:

a) The *status* says “created” or “updated”
b) The *process_message* says “SUCCESS”
a) The *reference* will hold the number of the consignment to be used when adding goods to it

12.10. Consignment (submit, cancel)

In order to submit or cancel an existing consignment a POST method must be sent. The content of the data payload should be in the following format. A cancel can only be performed under certain circumstances, please check in the guides mentioned at the beginning of this document for details. If a cancel is not allowed then an error will be returned.

Field Name	Format	Mandatory	Usage
op_type	String Value supplied must be “submit” or “cancel”	Yes	This will be used to indicate the type of transaction being sent.
consignment_number	String (40)	Yes	The previous supplied number on creation of the consignment

An example consignment payload (for a cancel) might look like the following:

```
{
"op_type":"cancel",
"consignment_number": "DEC000000000001425"
}
```

A successful cancel of a consignment record will return a payload similar to the below:

```
{"result": {
    "status": "cancelled",
    "process_message": "SUCCESS”,
    "reference": "DEC000000000001425"
}}
```

The fields in the response payload to check are:

c) The *status* says “updated”
d) The *process_message* says “SUCCESS”
b) The *reference* will hold the number of the consignment which has been cancelled

12.11. Consignment (read)

In order to read an existing consignment a GET method must be sent. The GET will be structured as below:

```
GET https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/consignments?<parameters>
```

Where;

<instance_name>	will be according to the table above entitled "Environments"
<parameters>	The parameters required are
reference	This is the reference number of the Consignment
fields	This is a comma separated list of the fields to that you want their values to be returned. If no fields are provided then no fields will be returned, therefore a minimum of one field must be specified.

If one of the fields requested is a nested payload then all existing nested records in that section will be returned.

The list of fields available are those mentioned in the create resource above plus any others listed below:

Field Name	Format	Usage
status	String	The current status of the consignment
movement_reference_number	String	This will contain the movement reference number for the consignment
eori_for_eidr	String	Reference for movement under EIDR
error_code	String	Not currently used
error_message	String	Error message if consignment is in error
total_packages	Numeric	Total number of packages in this consignment
gross_mass_kg	Numeric	Total mass of all packages in this consignment in KG

It is not possible to select only a single sub-field so a whole top-level field needs to be supplied. For example *holder_of_authorisation* is allowed but the sub-field of *auth_type_code* is not.

An example read request might look like the following:

```
GET
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/consignments?reference=DEC000000000001425&fields=status,transport_document_number,consignor_eori,importer_eori,holder_of_authorisation
```

A successful request will return a payload similar to the example below, errors are explained in Section 12.22 below:

```
{"result": {
"reference":" DEC000000000001425",
“status”:”draft”,
"transport_document_number":"REF12345",
"consignor_eori":"XI123456789012",
"importer_eori":"GB1234567890123",
"holder_of_authorisation": [
        {
        "auth_role_id": "GB000012340001",
        "auth_type_code": "SDE"
        }
]
}}
```

12.12. Goods Item (create, update)

Use this resource to create and update goods items for ENS, SFD and supplementary declarations. The consignment_number field needs to contain the parent for the goods item. There is a maximum of 99 goods per consignment. In order to add goods to an existing consignment or to update goods a POST method must be sent. The content of the data payload should be in the following format. The mandatory status applies to both create and update, however, all fields you require populated must be sent for an update. This means if you leave an optional field empty it will be blanked or set back to the systems default value. If you wish to empty an optional field then leave it blank, if you need it to stay the same then send the existing value. Updates can only be performed under certain circumstances, please check in the guides mentioned at the beginning of this document for details. If an update is not allowed then an error will be returned.

Field Name	Format	Mandatory	Usage
op_type	String Value supplied must be create or update	Yes	This will be used to indicate the type of transaction being sent. See mandatory requirements to check which fields are required for each op_type.
consignment_number	String (40)	Yes	The previously supplied number of the consignment that these goods belong to. This could be the ENS, SFD or supp dec consignment number. This must be blank or omitted for an update.
goods_id	String (32)	No - create Yes - update	The previous supplied ID of the goods which needs to be updated
equipment_number	Alpha Numeric (17)	No	Container number if the goods are containerized
un_dangerous_goods_code	String (4)	No - ONLY available for Goods Items under an ENS or SFD	The UN Dangerous Goods Code if required
type_of_packages	String(40)	Yes	Download a list of available choices as per Section 13
number_of_packages	Numeric (5)	Yes	The number of packages in this goods note. Minimum of 1.
number_of_individual_pieces	Numeric (5)	No - ONLY available for Goods Items under an ENS or SFD	The number of individual pieces in this goods note. Minimum of 1.

package_marks	String (140)	Yes	Any markings on the packages to be aware of. If not known please enter "ADDR"
gross_mass_kg	Numeric (5)	Yes	Gross mass rounded up to nearest Kg
net_mass_kg	Numeric (5)	No for ENS & SFD Yes for Supp Dec	Net mass rounded up to nearest Kg
goods_description	String (255)	Yes	A description of the goods
invoice_number	String (35)	No for ENS & SFD Yes for Supp Dec	Invoice number if known
controlled_goods	yes/no	Yes	Set to "yes" if this Goods Item contains controlled goods or "no" if it does not.
controlled_goods_type	String (40)	Yes if the field controlled_goods is 'yes'	Download a list of available choices as per Section 13
commodity_code	String (10)	Yes if the field controlled_goods is 'yes'	Download a list of available choices as per Section 13
preference	Aplha (4)	Yes for Supp Dec Not required for ENS or SFD	Download a list of available choices as per Section 13
country_of_origin	Alpha (2)	For ENS and SFD: Yes if the field controlled_goods is 'yes' For Supp Dec: Yes if the field preference is between 100 and 199 inclusive	Download a list of available choices as per Section 13
country_of_preferential_origin	Alpha (2)	Yes for Supp Dec if the field preference is not between 100 and 199 inclusive. Not required for ENS and SFD	Download a list of available choices as per Section 13
item_invoice_amount	String (100)	Yes if the field controlled_goods is 'yes'	Invoice amount. Max of 2 decimal places, no commas.
item_invoice_currency	String (8)	Yes if the field controlled_goods is 'yes'	See list of currencies available in sections below

procedure_code	String (4)	Yes if the field controlled_goods is 'yes'	Download a list of available choices as per Section 13
additional_procedure_code	String (3)	Yes if the field controlled_goods is 'yes'	Download a list of available choices as per Section 13
taric_code	String (20)	No – optional if the field controlled_goods is 'yes'	Taric code
cus_code	String (8)	No – optional if the field controlled_goods is 'yes'	Cus code
national_additional_codes	String (4)	No – optional if the field controlled_goods is 'yes'	Download a list of available choices as per Section 13
ni_additional_information_codes	String (40)	Yes – ONLY available for Goods Items under a Supplementary Declaration	Northern Ireland additional information codes. Download a list of available choices as per Section 13
supplementary_units	String (17)	No – optional if the field controlled_goods is 'yes'	Supplementary units
tax_base_unit	String (4)	No – optional if the field controlled_goods is 'yes'	Download a list of available choices as per Section 13
tax_base_quantity	String (16)	No – optional if the field controlled_goods is 'yes'	Tax base quantity
additional_procedures	Nested field (see example below)		This is a header for the additional procedures data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or delete	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
additional_procedure_code	String (3)	Yes	Download a list of available choices as per Section 13. This field will be used as the unique reference for updates and deletes.

document_references	Nested field (see example below)		This is a header for the document references data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or update	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
document_reference	String(35)	No	The document reference. This field will be used as the unique reference for updates and deletes.
document_code	String(4)	No	Download a list of available choices as per Section 13
document_status	String(2)	No	Download a list of available choices as per Section 13
document_part	String(5)	No	The document part reference
document_reason	String(35)	No	The document reason
date_of_validity	Date (GMT) (dd/mm/yyyy)	No	The date of validity for this document
issuing_authority	String(70)	No	The issuing authority for this document
amount	Numeric(9)	No	The amount against this document
currency	String(3)	No	Download a list of available choices as per Section 13
measurement_unit	String(4)	No	Download a list of available choices as per Section 13
quantity	String(16)	No	The quantity for this document
additional_information	Nested field (see example below)		This is a header for the additional information data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or update	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
additional_info_code	String(5)	No	Download a list of available choices as per Section 13. This field will be used

			as the unique reference for updates and deletes.
additional_info_description	String(512)	No	Description of the information
detail_previous_document	Nested field (see example below)		This is a header for the detail previous document data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or update	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
previous_document_ref	String (40)	No	Reference for the previous document. This field will be used as the unique reference for updates and deletes.
previous_document_type	String (3)	No	Download a list of available choices as per Section 13
previous_document_class	String (1)	No	Download a list of available choices as per Section 13
item_add_ded	Nested field (see example below)	Only for Supplementary Declaration	This is a header for the item adjustments and deductions data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or update	Yes Only for Supplementary Declaration	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
item_add_ded_code	String (2)	No Only for Supplementary Declaration	The code from the choice lists see below. This field will be used as the unique reference for updates and deletes.
Item_add_ded_value	Numeric	No Only for Supplementary Declaration	The value of the addition or deduction

NB All goods item fields should be supplied for an update unless specified, with the exception of the nested fields. These only need to be specified if you wish to create, update or delete one of them. See second example below.

Example goods item record payload for a create or an update might look like the following. The op_type would need to be “update” for the update transaction.


```
{
"op_type":"create",
"consignment_number":"DEC000000000002051",
“goods_id”:””,
"equipment_number":"",
"un_dangerous_goods_code":"",
"type_of_packages":"boxes",
"number_of_packages":"1",
"number_of_individual_pieces":"",
"package_marks":"ADDR",
"gross_mass_kg":"400",
"net_mass_kg":"",
"goods_description":"Car parts",
"invoice_number":"INV123",
"controlled_goods":"yes",
"controlled_goods_type":"weapons",
"commodity_code":"106120000",
"country_of_origin":"ES",
"item_invoice_amount":"100.00",
"item_invoice_currency":"",
"procedure_code":"",
"additional_procedure_code":"",
"taric_code":"",
"cus_code":"",
"national_additional_codes":"",
"ni_additional_information_codes":"",
"supplementary_units":"",
"tax_base_unit":"",
"tax_base_quantity":"",
```


```
"additional_procedures": [
            {
            "op_type": "create",
            "additional_procedure_code": "D11"
            },
            {
            "op_type": "create",
            "additional_procedure_code": "D21"
            },
            {
            "op_type": "create",
            "additional_procedure_code": "D16"
            },
            {
            "op_type": "create",
            "additional_procedure_code": "D51"
            }
],
"document_references": [
            {
            "op_type": "create",
            "document_code": "D019",
            "document_reference": "doc12345",
            "document_status": "AT",
            "document_part": "",
            "document_reason": "",
            "date_of_validity": "",
            "issuing_authority": "",
            "currency": "",
            "measurement_unit": "",
            "quantity": ""
            }
],
"additional_information": [
```


```
            {
            "op_type": "create",
            "additional_info_code": "AG202",
            "additional_info_description": ""
            }
],
"detail_previous_document": [
            {
            "op_type": "create",
            "previous_document_ref": "Ref1234",
            "previous_document_type": "740",
            "previous_document_class": "X"
            },
            {
            "op_type": "create",
            "previous_document_ref": "Ref5678",
            "previous_document_type": "741",
            "previous_document_class": "Y"
            }
],
"item_add_ded": [
            {
            "op_type": "create",
            "item_add_ded_code": "AM",
            "Item_add_ded_value": "100"
            },
            {
            "op_type": "create",
            "item_add_ded_code": "BB",
            "Item_add_ded_value": "50"
            }
]
}
```

The sample payload below shows how to delete an additional information record from a goods item. As mentioned all goods item fields must be populated as they currently stand for an update but notice the op_type is set to “delete” to remove the additional information record related to it.

```
{
"op_type":"update",
"consignment_number":"DEC000000000002051",
“goods_id”:””,
"equipment_number":"",
"un_dangerous_goods_code":"",
"type_of_packages":"boxes",
"number_of_packages":"1",
"number_of_individual_pieces":"",
"package_marks":"ADDR",
"gross_weight_kg":"400",
"goods_description":"Car parts",
"invoice_number":"INV123",
"controlled_goods":"true",
"controlled_goods_type":"weapons",
"commodity_code":"106120000",
"country_of_origin":"ES",
"item_invoice_amount":"100.00",
"additional_information": [
        {
                "op_type": "delete",
                "additional_info_code": "AG202",
                "additional_info_description": ""
        }
],
}
```

A successful insert of a goods record will return a payload similar to below:

```
{"result": {
    "status": "created",
    "process_message": "SUCCESS",
    "reference": "00991e871bcd24107a49db5be54bcbf3"
}}
```

A successful update of a goods record will return a payload similar to below. This would also be shown for any changes made to the nested sub records as no separate response is shown for them currently.

```
{
    "status": "updated",
    "process_message": "SUCCESS",
    "reference": "00991e871bcd24107a49db5be54bcbf3"
}
```

The fields in the response payload to check are:

e) The *status* says “created” or “updated”
f) The *process_message* says “SUCCESS”
c) The *reference* will hold the reference of the goods item record created or updated

12.13. Goods item (delete)

In order to delete goods from an existing consignment a POST method must be sent. The content of the data payload should be in the following format. A delete can only be performed under certain circumstances - please check in the guides mentioned at the beginning of this document for details. If a delete is not allowed then an error will be returned. When a Goods Item is deleted all nested records will automatically be deleted with it.

Field Name	Format	Mandatory	Usage
op_type	String Value supplied must delete	Yes	This will be used to indicate the type of transaction being sent.
goods_id	String (32)	Yes	The previous supplied number of the goods which needs to be deleted from the consignment

An example goods payload might look like the following:

```
{
"op_type":"delete",
"goods_id":"ff48d6ab2fc82c50aa92d5ccf699b65a"
}
```

A successful delete of a goods record will return a payload similar to the below:

```
{"result": {
    "status": "deleted",
    "process_message": "SUCCESS",
    "reference": "00991e871bcd24107a49db5be54bcbf3"
}}
```

The fields in the response payload to check are:

g) The *status* says “deleted”
h) The *process_message* says “SUCCESS”
d) The *reference* will hold reference number of the Goods Item

12.14. Goods item (lookup)

In order to identify the reference number(s) of any Goods Items under either SFD's or supplementary declarations a lookup call will be needed. The method used will be a GET and will need to be in the following format:

GET **Error! Hyperlink reference not valid.**>

Where:

<instance_name>	will be according to the table above entitled "Environments"
<parameters>	the parameters required are
sfd_number	This is the reference number of the SFD to which the Goods Items belong
sup_dec_number	This is the reference number of the supplementary declaration to which the Goods Items belong

If you are looking for goods under an SFD use the *sfd_number* or if you are looking for goods under a supplementary declaration use the *sup_dec_number.* The payload will return with all goods items under that SFD or supplementary declaration listing their reference, description and package marks to aid identification.

An example Goods Item lookup request might look like the following:

GET https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/goods?sfd_number=DEC000000000001106

A successful response will return a payload similar to the below:


```
{"result": {
“sfd_number”:”DEC000000000001106”,
"goods": [
        {
                "goods_id": "576435dc1b8da450e159620be54bcbec",
                "goods_description": "Car parts",
                "package_marks": "345"
        },
        {
                "goods_id": "03a9efc01b256c1004473325464bcb09",
                "goods_description": "Body panels",
                "package_marks": "A91262"
        },
        {
                "goods_id": "03ca614f1b0d24107a49db5be54bcbff",
                "goods_description": "Suspension brackets",
                "package_marks": "34544421"
        }
]
}}
```

12.15. Goods item (read)

In order to read an existing declaration header a GET method must be sent. The GET will be structured as below:

```
GET https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/goods?<parameters>
```

Where:

<instance_name>	will be according to the table above entitled “Environments”
<parameters>	the parameters required are
reference	This is the ID number of the goods
fields	This is a comma separated list of the fields to that you want their values to be returned. If no fields are provided then no fields will be returned, therefore a minimum of one field must be specified.

If one of the fields requested is a nested payload then all existing nested records in that section will be returned.

The list of fields available are those mentioned in the create resource above plus any others listed below:

Field Name	Format	Usage

It is not possible to select only a single sub-field so a whole top-level field needs to be supplied. For example *additional_procedures* is allowed but the sub-field of *additional_procedure_code* is not.

An example read request might look like the following:

```
GET
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/goods?reference=00991e871bcd24107a49db5be54bcbf3&fields=gross_weight_kg,commodity_code,item_invoice_amount,additional_information
```

A successful request will return a payload similar to the example below, errors are explained in Section 12.22 below:

```
{"result": {
"reference":"00991e871bcd24107a49db5be54bcbf3",
"gross_weight_kg":"400",
"commodity_code":"106120000",
"item_invoice_amount":"100.00",
"additional_information": [
        {
                "additional_info_code": "AG202",
                "additional_info_description": ""
        }
]
}}
```

12.16. Simplified frontier declaration (lookup)

In order to identify the reference number of a simplified frontier declaration (SFD) a lookup call will be needed. The method used will be a GET and will need to be in the following format.

GET https://*<instance_name>*/api/x_fhmrc_tss_api/v1/tss_api/simplified_frontier_declarations?*<parameters>*

Where:

<instance_name>	will be according to the table above entitled "Environments"
<parameters>	the parameters required are
consignment_number	This is the reference number of the consignment to which the SFD belongs. If created via the API this would have been returned in the response payload on consignment creation.

An example SFD lookup request might look like the following:

GET https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/simplified_frontier_declarations?consignment_number=DEC000000000002051

A response will return a payload similar to the below:

```
{"result": {
        "consignment_number":"DEC000000000002051",
        "sfd_number":"DEC000000000001182"
}}
```

12.17. Simplified frontier declaration (read)

In order to read an existing simplified frontier declaration a GET method must be sent. The GET will be structured as below:

```
GET
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/simplified_frontier_declarations?<parameters>
```

Where:

<instance_name>	will be according to the table above entitled “Environments”
<parameters>	The parameters required are
reference	This is the reference number of the simplified frontier declaration
fields	This is a comma separated list of the fields to that you want their values to be returned. If no fields are provided then no fields will be returned, therefore a minimum of one field must be specified.

If one of the fields requested is a nested payload then all existing nested records in that section will be returned.

The list of fields available are those mentioned in the SFD update resource described later plus any others listed below:

Field Name	Format	Usage
status	String	The current status of the SFD
movement_reference_number	String	This will contain the movement reference number for the consignment
eori_for_eidr	String	Reference for movement under EIDR
error_code	String	Not currently used
error_message	String	Error message if Consignment is in error

An example read request might look like the following:

```
GET
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/simplified_frontier_declarations?reference=DEC000000000001182&fields=status,goods_description,transport_document_number,importer_eori,controlled_goods,ducr,holder_of_authorisation
```

A successful request will return a payload similar to the example below, errors are explained in Section 12.22 below:

```
{"result": {
"reference":"DEC000000000001182",
"status":"Authorised for movement",
"goods_description":"Car parts",
"transport_document_number":"123456",
"importer_eori":"XI123456789012",
"controlled_goods":"yes",
"ducr":"",
"holder_of_authorisation": [
        {
        "auth_role_id": "GB000012340001",
        "auth_type_code": "SDE"
        }
]
}}
```

12.18. Simplified frontier declaration (update)

The payload to be sent in order to update a simplified frontier declaration will require a POST in the following format.

Field Name	Format	Mandatory	Usage
op_type	String Value supplied must be create or update	Yes	This will be used to indicate the type of transaction being sent. See mandatory requirements to check which fields are required for each op_type.
sfd_number	String (40)	Yes	The number of the consignment you wish to update
goods_description	String(254)	Yes	A description of the goods that will be in this consignment
transport_document_number	Alpha Numeric (35)	Yes	The transport document number
controlled_goods	yes/no	Yes	Set to “yes” if this SFD contains controlled goods or “no” if it does not.
goods_domestic_status	String(1)	Yes If controlled goods is true	Download a list of available choices as per Section 13
supervising_customs_office	String(8)	No Optional if controlled goods is true	Download a list of available choices as per Section 13
customs_warehouse_identifier	String(18)	No Optional if controlled goods is true	Identifier for the customs warehouse
ducr	String(35)	No Optional if controlled goods is true	Declaration Unique Consignment Reference
consignor_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes If EORI is not supplied then the following consignor fields are ALL mandatory	GB EORIs are not accepted, use the XI version instead. European EORIs are accepted If EORI is not supplied then the following consignor fields are ALL mandatory
consignor_name	String(35)	Yes if EORI is not known	Consignor name only required if EORI is not known

consignor_street_number	String(35)	Yes if EORI is not known	Consignor street and number only required if EORI is not known
consignor_city	String(35)	Yes if EORI is not known	Consignor city only required if EORI is not known
consignor_postcode	String(9)	Yes if EORI is not known	Consignor postcode only required if EORI is not known
consignor_country	Alpha (2)	Yes if EORI is not known	Consignor country only required if EORI is not known. Download a list of available choices as per Section 13
consignee_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes If EORI is not supplied then the following consignee fields are ALL mandatory	GB EORIs are not accepted, use the XI version instead. European EORIs are accepted If EORI is not supplied then the following consignee fields are ALL mandatory
consignee_name	String(35)	Yes if EORI is not known	Consignee name only required if EORI is not known
consignee_street_number	String(35)	Yes if EORI is not known	Consignee street and number only required if EORI is not known
consignee_city	String(35)	Yes if EORI is not known	Consignee city only required if EORI is not known
consignee_postcode	String(9)	Yes if EORI is not known	Consignee postcode only required if EORI is not known
consignee_country	Alpha (2)	Yes if EORI is not known	Consignee country only required if EORI is not known. Download a list of available choices as per Section 13
importer_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes If EORI is not supplied then the following importer fields are ALL mandatory	EORI of the party legally responsible for the import declaration. XI EORIs are not accepted, use the GB version instead. European EORIs are accepted If EORI is not supplied then the following importer fields are ALL mandatory

importer_name	String(35)	Yes if EORI is not known	Importer name only required if EORI is not known
importer_street_number	String(35)	Yes if EORI is not known	Importer street and number only required if EORI is not known
importer_city	String(35)	Yes if EORI is not known	Importer city only required if EORI is not known
importer_postcode	String(9)	Yes if EORI is not known	Importer postcode only required if EORI is not known
importer_country	Alpha (2)	Yes if EORI is not known	Importer country only required if EORI is not known. Download a list of available choices as per Section 13
exporter_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes - If EORI is not supplied then the following exporter fields are ALL mandatory	XI EORIs are not accepted, use the GB version instead. European EORIs are accepted If EORI is not supplied then the following exporter fields are ALL mandatory
exporter_name	String(35)	Yes if EORI is not known	Exporter name only required if EORI is not known
exporter_street_number	String(35)	Yes if EORI is not known	Exporter street and number only required if EORI is not known
exporter_city	String(35)	Yes if EORI is not known	Exporter city only required if EORI is not known
exporter_postcode	String(35)	Yes if EORI is not known	Exporter postcode only required if EORI is not known
exporter_country	Alpha (2)	Yes if EORI is not known	Exporter country only required if EORI is not known. Download a list of available choices as per Section 13
header_previous_document	Nested field (see example below)		This is a header for the header previous document data that is required. Repeat the fields within this header for each set of data required.
op_type	String	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be

	Value supplied must be create, update or delete		different for each (see the example below). The next field will be used as the unique reference.
previous_document_ref	String (35)	No	Previous document reference
previous_document class	String(1)	No	Download a list of available choices as per Section 13
previous_document_type	String(3)	No	Download a list of available choices as per Section 13
holder_of_authorisation	Nested field (see example below)		This is a header for the holder of authorisation data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be create, update or delete	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
auth_role_id	String(17)	No	Authorisation Role ID
auth_type_code	String(5)	No	Download a list of available choices as per Section 13

An example SFD update payload might look like the following:


```
{
"op_type":"update",
"sfd_number":"DEC000000000001182",
"goods_description":"Car parts",
"transport_document_number":"REF12345",
"controlled_goods":"no",
"goods_domestic_status":"D",
"supervising_customs_office":"",
"customs_warehouse_identifier":"",
"ducr":"",
"consignor_eori":"XI123456789012",
"consignor_name":"",
"consignor_street_number":"",
"consignor_city":"",
"consignor_postcode":"",
"consignor_country":"",
"consignee_eori":"",
"consignee_name":"John Doe",
"consignee_street_number":"12 Street",
"consignee_city":"Belfast",
"consignee_postcode":"BT1 1AA",
"consignee_country":"GB",
"importer_eori":"GB1234567890123",
"importer_name":"",
"importer_street_number":"",
"importer_city":"",
"importer_postcode":"",
"importer_country":"",
"exporter_eori":"GB12345678901234",
```


```
"exporter_name":"",
"exporter_street_number":"",
"exporter_city":"",
"exporter_postcode":"",
"exporter_country":"",
"header_previous_document": [
        {
        "op_type": "create",
        "previous_document_class": "X",
        "previous_document_type": "355",
        "previous_document_ref": "80085"
        }
],
"holder_of_authorisation": [
        {
        "op_type": "create",
        "auth_role_id": "GB000012340001",
        "auth_type_code": "SDE"
        }
]
}
```


A successful update of an SFD will return a payload similar to the below:


```
{"result": {
    "status": "updated",
    "process_message": "SUCCESS",
    "reference": "DEC000000000001182"
}}
```

The fields in the response payload to check are:

a) The *status* says “updated”
b) The *process_message* says “SUCCESS”
c) The *reference* will hold the number of the SFD that was updated.

12.19. Supplementary declaration (lookup)

In order to identify the reference number of a supplementary declaration a lookup call will be needed. The method used will be a GET and will need to be in the following format:

GET **Error! Hyperlink reference not valid.**>

Where;

<instance_name>	will be according to the table above entitled “Environments”
<parameters>	the parameters required are
sfd_number	This is the reference number of the SFD to which the supplementary declaration belongs

An example supplementary declaration lookup request might look like the following:

GET
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/supplementary_declarations?sfd_number=DEC000000000001182

A successful response will return a payload similar to the below:

{"result": {

“sfd_number”:”DEC000000000001182”,

“sup_dec_number”:”SUP000000000001077”

}}

12.20. Supplementary declaration (read)

In order to read an existing supplementary declaration a GET method must be sent. The GET will be structured as below:

```
GET
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/supplementary_declarations?<parameters>
```

Where;

<instance_name>	will be according to the table above entitled “Environments”
<parameters>	the parameters required are
reference	This is the reference number of the supplementary declaration
fields	This is a comma separated list of the fields to that you want their values to be returned. If no fields are provided then no fields will be returned, therefore a minimum of one field must be specified.

If one of the fields requested is a nested payload then all existing nested records in that section will be returned.

The list of fields available are those mentioned in the SFD update resource described later plus any others listed below;

Field Name	Format	Usage
status	String	The current status of the supplementary declaration
goods_location	String	The port of arrival for the goods
movement_reference_number	String	This will contain the movement reference number for the consignment
error_code	String	Not currently used
error_message	String	Error message if consignment is in error

An example read request might look like the following:

```
GET
https://<instance_name>/api/x_fhmrc_tss_api/v1/tss_api/supplementary_declarations?reference=SUP000000000001077&
fields=status,goods_description,transport_document_number,importer_eori,controlled_goods,ducr,holder_of_authorisation
```

A successful request will return a payload similar to the example below, errors are explained in Section 12.22 below:

```
{"result": {
"reference":"SUP000000000001077",
"status":"Closed",
"goods_description":"Car parts",
"transport_document_number":"123456",
"importer_eori":"XI123456789012",
"controlled_goods":"yes",
"ducr":"",
"holder_of_authorisation": [
        {
        "auth_role_id": "GB000012340001",
        "auth_type_code": "SDE"
        }
]
}}
```

12.21. Supplementary declaration (update)

The payload to be sent in order to update a supplementary declaration will require a POST in the following format:

Field Name	Format	Mandatory	Usage
op_type	String (6) Value supplied must be “update”	Yes	This will be used to indicate the type of transaction being sent. Must always be “update”.
supp_dec_number	String (40)	Yes	The reference number of the supplementary declaration
controlled_goods	yes/no	Yes	Set to “yes” if this supplementary declaration contains controlled goods or “no” if it does not. **NOTE**: You cannot change a supp dec from “yes” to “no” only from “no” to “yes”.
additional_procedure	yes/no	Yes	Set to “yes” if there any additional procedures, otherwise set to “no”
goods_domestic_status	String (1)	Yes	Download a list of available choices as per Section 13
importer_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes	EORI of the party legally responsible for the import declaration. XI EORIs are not accepted, use the GB version instead. European EORIs are accepted If EORI is not supplied then the following importer fields are ALL mandatory
exporter_eori	String (200) 2 Alpha followed by Alpha Numeric	Yes - If EORI is not supplied then the following exporter fields are ALL mandatory	XI EORIs are not accepted, use the GB version instead. European EORIs are accepted If EORI is not supplied then the following exporter fields are ALL mandatory
exporter_name	String(35)	Yes - if EORI is not known	Exporter name only required if EORI is not known
exporter_street_number	String(35)	Yes - if EORI is not known	Exporter street and number only required if EORI is not known

exporter_city	String(35)	Yes - if EORI is not known	Exporter city only required if EORI is not known
exporter_postcode	String(35)	Yes - if EORI is not known	Exporter postcode only required if EORI is not known
exporter_country	Alpha (2)	Yes - if EORI is not known	Exporter country only required if EORI is not known. Download a list of available choices as per Section 13
total_packages	Numeric(40)	Yes	Total number of packages
movement_type	String (40)	Yes	Download a list of available choices as per Section 13
nationality_of_transport	Alpha (2)	No If movement_type is Ro/Ro (Accompanied / Unaccompanied) this field is mandatory, otherwise it is not required and will not be processed	See mandatory requirements. Download a list of available choices as per Section 13
identity_no_of_transport	String (27)	Yes No if “Air” is selected as movement_type	The identity number of the transport
freight_charge	String (10)	No	
freight_charge_currency	String (4)	No	Download a list of available choices as per Section 13
insurance	String (10)	No	
insurance_currency	String (4)	No	Download a list of available choices as per Section 13
vat_adjustment	String (10)	No	
vat_adjust_currency	String (4)	No	Download a list of available choices as per Section 13
total_invoice	String (10)	No	
total_invoice_currency	String (4)	No	Download a list of available choices as per Section 13
exchange_rate	String (10)	No	
postponed_vat	yes/no	Yes	Are you using postponed VAT accounting
vat_number	String (11)	Yes – if postponed_vat is “yes”	VAT Number (for PVA) is only required if Use Postponed VAT Accounting is Yes.

incoterm	String (3)	Yes	Download a list of available choices as per Section 13
delivery_location_country	Alpha (2)	Yes	See mandatory requirements. Download a list of available choices as per Section 13
delivery_location_town	String(37)	Yes	The delivery location town
header_previous_document	Nested field (see example below)		This is a header for the header previous document data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be “create”, “update” or “delete”	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
previous_document_ref	String (35)	No	Previous document reference
previous_document_class	String(1)	No	Download a list of available choices as per Section 13
previous_document_type	String(3)	No	Download a list of available choices as per Section 13
holder_of_authorisation	Nested field (see example below)		This is a header for the holder of authorisation data that is required. Repeat the fields within this header for each set of data required.
op_type	String Value supplied must be “create”, “update” or “delete”	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
auth_role_id	String(17)	No	Authorisation Role ID
auth_type_code	String(5)	No	Download a list of available choices as per Section 13
header_additions_deductions	Nested field (see example below)		This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below).

op_type	String Value supplied must be “create”, “update” or “delete”	Yes	This will be used to indicate the type of request being sent. It needs to be specified for each set of data and can be different for each (see the example below). The next field will be used as the unique reference.
addition_deduction_code	String(2)	No	Download a list of available choices as per Section 13
addition_deduction_value	Numeric(10)	No	The value of the addition or deduction in Pounds Sterling

An example update for a supplementary declaration payload might look like the following:


```
{
"op_type":"update",
"supp_dec_number":"SUP000000000001077",
"controlled_goods":"no",
"additional_procedure":"false",
"goods_domestic_status":"D",
"importer_eori":"GB1234567890123",
"exporter_eori":"GB12345678901234",
"exporter_name":"",
"exporter_street_number":"",
"exporter_city":"",
"exporter_postcode":"",
"exporter_country":"",
"total_packages":"12",
"movement_type":"3",
"nationality_of_transport":"GB",
"identity_number_of_transport":"HD60 1XL XX1254POL",
"freight_charge":"",
"freight_charge_currency":"",
"insurance":"",
"insurance_currency":"",
"vat_adjustment":"",
"vat_adjustment_currency":"",
"total_invoice":"",
"total_invoice_currency":"",
"exchange_rate":"",
"goods_location":"Londonderry",
"postponed_vat":"no",
"vat_number":"",
"incoterm":"DAP",
"delivery_location_country":"GB",
```


```
"delivery_location_town":"Belfast",
"header_previous_document": [
        {
        "op_type": "create",
        "previous_document_class": "X",
        "previous_document_type": "355",
        "previous_document_ref": "80085"
        }
],
"holder_of_authorisation": [
        {
        "op_type": "create",
        "auth_role_id": "GB000012340001",
        "auth_type_code": "SDE"
        }
],
"header_additions_deductions": [
        {
        "op_type": "create",
        "addition_deduction_code": "AE",
        "addition_deduction_value": "150"
        }
]
}
```

A successful update of a supplementary declaration will return a payload similar to the below:

```
{"result": {
    "status": "updated",
    "process_message": "SUCCESS",
    "reference": "SUP000000000001077"
}}
```

The fields in the response payload to check are:

a) The *status* says “updated”
b) The *process_message* says “SUCCESS”
c) The *reference* will hold the number of the Supplementary Declaration that was updated.

12.22. Error handling

Error handling should be handled by both parties according to the issues. For example the non-response of the other end system during a transaction should be handled by the initiator of the transaction. This document does not describe the https response codes as these are standard and clearly defined on the Internet.

12.22.1. Legacy API error handling

If an error response is received it will usually be one of the 200 series responses and then the response payload will define what has been done with the transaction.

Do NOT assume that an http response of 200 means that the record has been successfully processed. Any http 20x responses should still require the *process_message* field to be checked for a successful transaction. If this does not contain the single word "SUCCESS" then it will start with "ERROR : " and be followed by a description of the processing error that occurred.

An example of a legacy error payload is shown below:

```
{
  "import_set": "ISET0010531",
  "staging_table": "x_fhmrc_tss_api_declaration_import",
  "result": [   {
    "transform_map": "Declaration Header Import",
    "table": "sn_customerservice_entry_summary_declarations",
    "status": "error",
    "error_message": "Target record not found",
    "process_message": "ERROR : Mandatory field 'movement_type' not supplied"
  }]
}
```

An example of the new resource error payload is shown below:

```
{
    "status": "error",
    "process_message": "ERROR : Mandatory field 'movement_type' not supplied"
}
```

Other *process_message* examples:

"process_message": "ERROR : Invalid value for 'movement_type' rejected: <value sent>"

"process_message": "ERROR : Mandatory field 'movement_type' not supplied"

"process_message": "ERROR : Something unexpected has occurred, internal support have been notified"

12.22.2. New resource API error handling

The new resource API calls return responses differently to the legacy API. You will still receive http 20x responses for successful payloads but now you will receive different http responses for invalid payloads, whether these are incorrectly structured or the payload is not successfully processed. Along with an http error response the response payload will contain additional information showing a "status" of "error" and a "process_message" indicating where the problem was and possibly a field name etc.

Some example error payloads are:

An invalid "op_type" of "updated" was supplied.

```
{"result": {
  "status": "error",
  "process_message": "ERROR: Invalid op_type for 'supplementary_declarations': updated"
}}
```

A mandatory field of "controlled_goods" was not supplied.

```
{"result": {
  "status": "error",
  "process_message": "ERROR: Mandatory field 'controlled_goods' not supplied"
}}
```

An invalid consignment or record reference was supplied.

```
{"result": {
  "status": "error",
  "process_message": "ERROR: Unable to access target record: DEC100000000022711"
}}
```

An invalid value of “XXXXX” for the “goods_domestic_status” field was specified.

```
{"result": {
   "status": "error",
   "process_message": "ERROR: Invalid format for 'goods_domestic_status' rejected: XXXXX"
}}
```

13. Downloading field choices

13.1. Overview

In order to download the options currently available for any particular field that has a limited set of choice values you can perform a GET request against the endpoint detailed below. Authorisation must be made in the same way as the other areas of the API, with the supplied credentials. By specifying the name of the field as the final part of the endpoint. This will then return a JSON payload containing value pairs for the field values you can use and a descriptive name of what that value refers to. This name will also typically match what you would see in the portal as the options for that field.

13.2. Endpoint details

The endpoint structure to use to download the choice values is as follows:

```
https://<instance_name>/api/x_fhmrc_tss_api/v1/choice_values/<choice_field_name>
```

Where:

<instance_name> will be according to the table in the main API section above entitled "**Error! Reference source not found.**"

<choice_field_name> will be the name from the Field Name column defining the payload you are requiring to send or one of the options below that matches

Field Name	Field Usage
country	country_of_origin country_of_preferential_origin exporter_country importer_country consignee_country consignor_country carrier_country nationality_of_transport delivery_location_country

movement_type	movement_type
port	arrival_port goods_location
route	route
transport_charge	transport_charges
type_of_package	type_of_packages
controlled_goods_type	controlled_goods_type
commodity_code	commodity_code
incoterm	incoterm
addition_deduction_code	addition_deduction_code
procedure_code	procedure_code
additional_procedure_code	additional_procedure_code
national_additional_code	national_additional_codes
document_code	document_code
document_status	document_status
item_add_ded_code	item_add_ded_code
measurement_unit	measurement_unit
previous_document_type	previous_document_type
previous_document_class	previous_document_class
additional_info_code	additional_info_code
auth_type_code	auth_type_code
goods_domestic_status	goods_domestic_status
supervising_customs_office	supervising_customs_office
tax_base_unit	tax_base_unit
preference	preference

ni_additional_information_code	ni_additional_information_codes
currency	currency addition_deduction_currency item_add_ded_currency total_invoice_currency freight_charge_currency vat_adjust_currency insurance_currency

13.3. Example request

Below is an example of the URI that might be sent in to retrieve the port list.

```
GET https://api.tsstestenv.co.uk/api/x_fhmrc_tss_api/v1/choice_values/port
```

13.4. Example response

Below is an example of the port data that might be returned. It has been split as the output is much larger.


```
{ "result": [
    {
    "value": "GBAUABDABDABD",
    "name": "Aberdeen Docks"
  },
    {
    "value": "GBAUAULINVEWE",
    "name": "Aultbea - Loch Ewe Pier, NATO POL Depot"
  },
    {
    "value": "GBAUAVOAVOAVO",
    "name": "Avonmouth Docks"
  },
    {
    "value": "GBAUAVOAVOCSX",
    "name": "Avonmouth - Royal Edward Dock X Berth"
  },
    {
    "value": "GBAUAYRAYRAYR",
    "name": "Ayr Harbour"
  },
```


. . . . . continued data . . . . . .


```
    {
    "value": "IMAURAMRSYRAM",
    "name": "Ramsey (Isle of Man)"
  }
]}
```

14. Usage scenario questions

Below are some questions and answers that may be useful

- One of my line items returned an error.

  Can I still keep adding line items to the consignment?

  - Yes, you can keep adding line items to the consignment

  Are all the line items for the consignment still available?

  - Yes, the all line items for the consignment they were successful are still available to view in the portal.

- I don't want to do a one shot upload.

  Do I need to upload all of my consignments and line items in one go?

  - No you don't need to upload all of your consignments in one go.
  - The upload API mimics the way of working with the portal – you can add information, go away and come back and add more and repeat that process.

- I want reports on the progress of my uploaded data

  Is there an API call to get a report?

  - No, there is no API to get a report. The granular nature of the API allows you to record the status of your consignment and line item creation at your end.
  - You are able to check your consignments and line items in the portal

- I want to remove one of my consignments whilst the upload is in progress

  You can do this from the portal. Any reports you had compiled at your end would need to be updated to reflect this.

  Any items that you tried to add to the consignment would be rejected.

- I want to remove line items from a consignment whilst I am still doing an upload through the API

  You can do this from the portal. Any reports you had compiled at your end would need to be updated to reflect this.

- Is there a time limit on how long my consignment and line items can exist on the portal?

  No there is no time limit. You can keep adding more line items to the consignment for as long as the consignment exists on the portal and it has not been submitted. The consignment won't be removed at any time unless you remove it.

  However, you need to comply with the "When to Submit" guidance on https://www.gov.uk/guidance/making-an-entry-summary-declaration.

- I want to submit consignments from the portal

  You can submit consignments from the portal. Any reports you had compiled at your end would need to be updated to reflect this.

- Can I add line items to a consignment which has already been submitted?

  No, you can't add line items to a consignment that has already been submitted

- I want to submit all of my consignments associated with a header in one go

  This is not available in the portal and therefore you can't do that with the API. The API mimics the way users create headers, consignments and line items.

15. Document control sheet

Document version

Version	Date	Authors	Superseded documents
1.0	18/11/2020	Andy Lark	None.
1.1	18/11/2020	Ian Hutchison	1.0
1.2	19/11/2020	David Coupe	1.1
1.3	25/11/2020	Andy Lark	1.2
1.4	11/12/2020	Andy Lark	1.3
1.5	16/12/2020	Andy Lark	1.4
1.6	03/01/2021	Dan Cook	1.5
2.0	05/02/2021	Andy Lark, Michelle Tones	1.6
2.0.1	16/02/2021	Andy Lark	2.0
2.0.2	16/02/2021	Andy Lark	2.0.1
2.0.3	16/03/2021	Andy Lark	2.0.2
2.0.4	17/03/2021	Andy Lark	2.0.3
2.0.5	18/03/2021	Andy lark	2.0.4

Amendment record

Version	Area changed	Details of changes
1.0		First release
1.1		Review. Added sections to future changes. Added explanation of table headers. Expanded section on registering initial interest and registration. Other minor changes.
1.2		Minor changes to Process for Requesting Access section following HMRC review together with addition of header and footer details
1.3		Appendix A, various values updated. Reformatting of some response payloads
1.4		Changes to Header, Consignment and Goods payloads. Appendix A removed and section 13 added which now allows for download of values

1.5	Section 11	Amended to contain the final endpoint details for TEST and PROD
	All sections	All sample response payloads updated to contain the TEST instance name in the data
	Section 12.2	*departure_port* field removed from Declaration Header.
	Section 12.2	*arrival_date_time* field validation updated. Cannot be more than 14 days in the future.
	Section 12.4	Maximum number of goods in a consignment reduced from 999 to 99
	Section 12.4	*no_additional_procedure* field removed from Consignment
	Section 12.4	Missing colon in the sample payload
	Section 12.4	Description of *country_of_preferential_origin* usage referred to *controlled_goods_type* which has been corrected to *controlled_goods*
	Section 12.2	Changes to mandatory requirement on *nationality_of_transport* field
	Section 12.2	Changes to field length of *conveyance_ref* field if *movement_type* is Air
1.6	Section 2	Updated to reflect that the service is now fully available
	Section 6	Updated to reflect that the service is now fully available
	Section 7	Removed registration process from the future change section
	Section 8	Updated registration process
	Section 12.2	Changes to the Format of the following fields - place_of_loading - Alpha Numeric (33) place_of_unloading - Alpha Numeric (33) carrier_eori - String (200) 2 Alpha followed by Alpha Numeric carrier_name - String(35) carrier_street_number - String(35) carrer_city - String(35) carrier_postcode - String(9)
	Section 12.3	Changes to the Format of the following fields – consignee_eori - String (200) 2 Alpha followed by Alpha Numeric consignee_name - String(35) consignee_street_number - String(35) consignee_city - String(35) consignee_postcode - String(9) consignor_eori - String (200) 2 Alpha followed by Alpha Numeric consignor_name - String(35)

		consignor_street_number - String(35) consignor_city - String(35) consignor_postcode - String(9) impoter_eori - String (200) 2 Alpha followed by Alpha Numeric importer_name - String(35) importer_street_number - String(35) importer_city - String(35) importer_postcode - String(9) exporter_eori - String (200) 2 Alpha followed by Alpha Numeric exporter_name - String(35) exporter_street_number - String(35) exporter_city - String(35) exporter_postcode - String(9)
	Section 12.4	Changes to the Usage of the following fields – number_of_packages – Minimum of 1 number_of_individual_pieces – Minimum of 1 Changes to the Format of the following fields – invoice_number – String (35)
	Various	Removal of reference to bulk upload. Now just refers to Upload API
2.0	Whole document	As this is a major release and many additional API calls have been made available, this document should be read through completely. Currently backwards compatibility for the old calls from version 1.6 has been maintained but expect these to be deprecated at some point. The old calls are now referred to as the legacy API. New sections created to describe the new calls which contain the new functionality. The API is now referred to as the "TSS Declaration API" and no longer as an upload API.
2.0.1	Section 5	Related documents list updated.
2.0.2	Section 7	Section renamed. Describes legacy API calls and how API calls will be deprecated.
	Sections 12.16, 12.17, 12.18 & 12.19	Incorrect prefix shown in samples for the SFD numbers (SFD incorrectly shown instead of DEC)
	Section 5	Reminder to check online for updated copies of this document
2.0.3	Section 12.9	The example payload was missing the *"op_type": "create",* for the nested payloads.
	Section 12.12	Field name of "goods_ref_number" changed to "goods_id" as this is too close to a similar field name.

	Section 12.13	Field name of “goods_ref_number” changed to “goods_id” as this is too close to a similar field name
	Section 12.14	Field name “reference” in the response payload renamed to “goods_id” for consistency
	Section 12.22	Wording changed in include that this requires a POST method.
	Section 12.13	Explains that deletion of Goods Item also deletes all related records
	Section 12.12	Incorrectly referred to field “u_ni_additional_information_codes” but should have been “ni_additional_information_codes”
	Section 12.11	Incorrectly referred to the Declaration Header and not the Consignment in the parameter explanation.
	Section 12.12	Field “net_mass_kg” is mandatory on Supplementary Declaration
	Section 12.22	Field “importer_eori” must be suppliedonly the alternative fields have now been removed at Supplementary Declaration level.
	Section 12.11	Fields “error_code” and “error_message” added as read-only fields
	Sections 12.8, 12.11, 12.15, 12.17 & 12.20	For all read resources the first parameter is now called “reference” and is consistent.
	Section 12.6	Field “seal_number” is now String(20)
	Section 12.17 & 12.20	Additional read fields added.
2.0.4	Section 1	Background text changed.
2.0.5	Section 12.6, 12.7, 12.9, 12.10, 12.12	Sample response payloads changed to reflect “created” and not “inserted”. Also, “cancelled” and not “updated”.
	Section 12.9	“controlled_goods” is now a yes/no field and no longer a Boolean
	Section 12.15	The example goods URL was wrong, now corrected to “/goods”
	Section 12.21	Field “additional_procedure” is now a yes/no field and no longer a Boolean Field “identity_no_of_transport” mandatory condition corrected Field “postponed_vat” is now a yes/no field and no longer a Boolean
	Section 12.11, 12.17, 12.18 & 12.20	Field “transport_deocument_reference” is now called “transport_document_number” for consistency
	Section 12.12	Field “amount” added under “document_references” section, Fields “invoice_number”, “un_dangerous_goods_code” and “number_of_individual_pieces” highlighted with purple notes for clarity,

		Field “country_of_origin” has mandatory condition explained in more detail, Fields “preference” and “country_of_preferential_origin” added Field “package_marks” is now a string field. Field “ni_additional_information_codes” is now mandatory and a choice field. Sample payload corrected for “ni_additional_information_codes”
	Section 12.18	Fields “previous_document_ref” and “previous_document_class” were missing an underscore in their names
	Section 10.1	Explanation added around new credentials required for the new resources calls
2.0.6	Section 12.6 & 12.22	Field “identity_number_of_transport” is now a string, it is now not required if “movement_type” is Air
	Section 12.21	The example for “postponed_vat” was false, this is now corrected to show no.
	Section 12.17	The example payload for reading an SFD had the wrong resource, this is now corrected
	Section 12.21	Note added for “controlled_goods“ making it clear that you cannot change it from “yes” to “no”
	Section 12.22	Error handling section split into two to detail the differences between the Legacy errors and the new API resource error payloads
	Sections 12.6 through to 12.21	All response payloads have now got the full response information correctly
2.1	Whole document	Format changed to new template and design, capitalisation changed
2.1.1	Section 12.20	The example GET had the wrong resource name, now corrected to supplementary_declarations
	Section 6 & 7	It is now potentially only major changes which will be communicated out but all changes will be documented and updated online.