H7 – Super reduced import declaration

Agent Interface – Specifications Document

Date: 01/09/2024
Version: 1.3
Department: PMD

Unclassified

Malta Information Technology Agency, Gattard House, National Road, Blata l-Bajda HMR 9010 Malta
Telephone: (+356) 21234710
Web Site: www.mita.gov.mt

Document Control Information

Document reference

PE09102A25-RED-DesAgntWebServSpec-V1.3.docx

Document type

Specifications Document

Security classification

Public

Synopsis

The System Development Design Document communicates and documents the system design conceptual solution to the problem. It should contain enough information about the design concept so that other individuals can read it and proceed ahead with the development and implementation. It provides the underlying rationale and decisions that enable those performing the development to meet the business requirements.

Document control

Author	Change controller	Distribution controller
MITA Customs	MITA Customs	Customs IT

This document may be viewed and/or downloaded from the IMS On-Line, which maintains the latest issues of all documents and forms.

Authorisation

Issuing authority	Approval Authority	Client Approval
Customs IT	Customs IT	Customs IT
Signature / Date	**Signature / Date**	**Signature / Date**

Modification history

Version	Date	Comments
Draft 0.1	15/02/2021	Draft version for internal review
Version 0.2	19/02/2021	First draft version for release
Version 1.0	08/03/2021	First Client release
Version 1.1	06/04/2021	authentication description
Version 1.2	19/04/2021	Latest specification updates (refer to appendix D); information on declaration states (refer to appendix C)
Version 1.3	01/09/2024	H7 EUCDM updates

Acknowledgements

Alan Mamo	Customs IT
Marco Catania	Customs IT
Raymond Camilleri	Customs IT
Laura Cutajar	Customs IT
Stephanie Ruggier	Customs IT
Juan Carlo Attard	MITA Customs and SRE
Gerald Vassallo	MITA Customs and SRE
Samuel Mizzi	MITA Customs and SRE

References

PE09102A24-RED-ReqSupRedDec-v0.3

https://eucdm.softdev.eu.com/

Data dictionary v0.7

Table of Contents

01. Introduction

01.1 Project Background

Following an amendment to the Union Customs Code Delegated Regulation (EU) 2015/2446, from **1 July 2021 goods with value equal to or less than €150** have to be declared at the border using an electronic customs declaration with super-reduced data set.

The Commission has amended the UCC Delegated Regulation to provide for a lower, more manageable but still adequate level of data (a "**super-reduced data set**") in **customs declarations on imports of low-value consignments** (those below the threshold for application of intrinsic value of 150€). This legislation should mitigate, for both customs and traders, the impact of the sharp increase in the number of customs declarations.

This is an important step forward and allows Member States and economic operators to go ahead with their IT developments. The amending Delegated Regulation, entering into force on 25 July 2019.

Malta Customs department has decided that Malta Customs will be implementing a super reduced import declaration to be in line with the July 1st 2021 deadline.

01.2 Scope of Project

The project will focus on the development of a new national Customs Import declaration having a reduced data set. The H7 – Super Reduced Import Declaration will be made available through NIES and also be made available through a web services as an extension to the system-to-system interface. Furthermore, this type of declaration is to be also included and made part of the Surveillance report. This document will highlight the system-to-system specifications part of this project.

01.3 Terminology

This section defines the technical and business terms used in this requirements document.

Term	Definition
CCN/CSI	Common Communication Network / Common Services – LDAP Interface
CN	Combined nomenclature
CRS	Customer Reference Services
CS/RD2	Central System / Reference Data (version 2)
D.E.	Data Element
DG AGRI	Directorate-General for Agriculture and Rural Development
DG TAXUD	Taxation and Customs Union Directorate-General
DG TRADE	Directorate General for Trade
EU	European Union
H7	Super reduced import declaration
MS	Member State
MSA	Member State Administration
MRN	Master Reference Number
NIES	National Import Export System
S2S	System-to-System

SAD	Single Administration Document
SDR	Surveillance Declaration Record
SURV2	Surveillance 2 Application
SURV-RECAPP	Surveillance Reception Application
TARIC	TARif Intégré Communautaire
TAXUD	Taxation and Customs Union Directorate-General
UCC-BTI	Union Customs Code – Binding Tariff Information
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business

02. Design Considerations

02.1 Assumptions and Dependencies

It is assumed that the express agent's systems are already in place to be able to generate the required data to be passed to the S2S - H7 Super reduced declaration web service.

It is assumed that this web service will not provide a front-end interface, integrating system will have to provide their own front-end interface.

02.2 Constraints

The H7 S2S web service will be limited to the functionality provided by the National H7 Import System web service.

At the time of writing this document Reference data is being evaluated to be forwarded through webservices. This is to be confirmed in the coming future.

02.3 Operating Environment

The web services provided are built using a REST webservice architecture with XML or JSON as the accepted data formats.

03. Design

03.1 Introduction

This document will highlight the S2S interface that will be used by express agents such as postal and courier service. Through this web service the express companies will be able to lodge, edit and request a cancellation of an H7 super reduced declaration. The aim is to provide the web service specifications that can be used by the express courier companies to integrate their respective IT system to the customs H7 import system.

This document will provide:

- A data dictionary on the data elements that will be used in the H7 declaration
- Links to further details on H7 declaration provided by EU
- H7 S2S - Web service specifications

03.1.1 The concept

The NIS API will be exposed through an endpoint to be able to be consumed by express companies' IT systems.

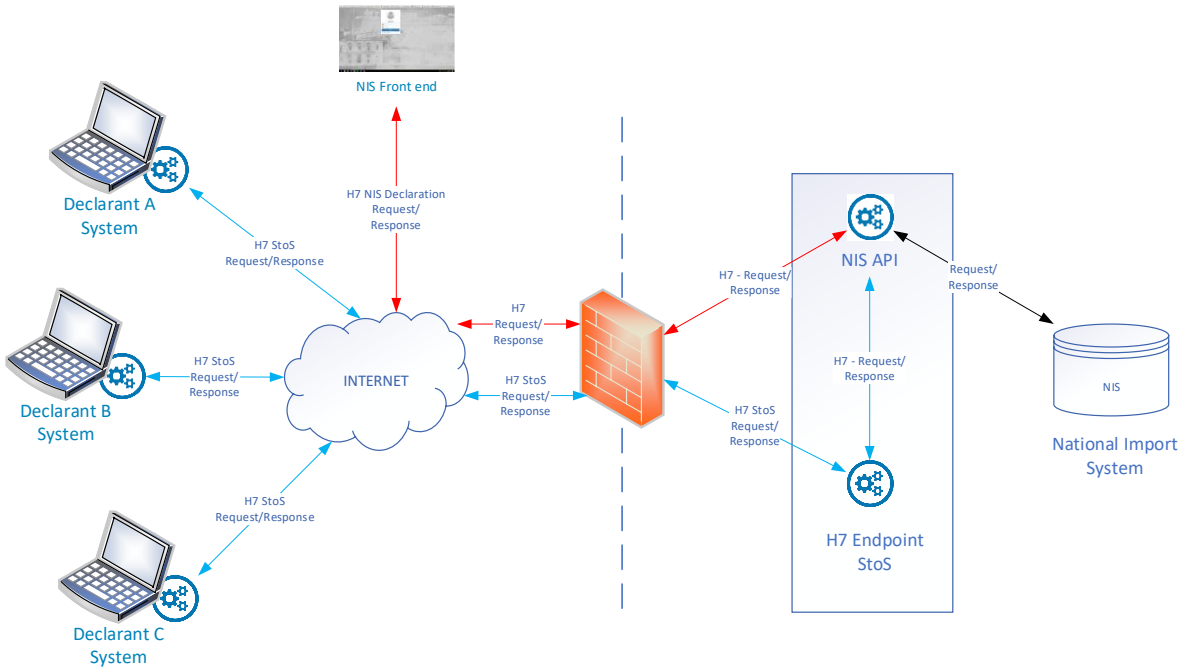


Figure 1. IOSS – Concept diagram

Express companies' IT systems will send a request to the webservice and receive a response of either an acknowledgment or a payload depending on the type of method requested.

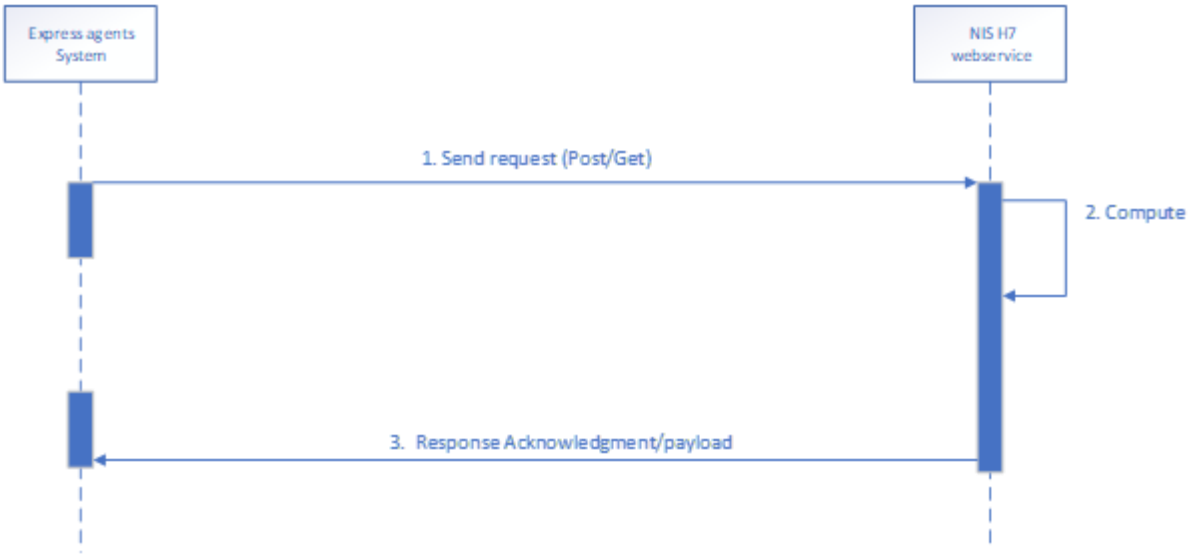
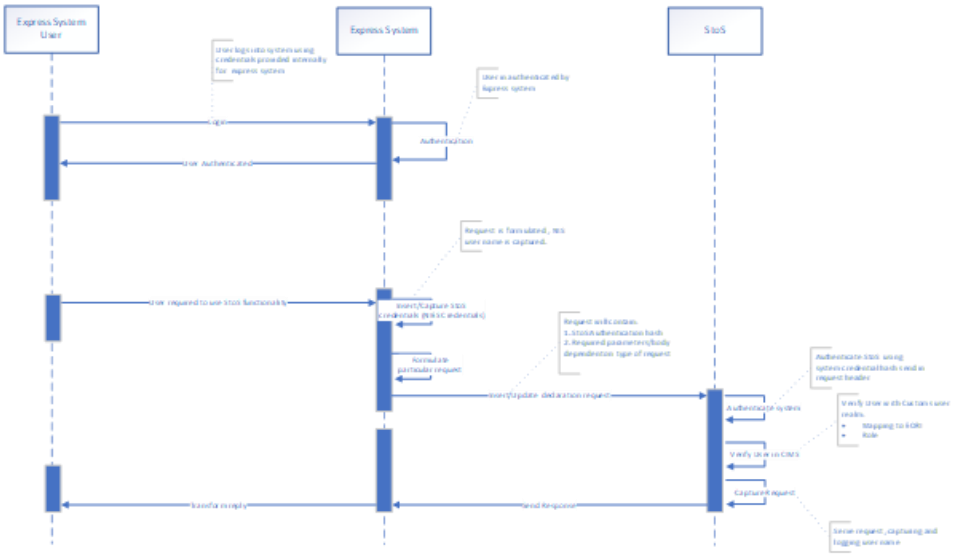


Figure 2. Sequence diagram – Express agent request/response from H7 webservice

03.1.1.1 Authentication

The Express agent's user (Being referred to as **User**) uses the Express agent's system (being referred to as **express system**) to communicate with NIS – System to System interface (being referred to **StoS**).



In order for the Express system to be able to connect and make use of SToS, it must first be authenticated. In this regards each user making use of the system must have a unique Username and Password set (These are the same that will be used for NIES). These will through a basic Authentication mechanism be passed as a Hashed as part of the header.

System users – Username and password

The same username and password used to access the National Import System are going to be used for SToS.

A request must be set with the customs IT sections to create the required user credentials in Custom's authentication realm.

The process will have to be done for PGS, TEST and Productions since these systems are totally isolated.

Please note: the username used to authenticate to the SToS will be logged in NIES as the user who has performed the action on the declaration.

03.2 Webservice

The web service will provide the following methods:

Please note: Webservice specifications and schemas can be access through Swagger. Please refer to appendix A to access Swagger details.

Name	**/submitted** Submit Import declaration
Method	POST
Description	Submit H7 import declaration - Returns acknowledged declaration or validation errors. The accept parameter must be set to true to submit the declaration. If accept is false, the declaration will be validated and an acknowledged declaration is sent as a response, but the declaration will not be submitted. Please refer to sequence diagram in appendix E.
Request parameters	Accept flag (boolean)
Request body	Submitted H7 import declaration
Response	Returns acknowledged declaration or validation errors.

	Code 200 – Acknowledged H7 Import declaration Code 400 – Bad Request Code 403 – Rule validation error/s

Name	**/amended** Submit amendment to import declaration
Method	POST
Description	Returns acknowledged amendment or validation errors.
Request parameters	n/a
Request body	Amended H7 import declaration
Response	Code 200 - Acknowledged H7 Import declaration SAD Code 400 – Bad Request Code 403 - Rejected / Rule validation error/s

Name	**/{mrn}** Get declaration by MRN
Method	GET
Description	Returns a representation of the Import declaration with the given MRN
Request parameters	MRN (String 21 Char)
Request body	n/a
Response	Code 200 – H7 Import declaration Code 400 – Bad Request Code 403 – Unauthorized error

Name	**/{mrn}/printout** Get a printout of the Import declaration with the given MRN
Method	GET
Description	Returns a Base54 (ISO-8859-1 charset) encoded PDF of the Import declaration with the given MRN. Use this for testing purposes https://emn178.github.io/online-tools/base64_decode_file.html
Request parameters	MRN (String 21 Char)
Request body	n/a
Response	Code 200 – H7 Import declaration printout Code 400 – Bad Request Code 403 – Unauthorized error

03.3 Data Dictionary

A data dictionary will be distributed as a separate file with this document to serve as a supporting document.

03.4 Further details

The EU Customs Data Model (EUCDM) is the model for Customs trans-European systems such as NCTS, AES, ICS, EOS and for Member States national customs clearance systems. Its overall objective is to provide a technical instrument that models the data requirements laid down in EU Customs legislation and present a single and genuine source of information for the technical developments of the different IT systems that are used for data processing by customs in the EU.

The data requirements are defined in Annex B to the UCC-DA (Commission Delegated Regulation No. 2019/2446), their formats and codes in Annex B to the UCC-IA (Commission Implementing Regulation No. 2019/2447). The EUCDM also contains the mapping of these data requirements against the WCO Data Model (WCO DM version v.3.8.1). This mapping serves the following main purposes:

To link the data elements of the EUCDM with their corresponding data elements in the WCO Data Model, thereby defining unambiguously the relation between Customs needs and economic operator's data.

In addition, the EUCDM includes the data requirements as well as the relevant formats and codes that relate to applications and decisions (Annex A of the UCC-DA and of the UCC-IA) as well as to the registration of economic operators and other persons (Annex 12-01 of the UCC-DA and of the UCC-IA).

For further details - EUCDM V6.0 can be accessed from:

https://eucdm.softdev.eu.com/

Appendix A – Swagger – webservice specifications

What is Swagger?

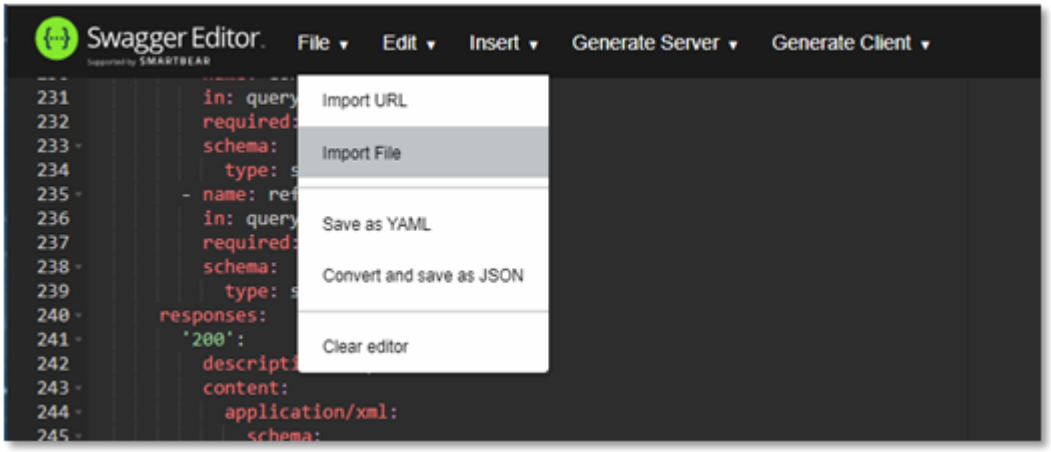
Swagger is an Interface Description Language for describing RESTful APIs expressed using JSON. Swagger is used together with a set of open-source software tools to design, build, document, and use RESTful web services.

Getting started

Go to URL: https://editor.swagger.io/

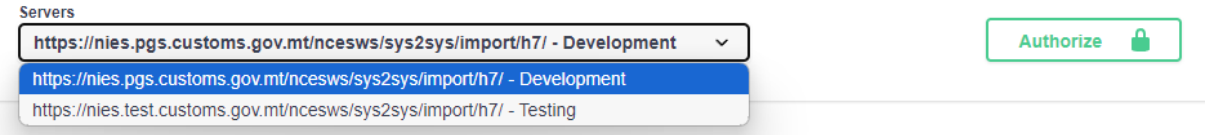
From File – Import file and browse to relevant YAML file:

For Import H7 specifications: ImportH7System2SystemOpenApiSpec_V3.0



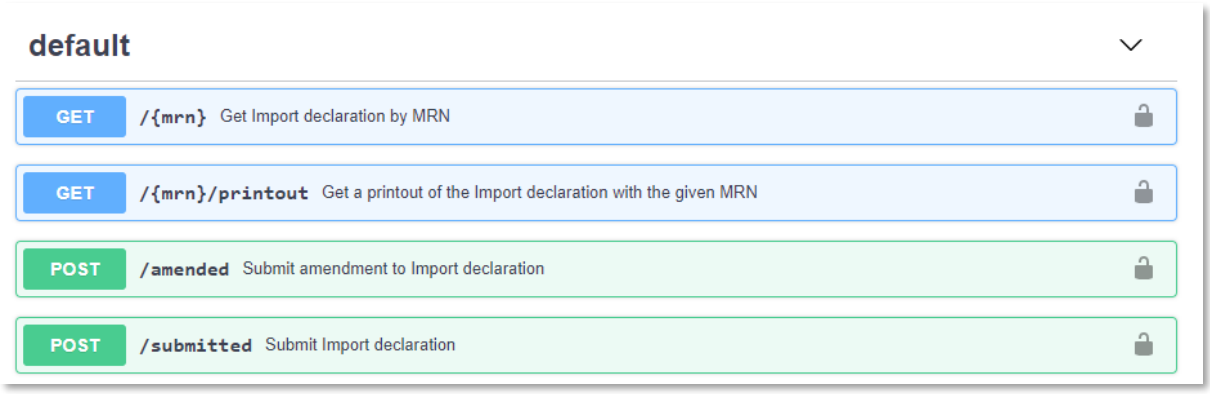
Once the file is opened the specifications are made available.

Choose server environment and authenticate:



Accessing the different methods

1. The different methods made available can be accessed through the **default** list:



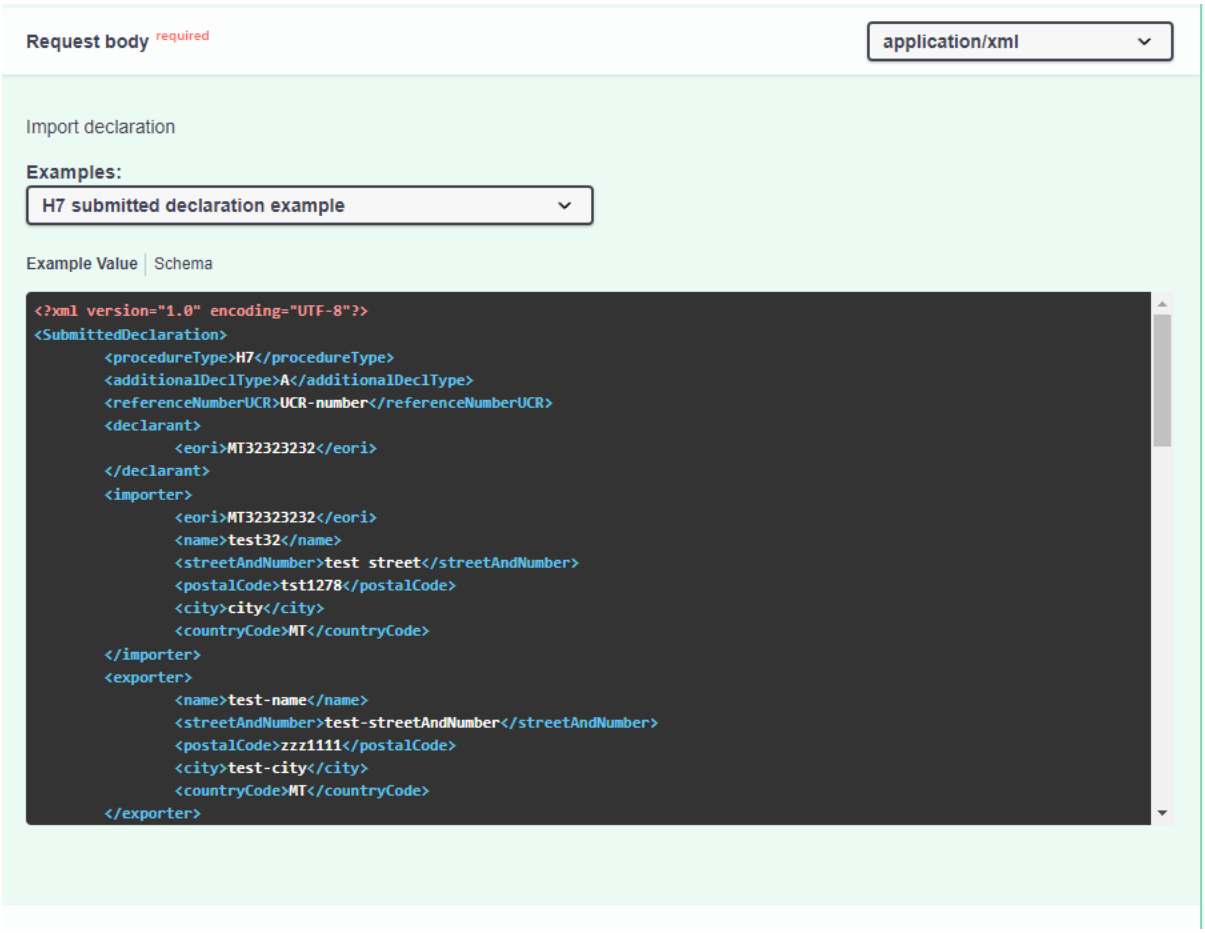
2. To take an example: **Submit Import Declaration**

a. Input parameters: In this case no parameters are to be passed through this **post** method.

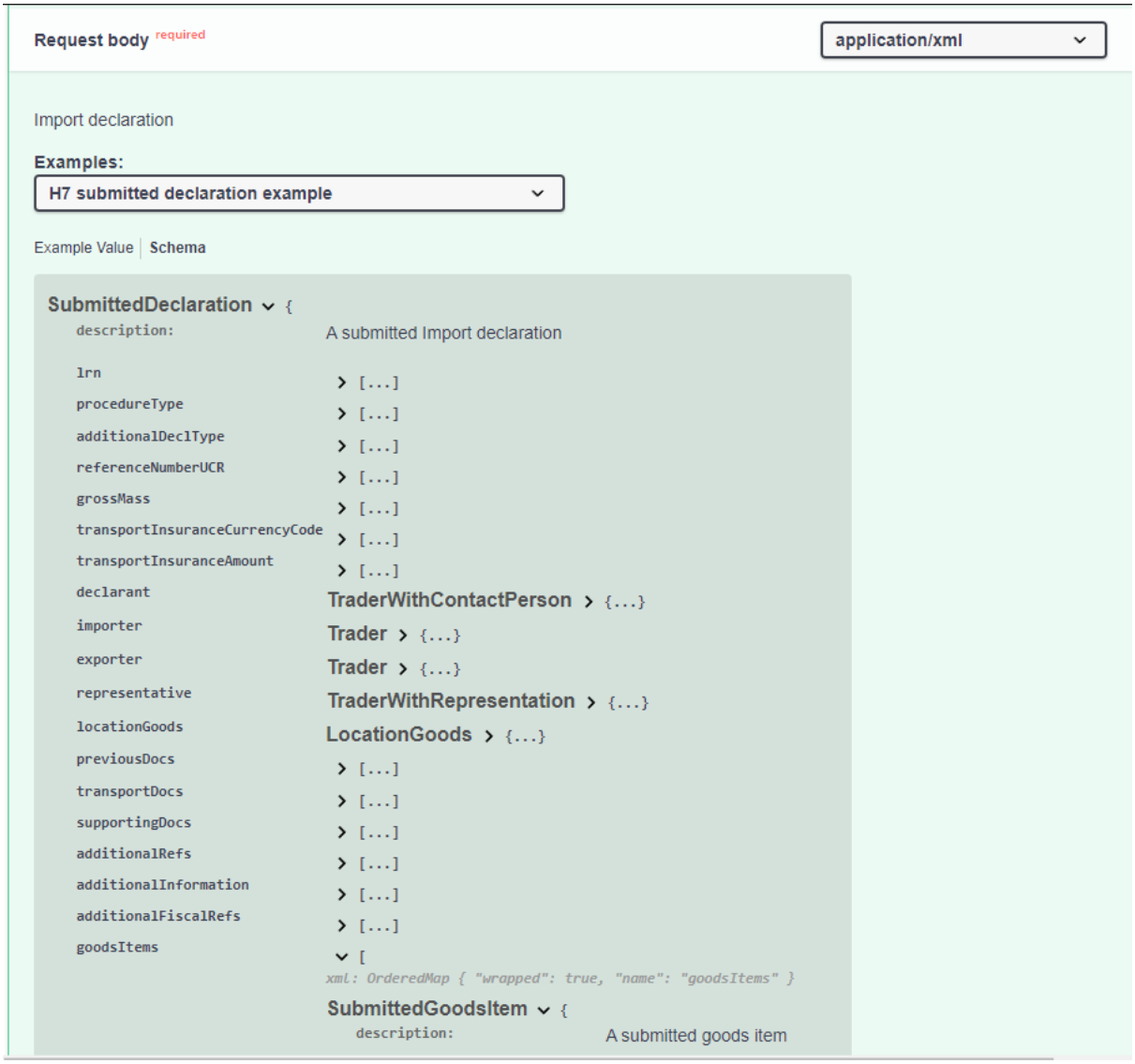
This POST request method will pass the H7 declaration details enclosed in the body of the request message. In other words, the requesting application will be passing the details of the H7 declaration to be submitted to the national Import system H7 application service.

Swagger makes available the **sample** and **schema** of this message:

Sample:


Request body required
application/xml
Import declaration
Examples:
H7 submitted declaration example
Example Value | Schema
<?xml version="1.0" encoding="UTF-8"?>
<SubmittedDeclaration>
<procedureType>H7</procedureType>
<additionalDeclType>A</additionalDeclType>
<referenceNumberUCR>UCR-number</referenceNumberUCR>
<declarant>
<eori>MT32323232</eori>
</declarant>
<importer>
<eori>MT32323232</eori>
<name>test32</name>
<streetAndNumber>test street</streetAndNumber>
<postalCode>tst1278</postalCode>
<city>city</city>
<countryCode>MT</countryCode>
</importer>
<exporter>
<name>test-name</name>
<streetAndNumber>test-streetAndNumber</streetAndNumber>
<postalCode>zzz1111</postalCode>
<city>test-city</city>
<countryCode>MT</countryCode>
</exporter>

Schema:

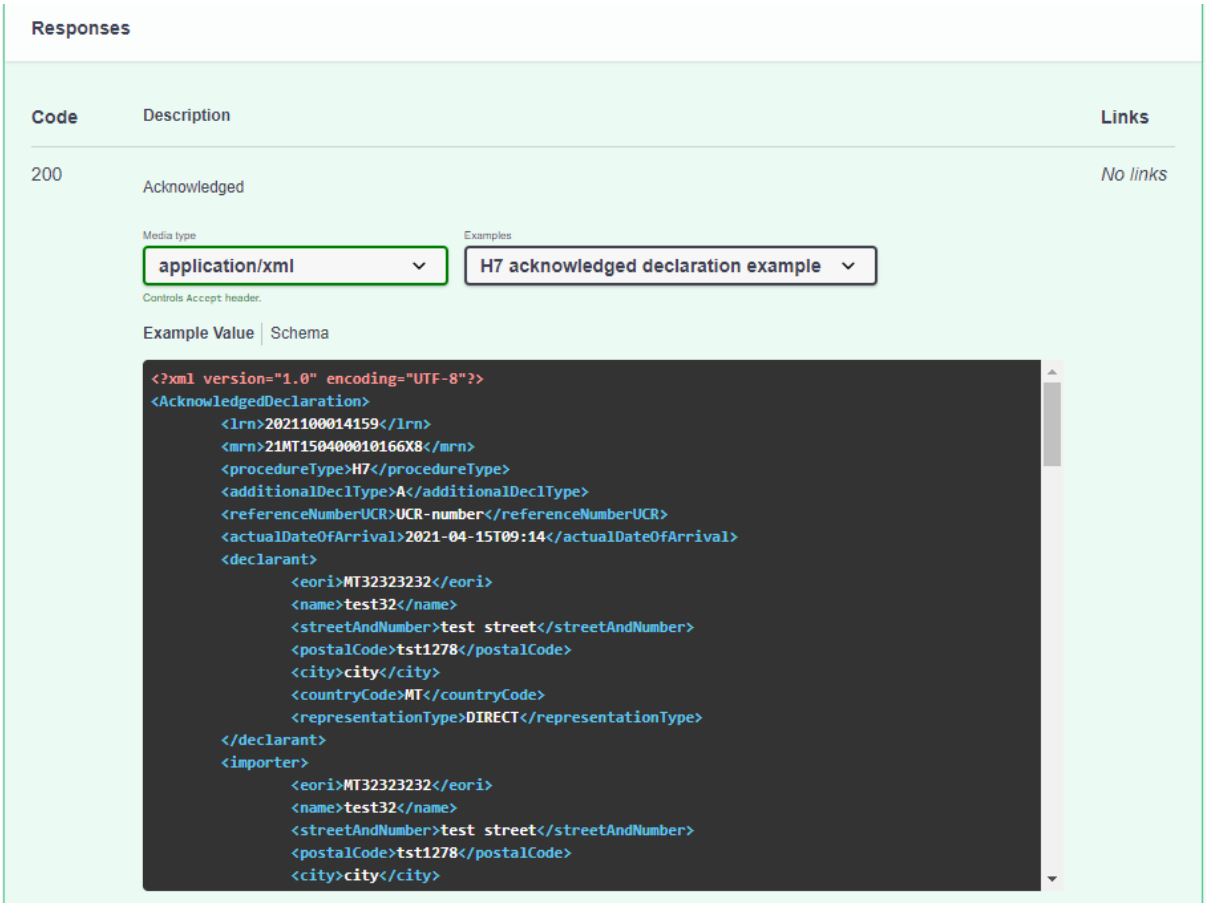


Please note: *schema collapsible feature (Hierarchy), by pressing the relevant arrow the respective 'Children' of that entity are displayed.*

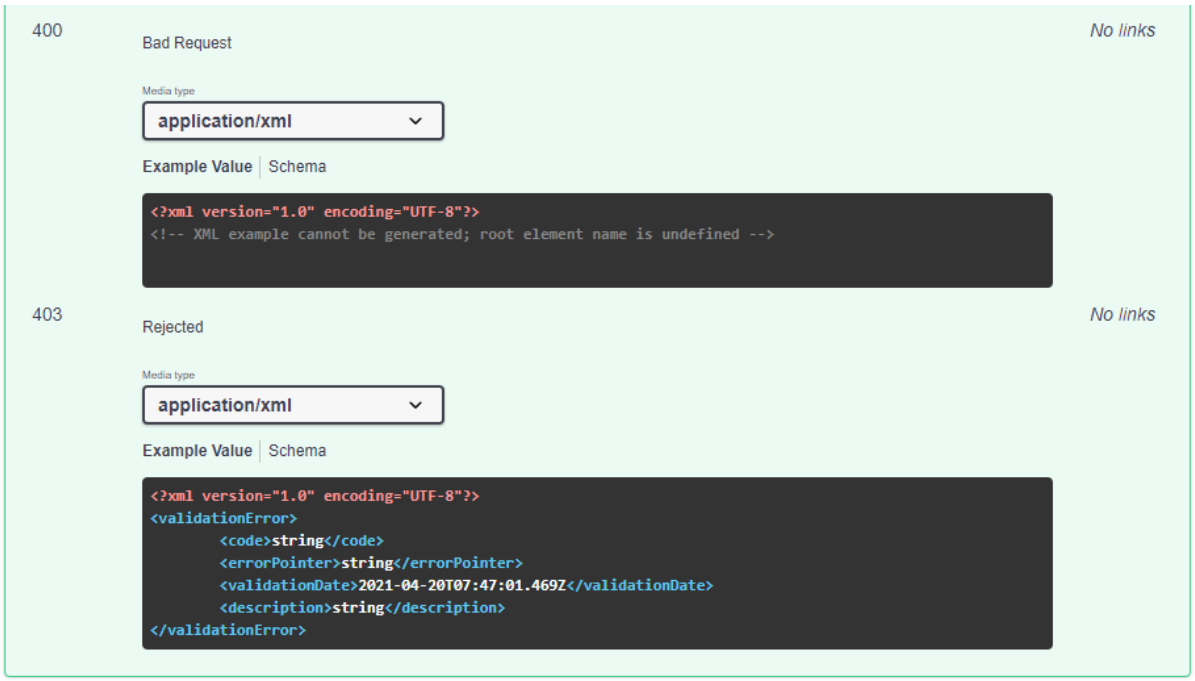
b. The Response – Swagger will also provide the response. In case the try me, feature is used the response will contain actual data, on the other hand it will show a sample, empty example. The interface also provides the schema of the response message. Response messages for accepted and rejected requests are included.

Example Value:

Accepted:



Bad Request / Rejected:



The response message **schema** can also be accessed:

Code	Description	Links
200	Acknowledged Media type: application/xml Controls Accept header. Examples: H7 acknowledged declaration example Example Value | Schema	*No links*

AcknowledgedDeclaration {

description:	An acknowledged Import declaration
lrn	[...]
mrn	[...]
procedureType	[...]
additionalDeclType	[...]
referenceNumberUCR	[...]
grossMass	[...]
transportInsuranceCurrencyCode	[...]
transportInsuranceCurrencyRate	[...]
transportInsuranceAmount	[...]
declarant	TraderWithRepresentation {...}
importer	Trader {...}
exporter	Trader {...}
representative	TraderWithRepresentation {...}
locationGoods	LocationGoods {...}
previousDocs	[...]
transportDocs	[...]
supportingDocs	[...]
additionalRefs	[...]
additionalInformation	[...]
additionalFiscalRefs	[...]
goodsItems	[...]

400	Bad Request Media type: application/xml Example Value | Schema `string`	*No links*
403	Rejected Media type: application/xml Example Value | Schema	*No links*

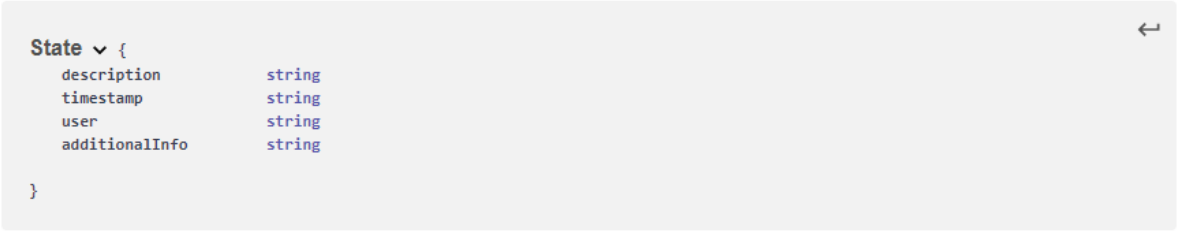
[
xml: OrderedMap { "name": "validationError" }

ValidationError {

code	string
errorPointer	string
validationDate	string($date-time)
description	string

}]

Please note that the ‘currentState’ property in the acknowledged declaration, it contains a description which can be updated over time. Moreover, the property ‘states is an array of states containing all the past states (including the current state) which the declaration has been through. The following diagram is the schema for state:



More information regarding states can be found in Appendix C

Appendix B – H7 Acknowledged declaration States

State Description	Information
SUBMITTED	This the first state the declaration goes through as it is being processed for submission
ACKNOWLEDGED	Declaration is acknowledged by the system
ACCEPTED	A new MRN is generated. The declaration submission request has been accepted and is completed. The declaration can now be processed for RISK
AWAITING AUTOMATED RISK ANALYSIS	NIS is waiting for the automated RISK result from the RISK system
AWAITING MANUAL RISK REVIEW	Automated RISK result is received, and the RISK timer is started
SELECTED FOR CONTROL	Final RISK result is RED, therefore declaration is selected for further inspection
AWAITING PAYMENT	Waiting for payment settlement
GOODS RELEASED	Goods are released
GOODS NOT RELEASED	After the inspection process it is concluded that the goods are not to be released

Appendix C – Submit declaration sequence diagram (Service: **/submitted**)