

XML ECSL Declaration

Technical Interface Specification

Version 2.0 – 07/07/2009

Version History

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Contents

1.	Introduction.....	4
1.1	Target Audience.....	4
1.2	Prerequisites.....	4
1.3	Objectives.....	4
2.	Major Aspects of the XML ECSL Declaration Service.....	6
2.1	Context.....	6
2.2	Transport and Security.....	6
2.3	Message Submission & Retrieval.....	7
2.3.1	Static View.....	7
2.3.2	Dynamic View.....	8
3.	ECSL Declaration Request Specification.....	11
3.1	GovTalk Envelope Elements.....	11
3.1.1	Message Class.....	11
3.1.2	Service Key.....	11
3.1.3	Channel.....	12
3.2	GovTalk Body Elements.....	14
3.2.1	IR Mark.....	14
3.2.2	Submitter's Contact Name.....	14
3.2.3	Currency Code.....	15
3.2.4	Tax Quarter.....	16
3.2.5	Tax Monthly Period.....	17
3.2.6	Strict Validation Flag.....	18
3.2.7	ECSL Submission Line.....	19
4.	Processing and Business Rules Specification.....	26
4.1	Request Structural Validation.....	27
4.2	Maximum Submission Line Verification.....	27
4.3	Currency Code Validation.....	28
4.4	Tax Period Details Processing.....	28
4.4.1	Tax Period Validation.....	28
4.4.2	Tax Period Due Date Resolution.....	29
4.5	ECSL Submission Line Validation.....	30
4.5.1	EU Membership Validation.....	30
4.5.2	EU Customer VRN Validation.....	30
4.5.3	Transaction Indicator Validation.....	31

4.6	Submission Line Failure Threshold Verification.....	31
5.	ECSL Declaration Response Specification.....	33
5.1	Success Response.....	33
5.2	Submitter's Contact Name.....	34
5.3	Currency Code.....	35
5.4	Tax Quarter.....	36
5.5	Tax Monthly Period.....	37
5.6	Strict Validation Flag.....	38
5.7	ECSL Declaration Reference.....	39
5.8	Receipt Timestamp.....	39
5.9	Total Number of Acknowledged Lines.....	40
5.10	Total Value of Acknowledged Sales.....	41
5.11	ECSL Submission Line Response.....	41
5.11.1	ECSL Submission Line.....	42
5.11.2	ECSL Submission Line Status.....	43
6.	ECSL Declaration Error Specification.....	45
6.1	GovTalk Error.....	45
6.2	Invalid Request Structure.....	46
6.3	Excessive Number of Submission Lines.....	46
6.4	Invalid Currency Code.....	47
6.5	Invalid Tax Period.....	48
6.5.1	Outdated Period.....	48
6.5.2	Future Period.....	48
6.6	Excessive Submission Line Failures.....	49
7.	TPVS Testing.....	51
7.1	Introduction.....	51
7.2	Key Characteristics.....	51
7.3	Direct Submission Route.....	51
7.4	Driver Data Set.....	52
7.5	Test Scenarios.....	53
8.	Glossary.....	56
8.1	Terms.....	56
8.2	Acronyms.....	57

1. Introduction

The XML ECSL Declaration Service is a reliable channel for VAT registered traders and their appointed agents to submit EC Sales Lists (ECSL) directly via commercial or bespoke software packages.

This service is thus an additional online submission option to the existing Web-based form. It is tailored to the larger trader and agent organisations willing to invest in messaging software.

The XML ECSL Declaration Service is accessed via the Transaction Engine (TxE), an asynchronous messaging system provided by the Government Gateway.

The Document Submission Protocol (DSP) is the XML messaging protocol adopted between the trader/agent's software package, the TxE and the XML ECSL Declaration Service.

This revised document covers the changes introduced by EU Finance Ministers as part of the VAT Package and the Anti-Tax Fraud Strategy (see [Cross Border VAT Changes 2010](#)). Changes from the previous version of the document are indicated by a line in the border.

1.1 Target Audience

This document is addressed to commercial software vendors or trader organisations with in-house development capabilities wishing to provide their customers with a direct “machine-to-machine” channel for the submission of EC Sales Lists.

1.2 Prerequisites

This Technical Interface Specification is just one of several documents contained in a comprehensive “technical pack” covering the XML ECSL Declaration Service.

The technical pack – published on HMRC's “Online Services” Web section – includes all the information required by a software developer to implement and test an XML ECSL Declaration Service client application.

More specifically, familiarity with the Government Gateway's Document Submission Protocol (DSP) and its “GovTalk” XML message format are required for an appropriate understanding of this Technical Interface Specification.

1.3 Objectives

This document has the following objectives:

- To provide a general overview of the XML ECSL Declaration Service clarifying the context and scope of this document;
- To describe in detail the structure and semantics of the following GovTalk-compliant XML messages:
 - ECSL Declaration Request: this is the XML message submitted by the software package containing the trader's EC Sales List;

- ECSL Declaration Response: this is the XML message sent back by the XML ECSL Declaration Service as a positive acknowledgement of the submission;
- ECSL Declaration Error: this is the XML message sent back by the XML ECSL Declaration Service as a negative acknowledgement of the submission.
- To provide a comprehensive list of test scenarios to be executed in the Third Party Validation Service (TPVS) environment.

Note: This document contains extracts of ECSL Declaration Service XML schemas and sample XML messages. It is not meant to be a verbose description of the schemas but rather complement them. The complete schemas and samples are provided in a separate technical pack deliverable.

2. Major Aspects of the XML ECSL Declaration Service

2.1 Context

The main objective of the XML ECSL Declaration Service is to provide a direct “machine-to-machine” channel for the submission of EC Sales Lists.

This channel is an alternative online submission option to the existing Web-based form hosted on the HMRC Portal site.

Figure 1 provides a simplified illustration of the Online ECSL Declaration Service outlining the two submission channels available.

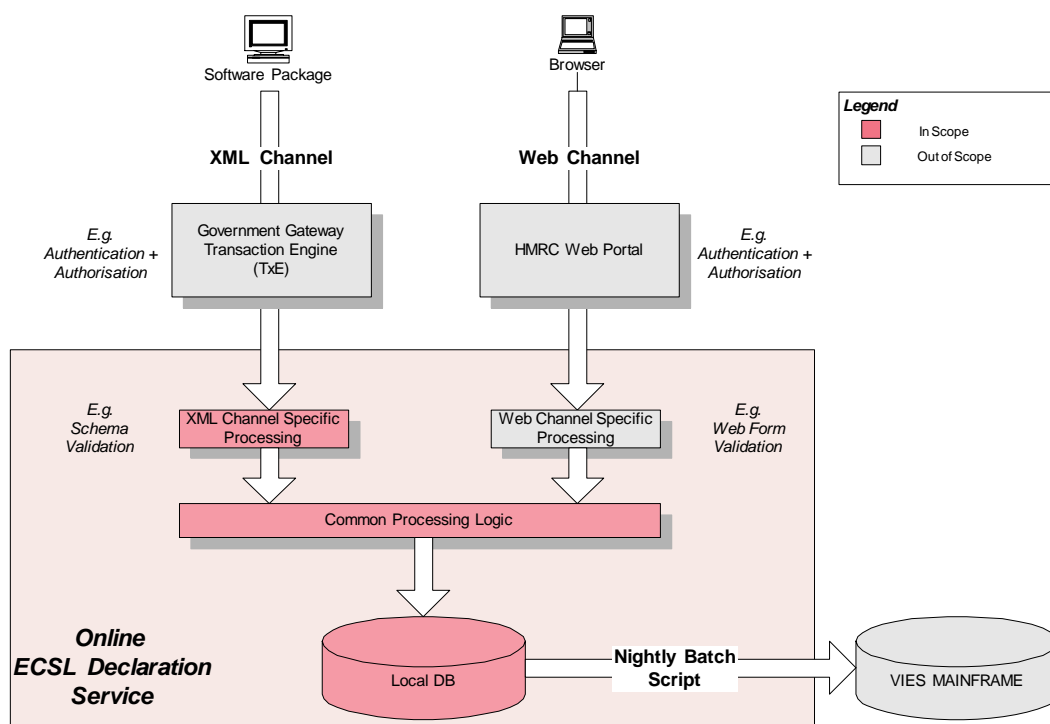


Figure 1 Online ECSL Declaration Service Overview

This document focuses on the XML submission channel only, detailing the structure and semantics of the XML messages exchanged between the ECSL Declaration Service and the software packages developed by the target audience.

2.2 Transport and Security

The XML ECSL Declaration Service is accessed via the Government Gateway’s Transaction Engine (TxE).

The TxE is the standard solution adopted by Government online services for the asynchronous submission and query of XML-based documents.

The underlying messaging protocol governing the exchange of XML documents is the Document Submission Protocol (DSP), which is based on an XML schema known as GovTalk.

The TxE ensures the confidentiality of message exchanges via a “secure HTTP” (or HTTPS) connection.

The TxE enforces client authentication and authorisation based on Government Gateway credentials (user id and password), requiring prior registration and service enrolment on the Gateway Portal site.

Traders wishing to use the XML submission channel must have enrolled/activated the Online ECSL Declaration Service on the Gateway.

Agents need to be enrolled to the common VAT Agent Service and be explicitly appointed by their traders the right to submit EC Sales Lists on their behalf.

All user management tasks for traders and agents are handled on the Government Gateway Portal site and are outside the scope of this document.

2.3 Message Submission & Retrieval

2.3.1 Static View

As mentioned in previous sections, the XML messages exchanged via the Transaction Engine (TxE) must comply with the GovTalk schema.

GovTalk-compliant XML messages have two layers:

- An envelope (conforming to the GovTalk Envelope XML Schema) containing information required by the Government Gateway's TxE to carry out its main tasks (e.g. authentication, authorisation, message routing);
- A body (sometimes referred to as "payload") containing the actual XML document destined to the business service (e.g. ECSL Declaration Service). Except for ensuring the well-formedness of the XML body, the TxE is oblivious of the payload content. It is the responsibility of the destination service to enforce any business specific XML schema for the GovTalk body.

Amendments have been made to VATCore.xsd schema to support changes to ESL Period references and the introduction of declarations for B2B Services. The amended schema will be effective from 01/01/2010. Traders who continue to make Quarterly declarations may continue to use the existing schema, or they can use the amended schema. Traders who are required to declare monthly, as a result of the new legislation, must use the amended schema.

Document Roadmap: Information regarding VATCore schema amendments is covered in section 3.2

Figure 2 shows the logical architecture of the XML ECSL Declaration Service reflecting the layered and modular structure derived from the above discussion.

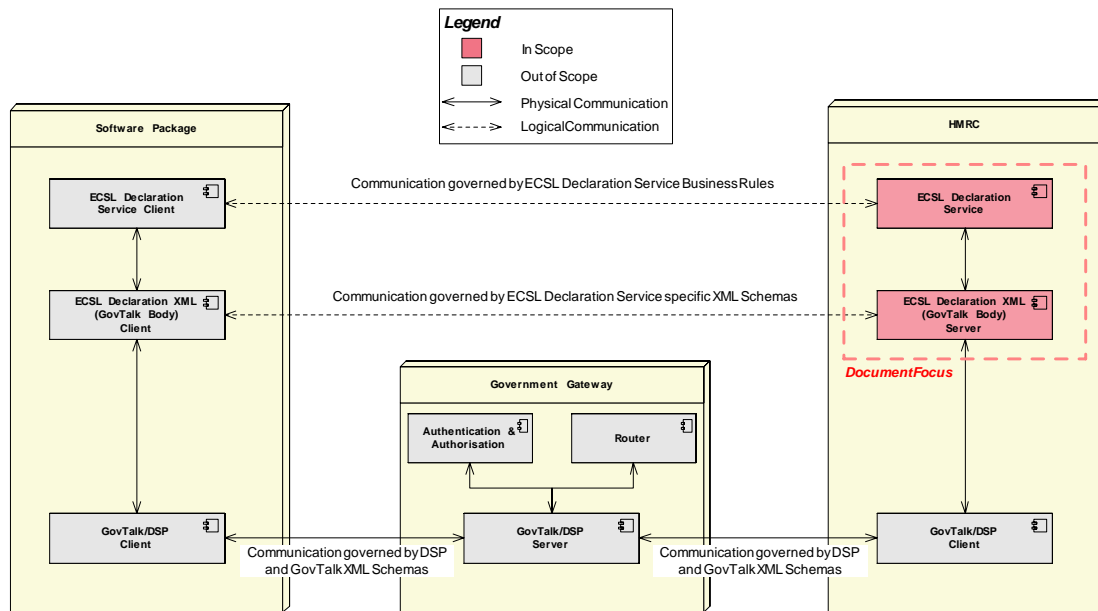


Figure 2 XML Channel Layering

As highlighted in the diagram above, this Technical Interface Specification limits itself to:

- Describing the structure and semantics of the three types of ECSL Declaration XML messages contained within the GovTalk body:
 1. ECSL Declaration Request;
 2. ECSL Declaration Response;
 3. ECSL Declaration Error.
- The business rules which govern the processing and generation of the above messages.

This document does not cover in any detail the Document Submission Protocol (DSP) nor the related GovTalk schema (refer to section “1.2 Prerequisites”).

2.3.2 Dynamic View

Figure 3 and Figure 4 provide a simplified description of the successful end-to-end processing of an EC Sales List submission via the XML channel.

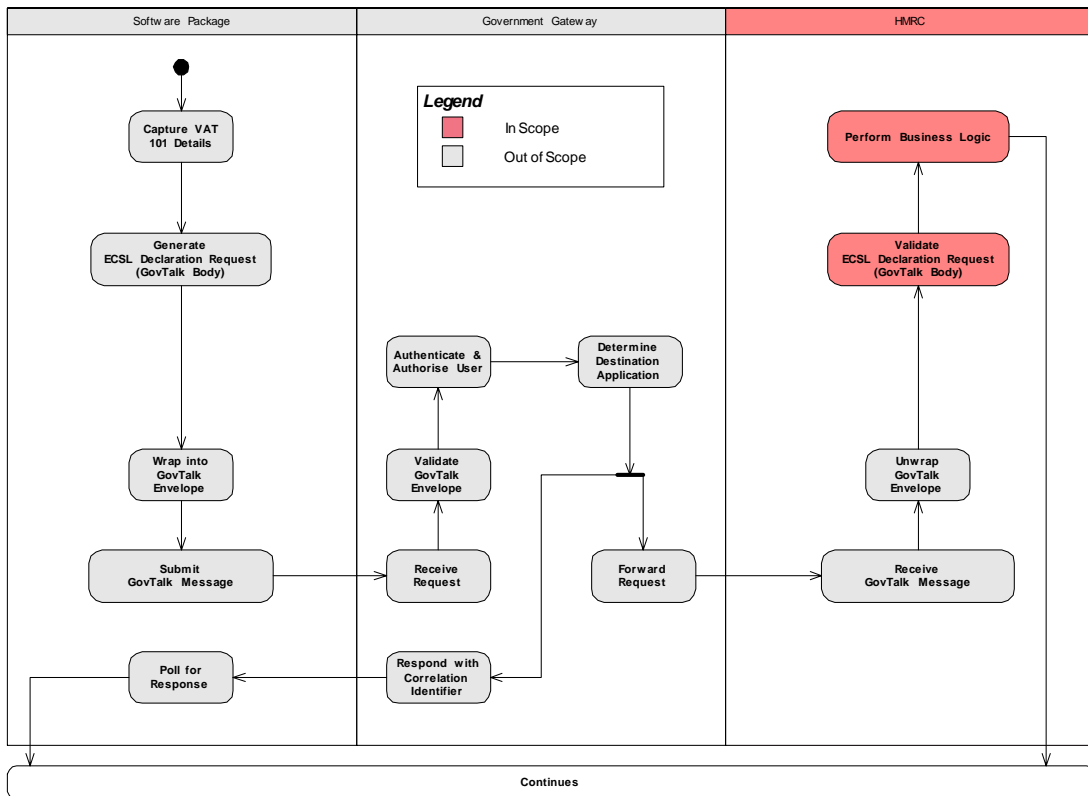


Figure 3 Logical Activity Flow (Part 1/2)

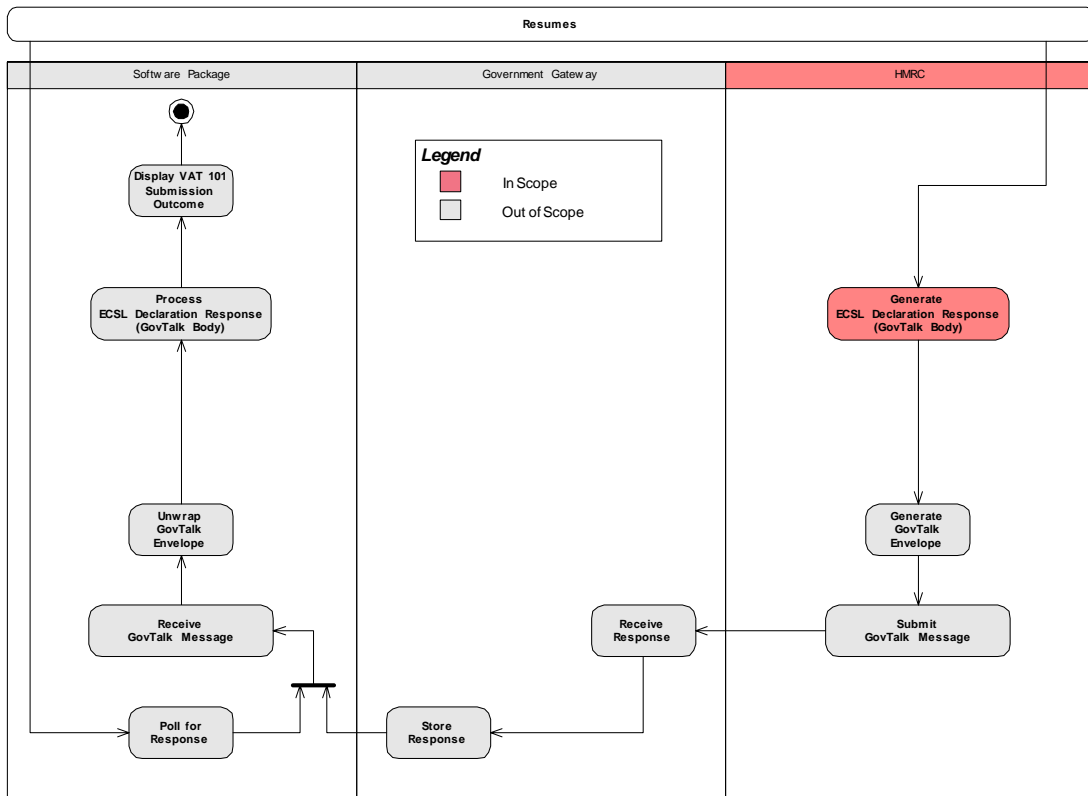


Figure 4 Logical Activity Flow (Part 2/2)

The following is a basic summary of the activities illustrated, with the addition of annotations clarifying the scope of this Technical Interface Specification.

1. Having captured the VAT 101¹ details for a given trader, the software package generates an ECSL Declaration Request message compliant with a business service specific XML schema;
2. The software package wraps the ECSL Declaration Request into a GovTalk envelope and submits the resulting message to the Government Gateway's Transaction Engine (TxE) adhering to the Document Submission Protocol (DSP);
3. The TxE receives the request message, verifies its well-formedness and validates the GovTalk envelope according to the corresponding schema. It then checks the client credentials contained in the envelope for authentication and authorisation purposes and identifies the destination application.

Document Roadmap: The key information needed in the GovTalk envelope to access the XML ECSL Declaration Service is covered in section 3.

4. The TxE forwards the request message to HMRC and acknowledges the submission to the software package by providing a correlation identifier (required to later identify the corresponding response).
5. At this stage, the software package enters a polling state (as defined by the DSP) awaiting a response from HMRC's XML ECSL Declaration Service.
6. In the meanwhile, the XML ECSL Declaration Service receives the GovTalk message from the TxE, unwraps the GovTalk envelope, and validates the enclosed ECSL Declaration Request message according to a predefined business service specific schema.

Document Roadmap: The key information regarding ECSL Declaration Requests is covered in section 3.2.

7. The XML ECSL Declaration Service proceeds by processing the enclosed EC Sales List according to predefined business rules. Note that the business rule covering Transaction Indicator validation has been amended in this release.

Document Roadmap: The processing and business rules are covered in section 4.

8. Where there is a positive processing outcome, the XML ECSL Declaration Service generates an ECSL Declaration Response message and sends it to the TxE.

Where any structural or business validation errors are encountered, the service generates an ECSL Declaration Error message (not shown in the diagrams).

Document Roadmap: The key information regarding ECSL Declaration Responses and Errors are covered in sections 5 and 6 respectively.

9. The TxE receives the response message and stores it for retrieval by the software package.

The software package retrieves the response by polling it with the previously provided correlation identifier. It unwraps the GovTalk envelope and processes the enclosed ECSL Declaration Response message displaying the outcome to the end user (trader or agent).

¹ Name of the paper form equivalent of an EC Sales List.

3. ECSL Declaration Request Specification

3.1 GovTalk Envelope Elements

A full description of the GovTalk envelope is outside the scope of this document. There are however certain elements in the envelope which play a specific role within the context of the XML ECSL Declaration Service thus requiring their coverage within this Technical Interface Specification.

Note: The element descriptions provided in this section are extracts or adaptations from the GovTalk documentation. Please refer to the latter for complete details of the elements listed.

3.1.1 Message Class

Schema File	envelope-v2.0.xsd
Namespace	http://www.govtalk.gov.uk/CM/envelope
Element	Class
Description	<p>This element is the primary identifier by which the Gateway recognises the contents of a document.</p> <p>Data entered into this field by the document's originator controls the processing, validation and routing of a message.</p>
Rules & Constraints	<p>To access the XML ECSL Declaration Service, this element must contain the following value:</p> <p>HMCE-ECSL-ORG-V101</p>
Sample	<Class>HMCE-ECSL-ORG-V101</Class>
Location	<p>The diagram illustrates the structure of the GovTalkMessage element. It is a complex type containing the following elements:</p> <ul style="list-style-type: none"> EnvelopeVersion Header (a complex type containing): <ul style="list-style-type: none"> Class Qualifier Function TransactionID AuditID CorrelationID ResponseEndPoint Transformation GatewayTest GatewayTimestamp GovTalkDetails MessageDetails (a complex type containing): <ul style="list-style-type: none"> SenderDetails Body

3.1.2 Service Key

Schema File	envelope-v2.0.xsd
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Namespace	http://www.govtalk.gov.uk/CM/envelope
Element	Key
Description	<p>This element holds an approved service identifier by which the Gateway can ascertain if the message sender is authorised to submit that type of document to government organisations on behalf of that customer.</p> <p>The service identifiers given here are unique to a particular individual or business, and must match those stored within the Gateway's Registration and Enrolment Service when a user first registers to use electronic business services.</p> <p>Each Key contains a Type attribute and a value to provide the information that the Gateway requires for authorisation of this transaction.</p>
Rules & Constraints	<p>The XML ECSL Declaration Service expects the following trader details as service keys:</p> <ul style="list-style-type: none"> • Branch Identifier; • Branch Post Code; • VAT Registration Number (VRN). <p>The respective Type attributes must be set to:</p> <ul style="list-style-type: none"> • “BranchNo” • “Postcode” • “VATRegNo”
Sample	<pre><Key Type="BranchNo">000</Key> <Key Type="Postcode">n11bc</Key> <Key Type="VATRegNo">999900001</Key></pre>
Location	

3.1.3 Channel

Schema File	envelope-v2.0.xsd
Namespace	http://www.govtalk.gov.uk/CM/envelope

Element	Channel
Description	<p>This element provides extra information about the originating application. It contains the following local elements:</p> <ul style="list-style-type: none"> • URI This element contains the URI of the owner of the current process thus allowing the Gateway to uniquely identify the application from which the message originates. • Name This element is an alternative to the URI element. It contains information allowing the Gateway to identify the originating application. • Product This element contains the name of the software used to create the original message submitted to the Gateway. • Version This element contains the version number of the software (as specified in the Product element) that was used to create the original message.
Rules & Constraints	<p>The Channel element is optional. However it is strongly recommended to populate it in order to benefit from enhanced support and assistance from HMRC's Software Development Support Team (SDST).</p> <p>The URI element must be used instead of Name and must contain the Vendor Identifier as communicated by SDST.</p>
Sample	<pre><Channel > <URI>1234</URI > <Product>VATWare</Product > <Version>1.1</Version > </Channel ></pre>
Location	<p>The diagram illustrates the structure of a GovTalkMessage. At the top level is GovTalkMessage, which contains EnvelopeVersion, Header, and GovTalkDetails. GovTalkDetails is a complex element containing Keys, TargetDetails, GatewayValidation, ChannelRouting, GovTalkErrors, and GatewayAdditions. ChannelRouting contains ID and Timestamp. Channel contains URI, Name, Product, and Version.</p>

3.2 GovTalk Body Elements

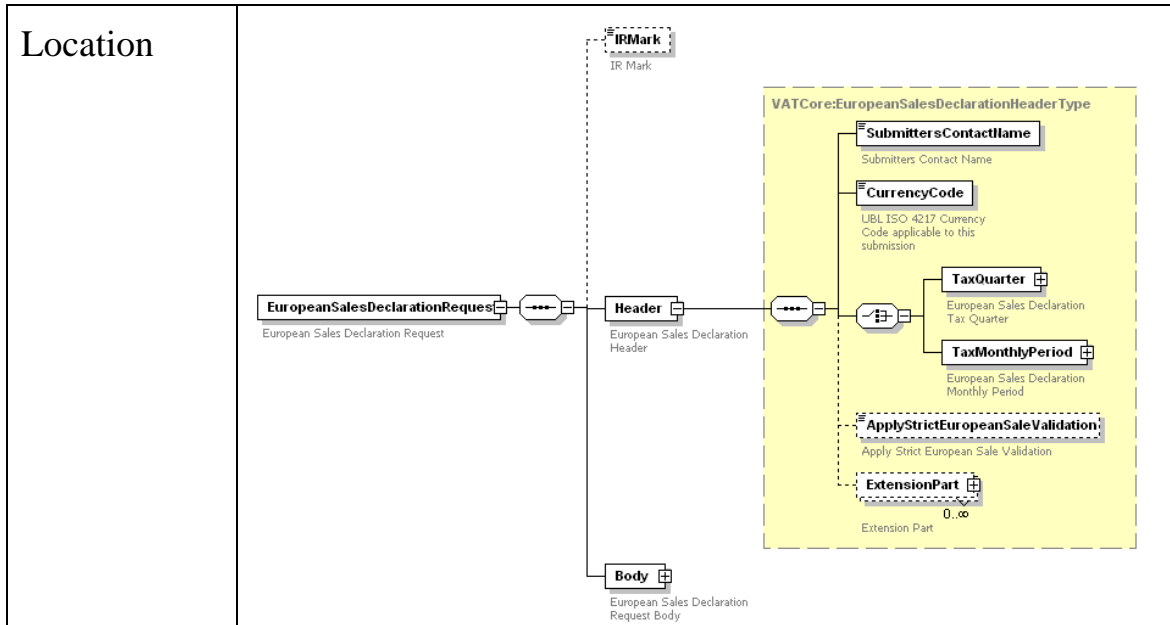
3.2.1 IR Mark

IR Mark will not be implemented in the current release of the XML ECSL Declaration Service. Schema elements have been included for future use.

Schema File	EuropeanSalesDeclarationRequest.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/european salesdeclaration/1
Element	IRMark
Description	This element is a Base64 encoded string representing the message digest of the request payload.
Rules & Constraints	This field is optional and reserved for future use. Any value contained within it will be ignored in the current release.
Location	<p>The diagram illustrates the structure of the EuropeanSalesDeclarationRequest. It is a root element containing a Header and a Body. The IRMark element is shown as a dashed box connected to the Header element.</p>

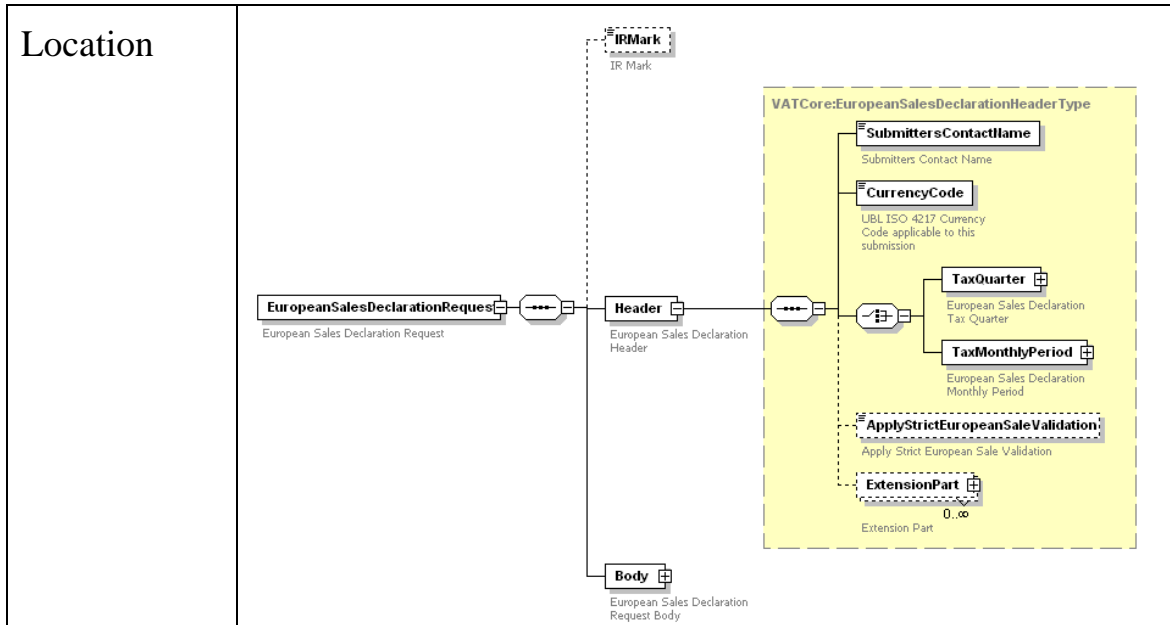
3.2.2 Submitter's Contact Name

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	SubmittersContactName
Description	This element contains the name of the person to contact within the submitting trader organisation where there are queries from HMRC.
Rules & Constraints	This is a mandatory element.
Sample	<pre><VATCore:SubmittersContactName> John Smith </VATCore:SubmittersContactName></pre>



3.2.3 Currency Code

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	CurrencyCode
Description	This element contains the “ISO 4217 Alpha” Currency Code related to the monetary values contained in the ECSL Declaration. It has been introduced for Euro Compliance reasons.
Rules & Constraints	This element is optional and defaults to “GBP”, the only currency currently supported by the system.
Sample	<pre><VATCore:CurrencyCode codeListName="Currency" codeListID="ISO 4217 Alpha" codeListAgencyName="United Nations Economic Commission for Europe" codeListSchemeURI="urn:oasis:names:specifi cation:ubl:schema:xsd:CurrencyCode-1.0" codeListURI="http://www.bsi- global.com/Technical%2BInformation/Publica tions/_Publications/tig90x.doc" name="String" codeListAgencyID="6" codeListVersionID="0.3" languageID="en"> GBP </VATCore:CurrencyCode></pre>



3.2.4 Tax Quarter

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	TaxQuarter
Description	<p>This element contains the following local elements:</p> <ul style="list-style-type: none"> • <code>TaxQuarterNumber</code> This element contains the identifier of the yearly quarter for which the ECSL Declaration is due. • <code>TaxQuarterYear</code> This element contains the year for which the ECSL Declaration is due. • <code>DueDate</code> This element contains the date for which the ECSL Declaration is due.
Rules & Constraints	<p>The following rules apply to this element:</p> <ul style="list-style-type: none"> • <code>TaxQuarterNumber</code> is mandatory and can have only 4 possible values: {1, 2, 3, 4}; • <code>TaxQuarterYear</code> is mandatory and must be a valid year ("YYYY" format). <p><i>Warning:</i> <code>DueDate</code> is reserved for the ECSL Declaration Response. This element should not be included in the request message. Any value contained in the request will be ignored.</p>

<p>Sample</p>	<pre> <VATCore:TaxQuarter> <VATCore:TaxQuarterNumber> 1 </VATCore:TaxQuarterNumber> <VATCore:TaxQuarterYear> 2004 </VATCore:TaxQuarterYear> </VATCore:TaxQuarter> </pre>
<p>Location</p>	

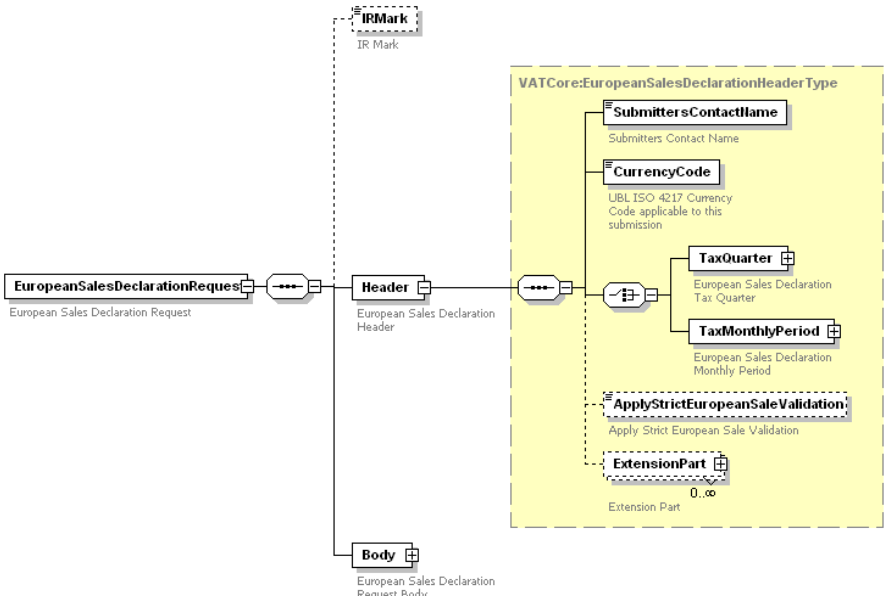
3.2.5 Tax Monthly Period

<p>Schema File</p>	<p>VATCore.xsd</p>
<p>Namespace</p>	<p>http://www.govtalk.gov.uk/taxation/vat/core/1</p>
<p>Element</p>	<p>TaxMonthlyPeriod</p>
<p>Description</p>	<p>This element contains the following local elements:</p> <ul style="list-style-type: none"> • TaxMonth This element contains the identifier for the month for which the ECSL Declaration is due. • TaxMonthPeriodYear This element contains the year for which the ECSL Declaration is due. • DueDate This element contains the date for which the ECSL Declaration is due.

Rules & Constraints	<p>The following rules apply to this element:</p> <ul style="list-style-type: none"> • TaxMonth is mandatory and can have only 12 possible values: {Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec}; • TaxMonthPeriodYear is mandatory and must be a valid year (“YYYY” format). <p><i>Warning:</i> DueDate <i>is reserved for the ECSL Declaration Response. This element should not be included in the request message. Any value contained in the request will be ignored.</i></p>
Sample	<pre> <VATCore:TaxMonthlyPeriod> <VATCore:TaxMonth> Feb </VATCore:TaxMonth> <VATCore:TaxMonthPeriodYear> 2011 </VATCore:TaxMonthPeriodYear> </VATCore:TaxMonthlyPeriod> </pre>
Location	

3.2.6 Strict Validation Flag

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	ApplyStrictEuropeanSaleValidation

Description	<p>This element contains a flag which can be set by the submitter to disable the default 30% Failed Submission Line Rejection Threshold (see Glossary).</p> <p><i>Warning: Setting this flag means that any ECSL Submission Line failure will result in the complete rejection of the ECSL Declaration.</i></p>
Rules & Constraints	<p>This element is optional and defaults to “false”, thus applying the default 30% Failed Submission Line Rejection Threshold.</p> <p>If explicitly set to “true”, a single ECSL Submission Line failure will cause the entire ECSL Declaration to be rejected.</p>
Sample	<pre><VATCore:ApplyStrictEuropeanSaleValidation> false </VATCore:ApplyStrictEuropeanSaleValidation></pre>
Location	

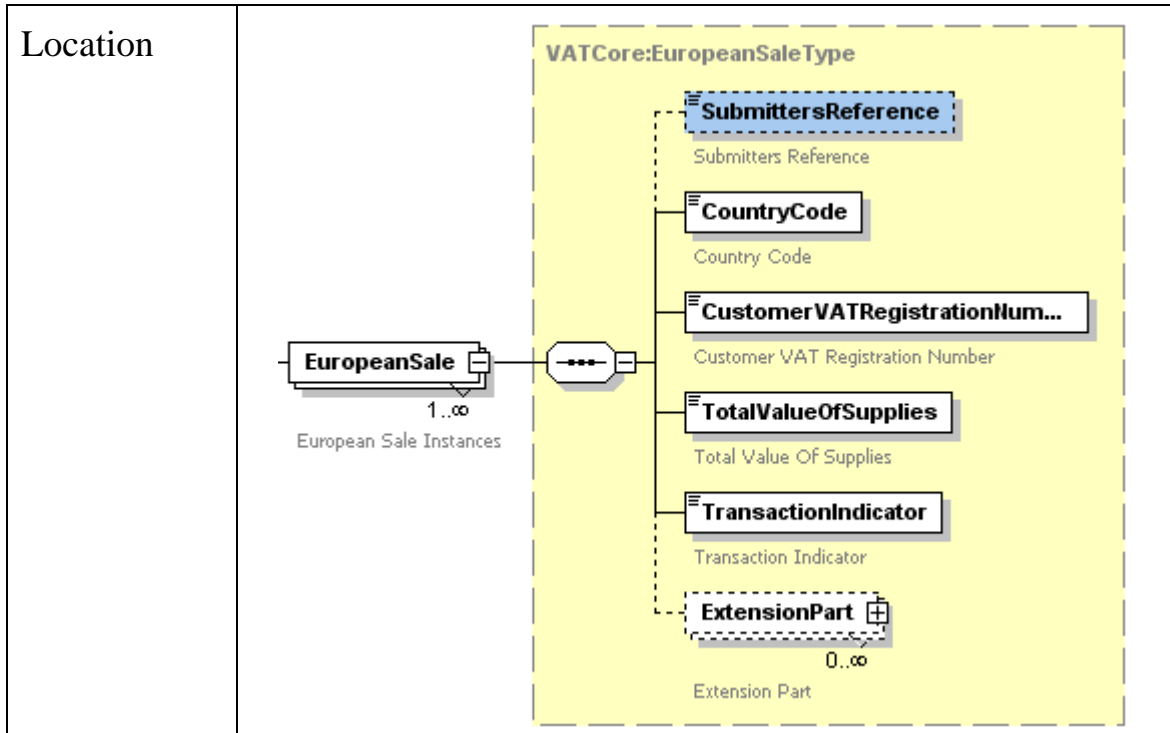
3.2.7 ECSL Submission Line

Schema File	EuropeanSalesDeclarationRequest.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/european salesdeclaration/1
Element	EuropeanSale
Description	<p>This element represents a single ECSL Submission Line containing the following information:</p> <ul style="list-style-type: none"> • SubmittersReference • CountryCode • CustomerVATRegistrationNumber • TotalValueOfSupplies • TransactionIndicator <p>All these elements are detailed in the subsequent sub-sections.</p>

<p>Rules & Constraints</p>	<p>There must be at least one EuropeanSale element (i.e. one Submission Line) per ECSL Declaration.</p> <p>All of the above listed elements are mandatory with the exception of the SubmittersReference.</p> <p>Refer to the following sub-sections for the rules and constraints that apply to each of these elements.</p>
<p>Location</p>	

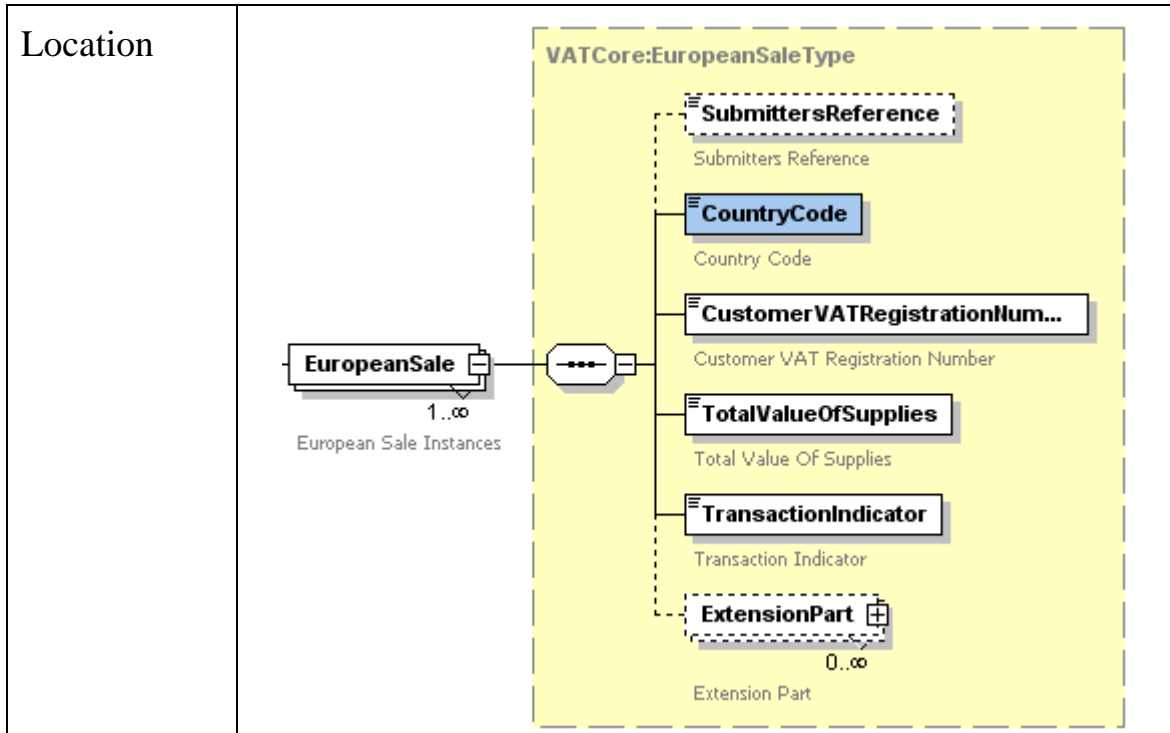
3.2.7.1 Submitter's Reference

<p>Schema File</p>	<p>VATCore.xsd</p>
<p>Namespace</p>	<p>http://www.govtalk.gov.uk/taxation/vat/core/1</p>
<p>Element</p>	<p>SubmittersReference</p>
<p>Description</p>	<p>This element contains a software package specific reference to help it internally identify a given ECSL Submission Line.</p>
<p>Rules & Constraints</p>	<p>This is an optional element and no specific validation is carried out on it. Each software developer can thus adopt a line reference convention that best suits their product.</p> <p>This element is recommended as it allows the identification of successful/failed Submission Lines by reference rather than by value.</p>
<p>Sample</p>	<pre><VATCore:SubmittersReference> ECSL-0001 </VATCore:SubmittersReference></pre>



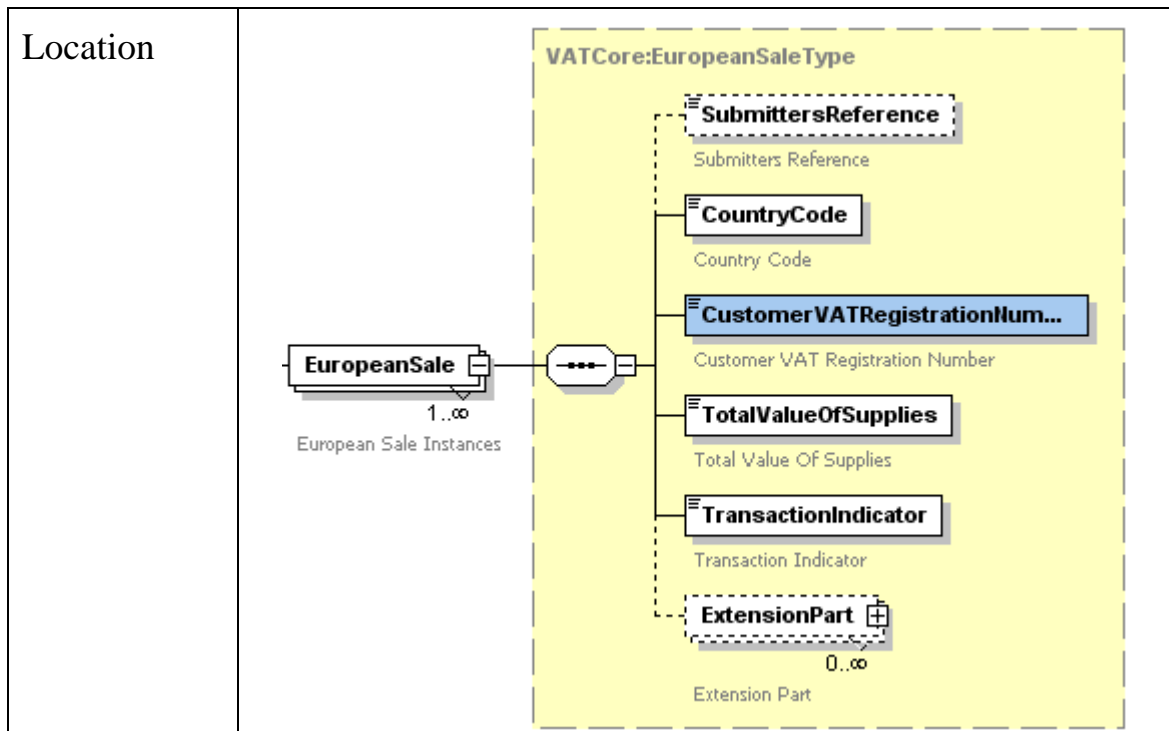
3.2.7.2 Country Code

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	CountryCode
Description	This element contains the identifier representing the member state of the EU Customer.
Rules & Constraints	<p>This element is mandatory and must contain a 2 character EU Country Code as specified in the following web page: http://ec.europa.eu/taxation_customs/vies/en/faqvies.htm#item11</p> <p>From a schema (i.e. structural) perspective, any 2-character combination (upper or lower case) will be accepted.</p> <p>However, the correct EU Country Codes as specified in the link above will be enforced programmatically (refer to the Processing and Business Rules Specification section for details).</p> <p><i>Warning: The Country Codes used are not ISO 3166-1 Alpha-2 compliant (e.g. Greece is "EL" instead of the ISO standard "GR").</i></p>
Sample	<VATCore:CountryCode>AT</VATCore:CountryCode>



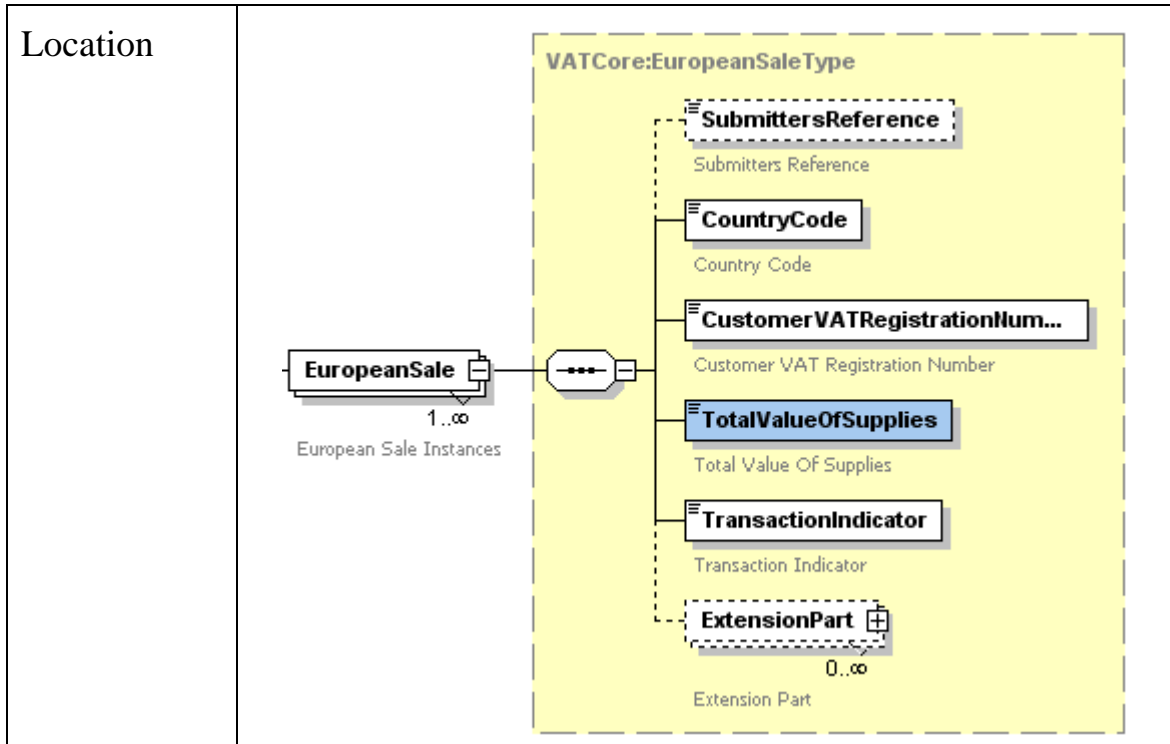
3.2.7.3 EU Customer VRN

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	CustomerVATRegistrationNumber
Description	This element contains the VRN of the purchaser of the goods within the VAT system of the EU member state in which the purchaser is registered.
Rules & Constraints	<p>This element is mandatory.</p> <p>From a schema (i.e. structural) perspective, there are no explicit VRN formatting checks carried out.</p> <p>The VRNs are validated programmatically (refer to the Processing and Business Rules Specification section for details).</p> <p>The public VRN formatting rules for each EU member state can be found in the following web page:</p> <p>http://ec.europa.eu/taxation_customs/vies/en/faqvies.htm#item11</p>
Sample	<pre><VATCore:CustomerVATRegistrationNumber> U10223006 </VATCore:CustomerVATRegistrationNumber></pre>



3.2.7.4 Total Value of Supplies

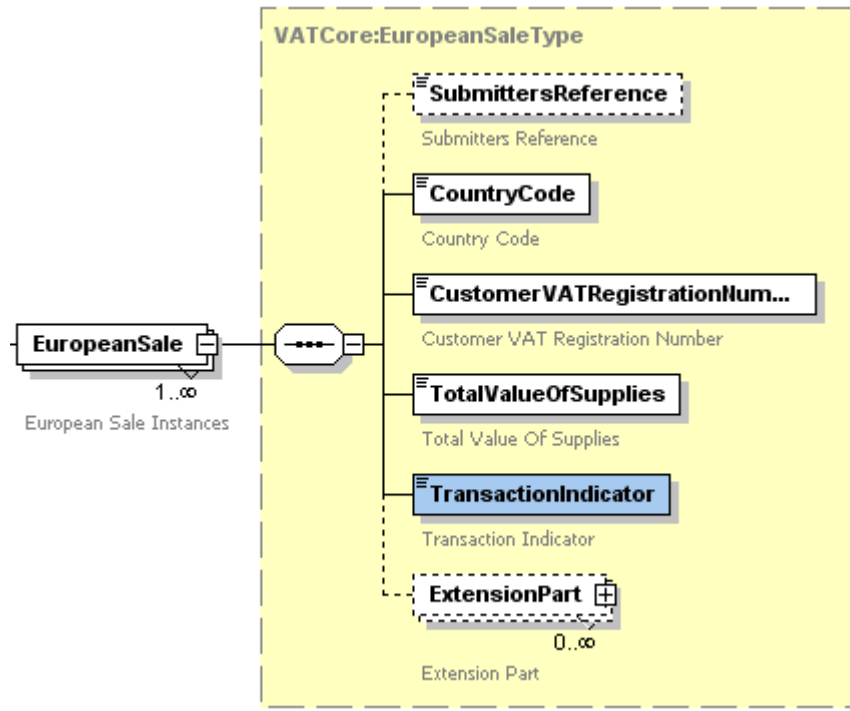
Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	TotalValueOfSupplies
Description	<p>This element contains the total value of goods and related services supplied to the customer during the Tax Period to which the ESL Declaration relates.</p> <p>The value is expressed in whole pounds sterling (i.e. GBP).</p>
Rules & Constraints	<p>The following rules apply to this element:</p> <ul style="list-style-type: none"> • Mandatory; • Can be positive or negative; • Must <u>not</u> be zero; • Must be at most 14 whole pound digits with the addition of a possible minus sign.
Sample	<pre><VATCore:TotalValueOfSupplies> 20 </VATCore:TotalValueOfSupplies></pre>



3.2.7.5 Transaction Indicator

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	TransactionIndicator
Description	<p>This elements contains the identifier for the type of transaction:</p> <ul style="list-style-type: none"> • 0: “B2B Goods” • 2: “Triangulated Goods” • 3: “B2B Services”
Rules & Constraints	This element is mandatory and should contain one numeric digit with either a “0”, “2” or “3”
Sample	<pre><VATCore:TransactionIndicator> 3 </VATCore:TransactionIndicator></pre>

Location



4. Processing and Business Rules Specification

This section covers the main processing and business rules applied to ECSL Declaration Request messages, governing the ultimate ECSL Declaration Response and Error messages generated by the service.

Figure 5 provides a detailed description of the XML ECSL Declaration Service process flow.

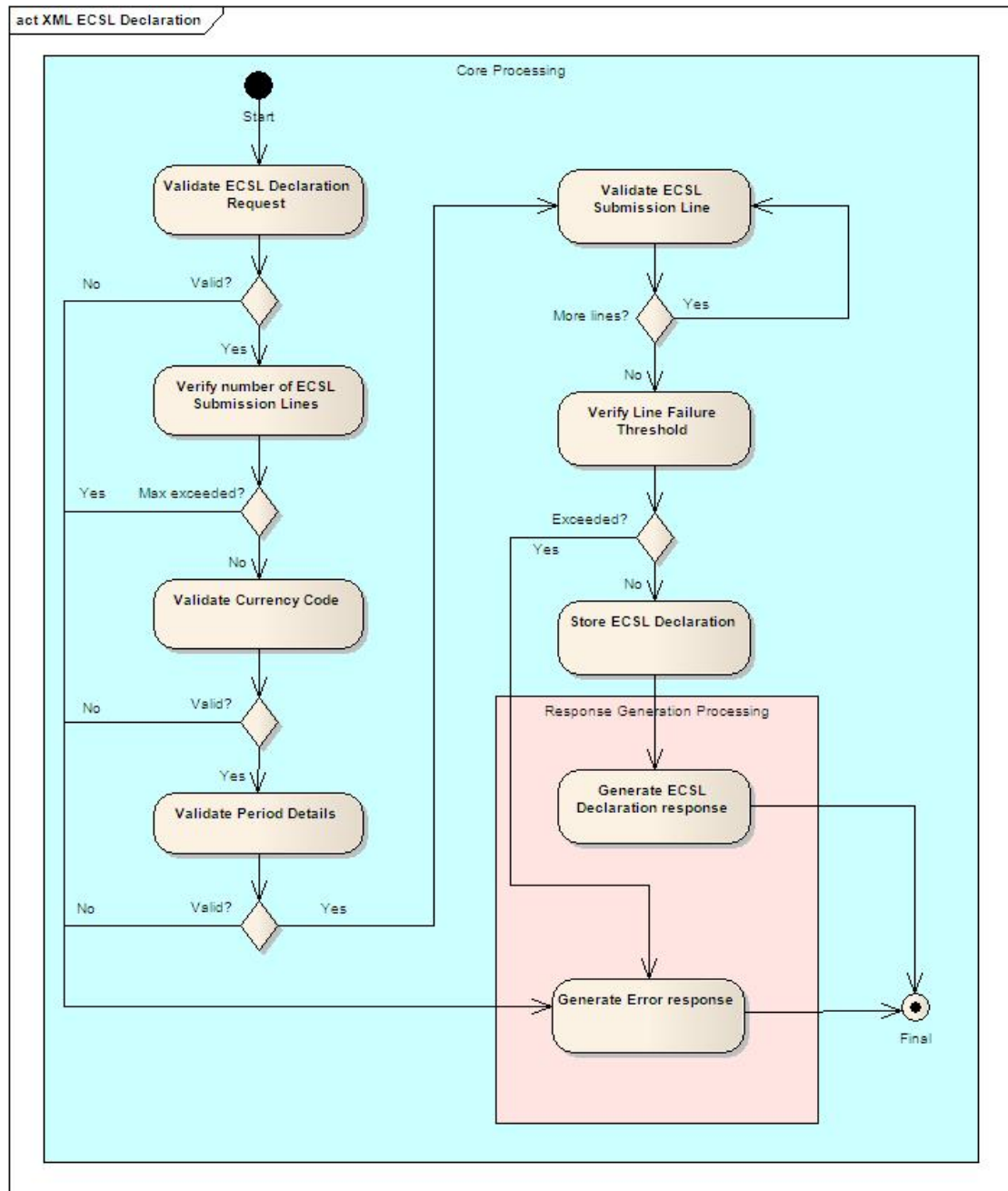


Figure 5 XML ECSL Declaration Service Processing Flow

Two functional areas have been outlined:

- The Core Processing consists in ensuring the ECSL Declaration Request submitted is both syntactically and semantically valid before being stored. The

underlying processing and business rules are covered in the following subsections:

- Request Structural Validation (see section 4.1);
 - Maximum Submission Line Verification (see section 4.2);
 - Currency Code Validation (see section 4.3);
 - Tax Period Details Processing (see section 4.4);
 - ECSL Submission Line Validation (see section 4.5);
 - Submission Line Failure Threshold Verification (see section 4.6).
- The Response Generation Processing consists in creating the ECSL Declaration Response and Error messages. These are the subjects of sections 5 and 6 respectively.

4.1 Request Structural Validation

Rule Title	Request Structural Validation Rule
Type	Business Rule
Request Element References	This rule applies to every element of the ECSL Declaration Request contained within the GovTalk body.
Description	The ECSL Declaration Request message must validate against the following business provided XML schema: <code>EuropeanSalesDeclarationRequest.xsd</code>
Error Element References	Where this rule fails, the following error message is generated: <ul style="list-style-type: none"> ● Invalid Request Structure (see section 6.2)

4.2 Maximum Submission Line Verification

Rule Title	Maximum Submission Line Verification Rule
Type	Business Rule
Request Element References	This rule applies to the following elements of the VAT Declaration Request: <ul style="list-style-type: none"> ● ECSL Submission Line (see section 3.2.7)
Description	The ECSL VAT Declaration Service allows a maximum of 9999 Submission Lines per declaration.
Error Element References	Where this rule fails, the following error message is generated: <ul style="list-style-type: none"> ● Excessive Number of Submission Lines (see section 6.3)

4.3 Currency Code Validation

Rule Title	Currency Code Validation Rule
Type	Business Rule
Request Element References	This rule applies to the following elements of the ECSL Declaration Request: <ul style="list-style-type: none">• Currency Code (see section 3.2.3)
Description	<p>The ECSL VAT Declaration Service only accepts “GBP” as the Currency Code.</p> <p>Although the ECSL Declaration Request XML Schema ensures the appropriate default value for the Currency Code, it does not impose it directly itself.</p> <p>The Currency Code check is thus enforced programmatically.</p>
Error Element References	Where this rule fails, the following error message is generated: <ul style="list-style-type: none">• Invalid Currency Code (see section 6.4)

4.4 Tax Period Details Processing

4.4.1 Tax Period Validation

Rule Title	Tax Period Validation Rule
Type	Business Rule
Request Element References	This rule applies to the following elements of the ECSL Declaration Request: <ul style="list-style-type: none">• Tax Quarter (see section 3.2.4)• Tax Monthly Period (see section 3.2.5)

Description	<p>Whether Tax Quarter or Tax Monthly Period should be provided depends on the following:</p> <p>If the Trader is mandated to submit monthly and the declaration is to include Goods then Tax Monthly Period must be used.</p> <p>If the Trader is not mandated to submit monthly or if only Services are being declared then either Tax Quarter or Tax Monthly Period may be used.</p> <p>Two checks are made against the Tax Quarter or Tax Monthly Period:</p> <ul style="list-style-type: none"> • It must not be over 6 years old; • It must not be in the future. <p><u>Note:</u> The first check only takes into account the Tax Year. For instance, if the current year is 2010, any period for the year 2004 would be accepted .</p> <p>Pseudo-Code:</p> <pre style="text-align: center;"> Fail if (Year Specified < (Current Year - 6)) OR (Quarter Specified, Year Specified) > (Current Quarter, Current Year) OR (Month Specified, Year Specified) > (Current Month, Current Year) </pre>
Error Element References	<p>According to which check fails, the following error messages can be generated:</p> <ul style="list-style-type: none"> • Outdated Period (see section 6.5.1) • Future Period (see section 6.5.2)

4.4.2 Tax Period Due Date Resolution

Rule Title	Tax Period Due Date Resolution Rule
Type	Business Rule
Request Element References	<p>This rule applies to the following elements of the ECSL Declaration Request:</p> <ul style="list-style-type: none"> • Tax Quarter (see section 3.2.4) • Tax Monthly Period (see section 3.2.5)

Description	The Due Date amounts to 3 weeks after the end of the Tax Period specified. Pseudo-Code: <code>Due Date = 21 days from period end date</code>
Response Element References	This rule applies to the following elements of the ECSL Declaration Response: <ul style="list-style-type: none"> • Tax Quarter – Due Date (see section 5.4) • Tax Monthly Period (see section 5.5)

4.5 ECSL Submission Line Validation

The following rules are applied to each Submission Line in the ECSL Declaration.

4.5.1 EU Membership Validation

Rule Title	EU Membership Validation Rule
Type	Referential Rule
Request Element References	This rule applies to the following elements of the ECSL Declaration Request: <ul style="list-style-type: none"> • Country Code (see section 3.2.7.2)
Description	The Country Code must be associated to one of the EU member states (excluding “GB”). Moreover, the relative country must have effectively joined the EU during the ECSL Declaration’s specified Tax Quarter. Example: a Submission Line with Country Code “CZ” (Czech Republic) for a Tax Quarter set to 2003 Q2 would fail validation (the Czech Republic joined the EU in May 2004). Pseudo-Code: <code>Fail if</code> <code>(Country Code = “GB”)</code> <code>OR</code> <code>(Country Code not in EU Member List during</code> <code>Quarter/Year specified)</code>
Response Element References	This rule applies to the following elements of the ECSL Declaration Response: <ul style="list-style-type: none"> • ECSL Submission Line Response (see section 5.11)

4.5.2 EU Customer VRN Validation

Rule Title	EU Customer VRN Validation Rule
Type	Business Rule

Request Element References	This rule applies to the following elements of the ECSL Declaration Request: <ul style="list-style-type: none"> • EU Customer VRN (see section 3.2.7.3)
Description	The EU Customer VRN validation consists of both formatting rules and confidential checksum rules. The formatting rules for each EU member state can be found in the following web page: http://ec.europa.eu/taxation_customs/vies/en/faqvies.htm#item11
Response Element References	This rule applies to the following elements of the ECSL Declaration Response: <ul style="list-style-type: none"> • ECSL Submission Line Response (see section 5.11)

4.5.3 Transaction Indicator Validation

Rule Title	Transaction Indicator Validation Rule
Type	Referential Rule
Request Element References	This rule applies to the following elements of the ECSL Declaration Request: <ul style="list-style-type: none"> • Transaction Indicator (see section 3.2.7.5)
Description	The Transaction Indicator is an enumeration of only 3 possible values: {0, 2, 3}. Pseudo-Code: <pre>Fail if (Transaction Indicator != (0 or 2 or 3)) OR (Transaction Indicator not yet effective for Period /Year specified)</pre> <p><i>Note:</i> Submissions prior to 1/1/2010 can only have the value 0 or 2.</p>
Response Element References	This rule applies to the following elements of the ECSL Declaration Response: <ul style="list-style-type: none"> • ECSL Submission Line Response (see section 5.11)

4.6 Submission Line Failure Threshold Verification

Rule Title	Submission Line Failure Threshold Verification Rule
Type	Business Rule

Request Element References	<p>This rule applies to the following elements of the ECSL Declaration Request:</p> <ul style="list-style-type: none"> • Strict Validation Flag (see section 3.2.6) • ECSL Submission Line (see section 3.2.7)
Description	<p>By default, the Failed Submission Line Rejection Threshold is set to 30%: if 30% or more of the Submission Lines fail validation, the entire ECSL Declaration is rejected.</p> <p>However, if the Strict Validation Flag is set to “true”, the threshold is set to 0%, thus any Submission Line failure will cause the entire ECSL Declaration to be rejected.</p>
Response Element References	<p>Where this rule fails, the following error message is generated:</p> <ul style="list-style-type: none"> • Excessive Submission Line Failures (see section 6.6)

5. ECSL Declaration Response Specification

5.1 Success Response

Schema File	SuccessResponse-v1-1.xsd
Namespace	http://www.inlandrevenue.gov.uk/SuccessResponse
Element	SuccessResponse
Description	<p>This element is the generic HMRC “wrapper” containing service specific successful responses.</p> <p>It has been introduced for consistency with (ex-) Inland Revenue services.</p> <p>It contains the following local elements:</p> <ul style="list-style-type: none">• IRmarkReceipt• Message• AcceptedTime• ResponseData
Rules & Constraints	<p>The ECSL Declaration Response message (as defined by the EuropeanSalesDeclarationResponse.xsd file) must be included in the ResponseData element.</p> <p>The IRmarkReceipt, Message, and ResponseData elements are reserved for future use and will be ignored in the current release.</p>
Sample	<pre><suc:SuccessResponse xmlns:suc= "http://www.inlandrevenue.gov.uk/SuccessResponse"> <suc:ResponseData> <ns: EuropeanSalesDeclarationResponse ...> ... </ns: EuropeanSalesDeclarationResponse> </suc:ResponseData> </suc:SuccessResponse></pre>

Location

SuccessResponse

IR generic response to a successful live or 'test in live' submission
- the value of the 'TestInLive' attribute indicates which. See Gateway ErrorResponse Schema for generic response to failed submissions.

IRmarkReceipt

Signature block contains signature (using IR's private key) over the original submission - therefore DigestValue is the actual IRmark, which may be repeated in the prose of the compulsory receipt message. DigestValue representation is base-64, but for presentation purposes this may be converted to a base-32 string. The receipt should be saved for future reference along with the matching original submission after first checking that the returned IRmark matches the submitted IRmark.

This receipt is optional until such time as all IR services support IRmark. For any particular service therefore, the presence of the IRmark receipt may be mandatory (See Service-specific documentation for details).

Message

0..∞

Service-specific advisory text messages (if any). It is possible for more than one message to be returned per response. Each message must be presented to the user. Service-specific message codes are carried in the 'code' attribute (see Service-specific documentation for details).

AcceptedTime

Placeholder for future use.

ResponseData

Container for service-specific response data if any (e.g. MSD returned payment reference). See additional service-specific response data Schema (if any) and documentation for details.

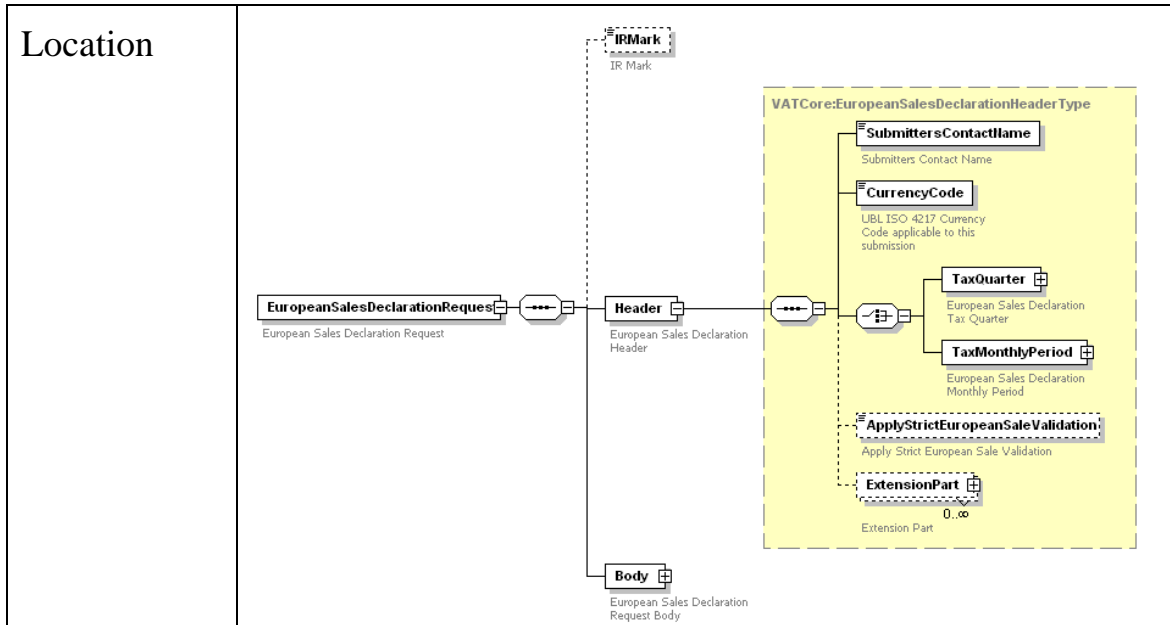
5.2 Submitter's Contact Name

Schema File	VATCore.xsd
-------------	-------------

Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	SubmittersContactName
Description	This is the same element as the one described in section 3.2.2 of the ECSL Declaration Request Specification
Rules & Constraints	This element must contain the corresponding value specified in the request message.
Sample	Refer to section 3.2.2.
Location	<p>The diagram illustrates the structure of the VATCore:EuropeanSalesDeclarationHeader Type. It is a complex type containing several elements: SubmittersContactName (Submitters Contact Name), CurrencyCode (UBL ISO 4217 Currency Code applicable to this submission), TaxQuarter (European Sales Declaration Tax Quarter), TaxMonthlyPeriod (European Sales Declaration Monthly Period), ApplyStrictEuropeanSaleValidation (Apply Strict European Sale Validation), and ExtensionPart (Extension Part). The diagram also shows the relationship between the EuropeanSalesDeclarationRequest (European Sales Declaration Request) and its Header (European Sales Declaration Header) and Body (European Sales Declaration Request Body). An IRMark (IR Mark) is also indicated.</p>

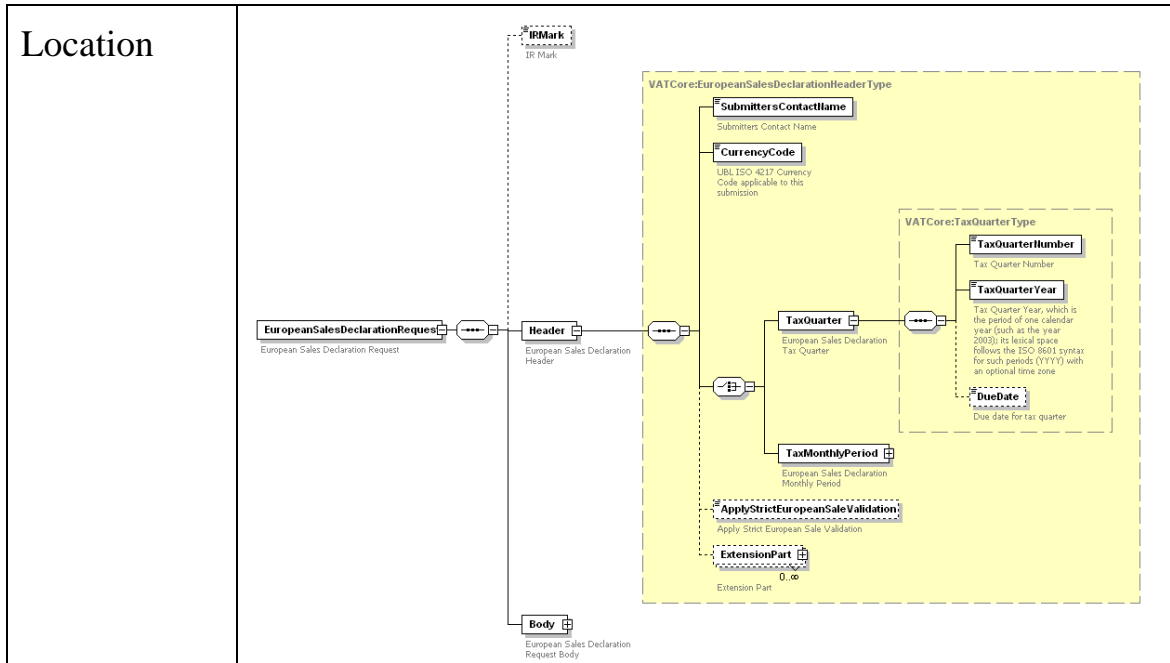
5.3 Currency Code

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	CurrencyCode
Description	This is the same element as the one described in section 3.2.3 of the ECSL Declaration Request Specification
Rules & Constraints	This element must contain the value “GBP”, the only currency currently supported by the system.
Sample	Refer to section 3.2.3.



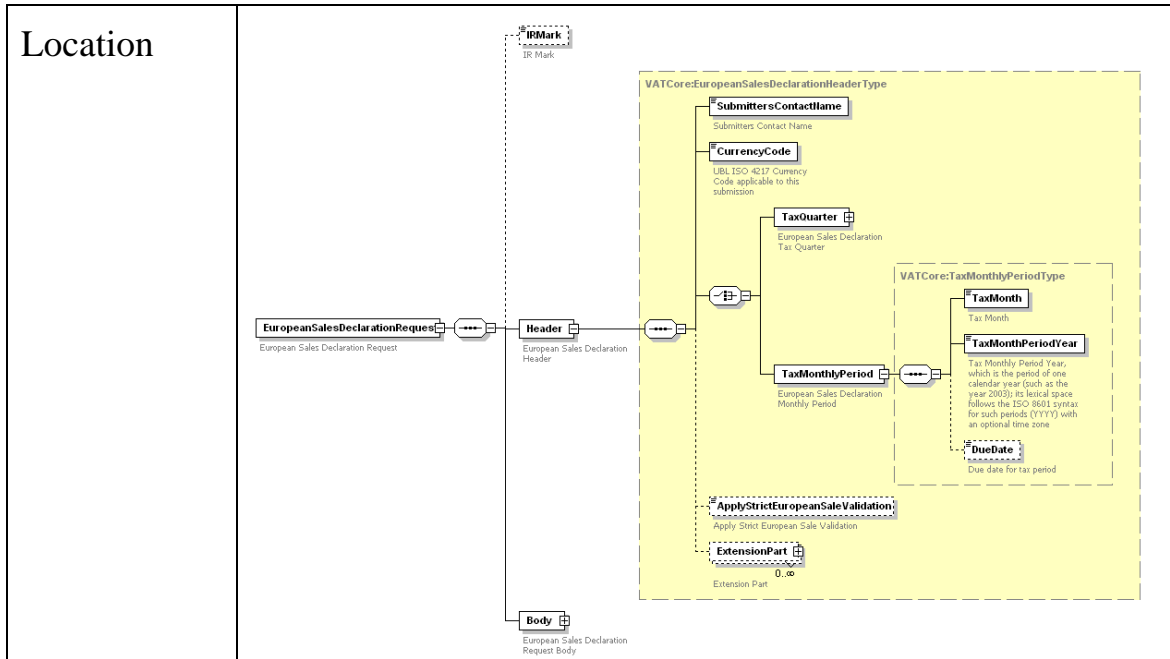
5.4 Tax Quarter

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	TaxQuarter
Description	This is the same element as the one described in section 3.2.4 of the ECSL Declaration Request Specification
Rules & Constraints	<p>The TaxQuarterNumber and TaxQuarterYear must contain the same values specified in the request message.</p> <p>The DueDate must contain the Tax Quarter Due Date as determined via the Tax Period Due Date Resolution rule (see section 4.4.2).</p>
Sample	<pre> <ns1:TaxQuarter xmlns:ns1="http://www.govtalk.gov.uk/taxation /vat/core/1"> <ns1:TaxQuarterNumber> 1 </ns1:TaxQuarterNumber> <ns1:TaxQuarterYear> 2006 </ns1:TaxQuarterYear> <ns1:DueDate> 2006-04-21 </ns1:DueDate> </ns1:TaxQuarter> </pre>



5.5 Tax Monthly Period

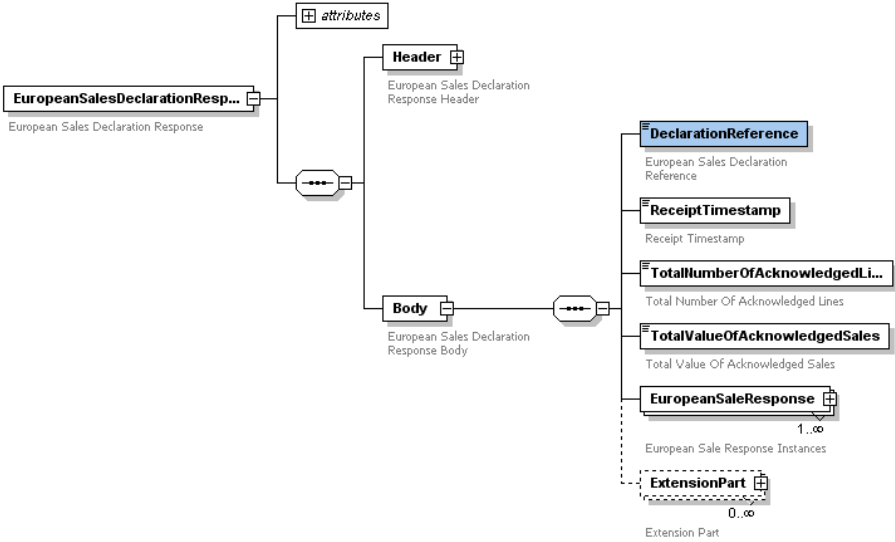
Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	TaxMonthlyPeriod
Description	This is the same element as the one described in section 3.2.5 of the ECSL Declaration Request Specification
Rules & Constraints	The TaxMonth and TaxMonthPeriodYear must contain the same values specified in the request message. The DueDate must contain the Tax Monthly Period Due Date as determined via the Tax Period Due Date Resolution rule (see section 4.4.2).
Sample	<pre> <VATCore:TaxMonthlyPeriod> <VATCore:TaxMonth> Feb </VATCore:TaxMonth> <VATCore:TaxMonthPeriodYear> 2011 </VATCore:TaxMonthPeriodYear> <VATCore:DueDate> 2011-03-21 </VATCore:DueDate> </VATCore:TaxMonthlyPeriod> </pre>



5.6 Strict Validation Flag

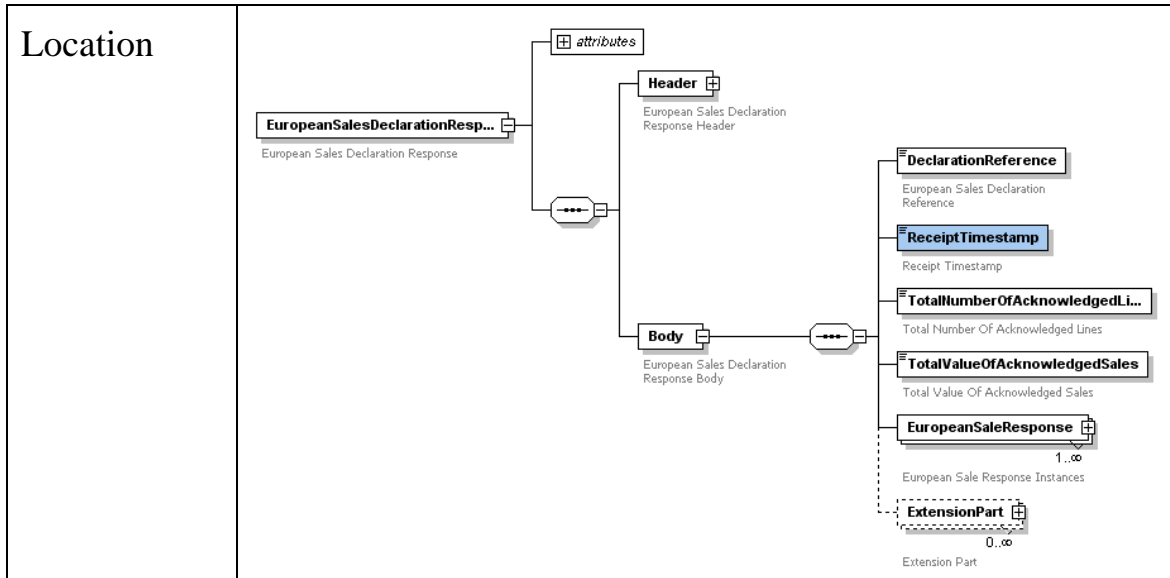
Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	ApplyStrictEuropeanSaleValidation
Description	This is the same element as the one described in section 3.2.6 of the ECSL Declaration Request Specification
Rules & Constraints	This element must contain the corresponding value specified in the request message.
Sample	Refer to section.3.2.6
Location	<p>The diagram illustrates the XML Schema structure for the <code>EuropeanSalesDeclarationRequest</code> element, similar to the one above. It is composed of a <code>Header</code> and a <code>Body</code>. The <code>Header</code> (European Sales Declaration Header) includes an <code>IRMark</code> (IR Mark), <code>SubmittersContactName</code> (Submitters Contact Name), <code>CurrencyCode</code> (UBL ISO 4217 Currency Code applicable to this submission), <code>TaxQuarter</code> (European Sales Declaration Tax Quarter), and <code>TaxMonthlyPeriod</code> (European Sales Declaration Monthly Period). The <code>TaxMonthlyPeriod</code> contains <code>TaxMonth</code> (Tax Month) and <code>TaxMonthPeriodYear</code> (Tax Monthly Period Year, which is the period of one calendar year (such as the year 2003); its lexical space follows the ISO 8601 syntax for such periods (YYYY) with an optional time zone). The <code>TaxMonthPeriodYear</code> contains <code>DueDate</code> (Due date for tax period). An <code>ExtensionPart</code> (Extension Part) is also shown, containing <code>ApplyStrictEuropeanSaleValidation</code> (Apply Strict European Sale Validation) and <code>ExtensionPart</code> (Extension Part) with a cardinality of <code>0..∞</code>.</p>

5.7 ECSL Declaration Reference

Schema File	EuropeanSalesDeclarationResponse.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/european salesdeclaration/1
Element	DeclarationReference
Description	This element contains a unique reference number provided by HMRC used to identify the declaration submission.
Rules & Constraints	This is a mandatory element.
Sample	<pre><ns:DeclarationReference> 136761246 </ns:DeclarationReference></pre>
Location	

5.8 Receipt Timestamp

Schema File	EuropeanSalesDeclarationResponse.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/european salesdeclaration/1
Element	ReceiptTimestamp
Description	This element contains the timestamp indicating when the ECSL Declaration was stored.
Rules & Constraints	This is a mandatory element.
Sample	<pre><ns:ReceiptTimestamp> 2006-10-06T13:08:44.000+01:00 </ns:ReceiptTimestamp></pre>



5.9 Total Number of Acknowledged Lines

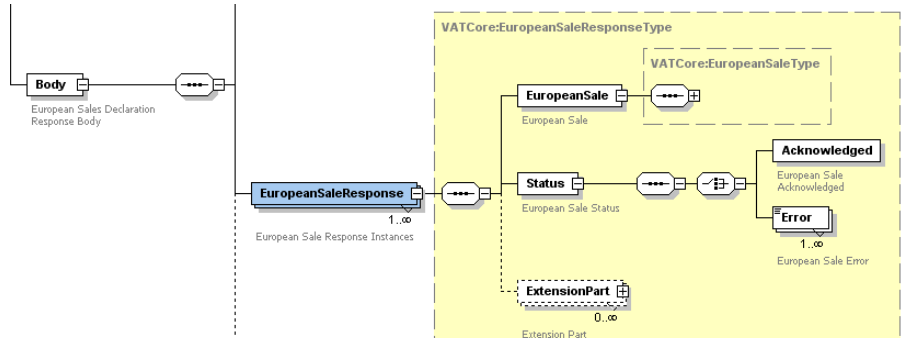
Schema File	EuropeanSalesDeclarationResponse.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/european salesdeclaration/1
Element	TotalNumberOfAcknowledgedLines
Description	This element contains the total number of Submission Lines which have been successfully validated and stored as part of the ECSL Declaration.
Rules & Constraints	This is a mandatory element.
Sample	<pre><ns:TotalNumberOfAcknowledgedLines> 8 </ns:TotalNumberOfAcknowledgedLines></pre>
Location	

5.10 Total Value of Acknowledged Sales

Schema File	EuropeanSalesDeclarationResponse.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/european salesdeclaration/1
Element	TotalValueOfAcknowledgedSales
Description	This element contains the total value of supplies made calculated across the Total Number of Acknowledged Lines.
Rules & Constraints	This is a mandatory element.
Sample	<pre><ns:TotalValueOfAcknowledgedSales> 14000 </ns:TotalValueOfAcknowledgedSales></pre>
Location	<p>The diagram illustrates the hierarchical structure of the EuropeanSalesDeclarationResponse. At the top level is the EuropeanSalesDeclarationResponse element, which includes an attributes container, a Header (European Sales Declaration Response Header), and a Body (European Sales Declaration Response Body). The Body contains several elements: DeclarationReference (European Sales Declaration Reference), ReceiptTimestamp (Receipt Timestamp), TotalNumberOfAcknowledgedLines (Total Number Of Acknowledged Lines), TotalValueOfAcknowledgedSales (Total Value Of Acknowledged Sales), and EuropeanSaleResponse (European Sale Response Instances). The EuropeanSaleResponse element has a cardinality of 1..∞ and contains an ExtensionPart (Extension Part) with a cardinality of 0..∞.</p>

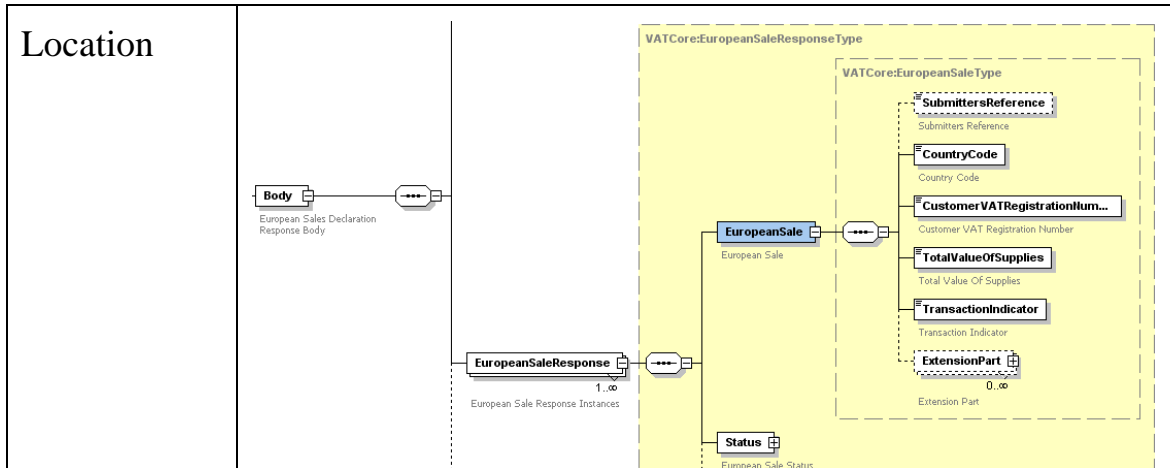
5.11 ECSL Submission Line Response

Schema File	EuropeanSalesDeclarationResponse.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/european salesdeclaration/1
Element	EuropeanSaleResponse
Description	<p>This element contains the processing outcome of an ECSL Submission Line.</p> <p>It includes:</p> <ul style="list-style-type: none"> The original EuropeanSale element (see section 3.2.7) submitted; A Status element indicating whether the Submission Line has been acknowledged or rejected.

Rules & Constraints	<p>This is a mandatory element.</p> <p>Refer to the following sub-sections for the rules and constraints that apply to each of the included elements.</p>
Sample	<pre> <ns:EuropeanSaleResponse> <ns1:EuropeanSale xmlns:ns1="http://www.govtalk.gov.uk/taxation/ vat/core/1"> <ns1:SubmittersReference> 001 </ns1:SubmittersReference> <ns1:CountryCode>AT</ns1:CountryCode> <ns1:CustomerVATRegistrationNumber> U52375709 </ns1:CustomerVATRegistrationNumber> <ns1:TotalValueOfSupplies> 1000 </ns1:TotalValueOfSupplies> <ns1:TransactionIndicator> 2 </ns1:TransactionIndicator> </ns1:EuropeanSale> <ns1:Status xmlns:ns1="http://www.govtalk.gov.uk/taxation/ vat/core/1"> <ns1:Acknowledged/> </ns1:Status> </ns:EuropeanSaleResponse> </pre>
Location	 <p>The diagram illustrates the hierarchical structure of the VATCore:EuropeanSaleResponseType. It shows a 'Body' element containing 'European Sales Declaration Response Body'. The main structure is 'EuropeanSaleResponse' (1..∞ instances), which contains 'EuropeanSale' (1..∞ instances) and 'Status' (1..∞ instances). The 'Status' element contains 'Acknowledged' (1..∞ instances) and 'Error' (1..∞ instances). An 'ExtensionPart' (0..∞ instances) is also shown as an optional extension.</p>

5.11.1 ECSL Submission Line

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	EuropeanSale
Description	This is the same element as the one described in section 3.2.7 of the ECSL Declaration Request Specification.
Rules & Constraints	This element must contain the corresponding values specified in the request message.



5.11.2 ECSL Submission Line Status

Schema File	VATCore.xsd
Namespace	http://www.govtalk.gov.uk/taxation/vat/core/1
Element	Status
Description	This element indicates whether the corresponding Submission Line has been acknowledged or rejected.
Rules & Constraints	<p>Where the ECSL Submission Line has been acknowledged, Status contains an empty Acknowledged local element.</p> <p>Where the ECSL Submission Line has been rejected, Status contains one or more Error local elements according to the number of validation failures.</p> <p>Each Error local element can have one of the following possible values according to the nature of the validation failure:</p> <ul style="list-style-type: none"> • “Country Not Supported For Specified Period” Where an EU Membership Validation failure (see section 4.5.1); • “VAT Registration Number Invalid For Specified Country” Where an EU Customer VRN Validation failure (see section 4.5.2); • “Transaction Indicator Not Supported For Specified Period” Where a Transaction Indicator Validation failure (see section 4.5.3).
Sample Acknowledged	<pre><ns1:Status xmlns:ns1="http://www.govtalk.gov.uk/taxation/vat/core/1"> <ns1:Acknowledged/> </ns1:Status></pre>

<p>Sample <i>Country Not Supported</i></p>	<pre><ns1:Status xmlns:ns1="http://www.govtalk.gov.uk/taxation/ vat/core/1"> <ns1:Error> Country Not Supported For Specified Period </ns1:Error> </ns1:Status></pre>
<p>Sample <i>VRN Invalid</i></p>	<pre><ns1:Status xmlns:ns1="http://www.govtalk.gov.uk/taxation/ vat/core/1"> <ns1:Error> VAT Registration Number Invalid For Specified Country </ns1:Error> </ns1:Status></pre>
<p>Sample <i>Transaction Indicator Not Supported</i></p>	<pre><ns1:Status xmlns:ns1="http://www.govtalk.gov.uk/taxation/ vat/core/1"> <ns1:Error> Transaction Indicator Not Supported For Specified Period </ns1:Error> </ns1:Status></pre>
<p>Location</p>	<p>The diagram illustrates the XSD structure for the EuropeanSaleResponse element. It is contained within a Body element (European Sales Declaration Response Body). The EuropeanSaleResponse element (European Sale Response Instances) has a cardinality of 1..∞ and contains a Status element (European Sale Status) with a cardinality of 1..∞ and an ExtensionPart element (Extension Part) with a cardinality of 0..∞. A dashed box highlights the VATCore:EuropeanSaleResponseType structure, which includes the EuropeanSale (European Sale) and Status (European Sale Status) elements, and the ExtensionPart (Extension Part) element.</p>

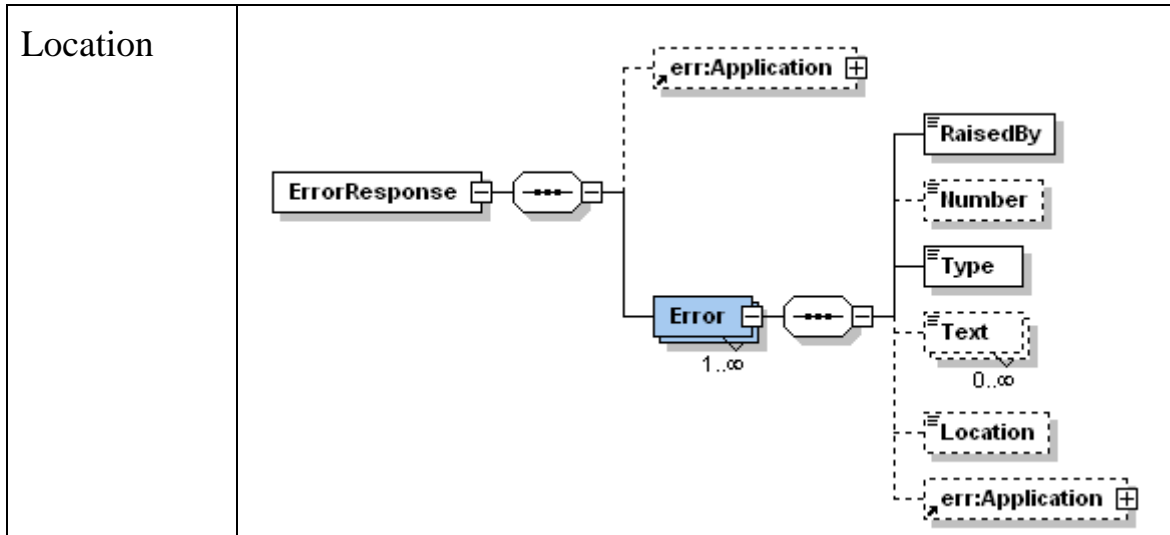
6. ECSL Declaration Error Specification

6.1 GovTalk Error

GovTalk has a predefined schema for error messages which the XML ECSL Declaration Service adheres to.

A full description of the GovTalk error schema is outside the scope of this document. This specification will limit itself to covering the error codes and descriptions specific to the XML ECSL Declaration Service.

Schema File	errorresponse-v2.0.xsd
Namespace	http://www.govtalk.gov.uk/CM/errorresponse
Element	Error
Description	<p>This element contains the following local elements:</p> <ul style="list-style-type: none">• RaisedBy• Number• Type• Text• Location
Rules & Constraints	<p>The ECSL Declaration Error messages must contain all of the above local elements.</p> <p>Some of these elements will have the same value for all error messages. More specifically, these are:</p> <ul style="list-style-type: none">• RaisedBy set to “HMRC VAT ESL XML CHANNEL”;• Type set to “business”;• Location set to “HMRC”. <p>Number and Text – containing respectively the error code and its textual description – are covered in the subsequent sub-sections.</p>



6.2 Invalid Request Structure

Error Code (Number)	1
Error Text (Text)	<p>“The declaration submitted has an invalid XML structure.”</p> <p><u>Note:</u> If possible, the XML ECSL Declaration Service will attempt to provide additional information concerning the exact cause of the schema validation failure. This message is parser specific and thus cannot be specified in advance.</p>
Cause	The ECSL Declaration Request submitted does not comply with the <code>EuropeanSalesDeclarationRequest.xsd</code> schema:
Remedial Action	<p>Ensure the software package validates the request messages against the provided schema prior to submission.</p> <p>If the error is still encountered, there may be a schema version mismatch: contact SDST for support.</p>
Sample	<pre> <err:Error> <err:RaisedBy> HMRC VAT ESL XML CHANNEL </err:RaisedBy> <err:Number>1</err:Number> <err:Type>business</err:Type> <err:Text> The declaration submitted has an invalid XML structure. </err:Text> <err:Location>HMRC</err:Location> <err:Application/> </err:Error> </pre>

6.3 Excessive Number of Submission Lines

Error Code (Number)	1204
------------------------	------

Error Text (Text)	<i>“The declaration submitted contained a number of submission lines exceeding the maximum allowed limit of 9999.”</i>
Cause	The ECSL Declaration Request contained too many Submission Lines.
Remedial Action	Ensure the software package enforces this limit by potentially splitting the original declaration in multiple submissions.
Sample	<pre> <err:Error> <err:RaisedBy> HMRC VAT ESL XML CHANNEL </err:RaisedBy> <err:Number>1204</err:Number> <err:Type>business</err:Type> <err:Text> The declaration submitted contained a number of submission lines exceeding the maximum allowed limit of 9999. </err:Text> <err:Location>HMRC</err:Location> <err:Application/> </err:Error> </pre>

6.4 Invalid Currency Code

Error Code (Number)	2
Error Text (Text)	<i>“The currency code specified [CurrencyCode] is not supported.”</i>
Cause	The ECSL Declaration Request contained a Currency Code other than “GBP”.
Remedial Action	Ensure the software package does not override the default value for Currency Code provided by the schema. If the error is still encountered, contact SDST for support.
Sample	<pre> <err:Error> <err:RaisedBy> HMRC VAT ESL XML CHANNEL </err:RaisedBy> <err:Number>2</err:Number> <err:Type>business</err:Type> <err:Text> The currency code specified EUR is not supported. </err:Text> <err:Location>HMRC</err:Location> <err:Application/> </err:Error> </pre>

6.5 Invalid Tax Period

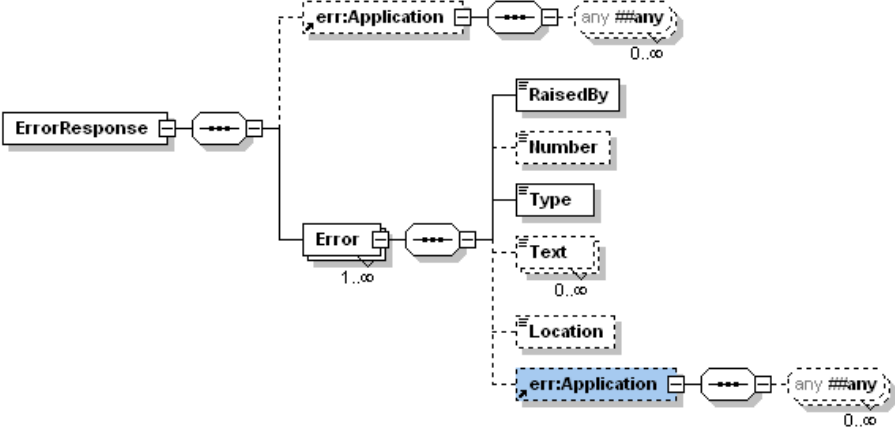
6.5.1 Outdated Period

Error Code (Number)	1201
Error Text (Text)	<i>“The declaration submitted is for a period over 6 years old.”</i>
Cause	The Tax Period Rule described in section 4.4.1 is not respected.
Remedial Action	Ensure the Tax Period Rule is properly implemented. Otherwise contact SDST for support.
Sample	<pre><err:Error> <err:RaisedBy> HMRC VAT ESL XML CHANNEL </err:RaisedBy> <err:Number>1201</err:Number> <err:Type>business</err:Type> <err:Text> The declaration submitted is for a period over 6 years old. </err:Text> <err:Location>HMRC</err:Location> <err:Application/> </err:Error></pre>

6.5.2 Future Period

Error Code (Number)	1202
Error Text (Text)	<i>“The declaration submitted is for a future period.”</i>
Cause	The Tax Period Rule described in section 4.4.1 is not respected.
Remedial Action	Ensure the Tax Period Rule is properly implemented. Otherwise contact SDST for support.
Sample	<pre><err:Error> <err:RaisedBy> HMRC VAT ESL XML CHANNEL </err:RaisedBy> <err:Number>1202</err:Number> <err:Type>business</err:Type> <err:Text> The declaration submitted is for a future period. </err:Text> <err:Location>HMRC</err:Location> <err:Application/> </err:Error></pre>

6.6 Excessive Submission Line Failures

<p>Error Code (Number)</p>	<p>1203</p>										
<p>Error Text (Text)</p>	<p><i>“The declaration submitted contained an excessive amount of invalid submission lines. The entire submission has been rejected. The following lines have caused one or more validation failures.”</i></p>										
<p>Extra Error information</p>	<p>This particular ECSL Declaration Error message requires more information than just the error code and text. The ECSL Submission Lines having failed validation need to be communicated so that they can be corrected and eventually resubmitted.</p> <p>The GovTalk Error schema caters for this situation by providing an Application element (see location below).</p>  <p>Within this element, the XML ECSL Declaration Service will include the list of invalid Submission Lines (please note that <u>only</u> the <u>invalid</u> lines will be provided). These are structured according to a business specific error schema as follows:</p> <table border="1"> <tr> <td>Schema File</td> <td>EuropeanSalesDeclarationError.xsd</td> </tr> <tr> <td>Namespace</td> <td>http://www.govtalk.gov.uk/taxation/vat/europeansalesdeclaration/1</td> </tr> <tr> <td>Element</td> <td>EuropeanSalesDeclarationError</td> </tr> <tr> <td>Description</td> <td>This element echoes back the header information of the ECSL Declaration submitted along with all the Submission Lines which have failed validation. All the elements included have already been described in section 5.</td> </tr> <tr> <td>Rules &</td> <td>Only the invalid ECSL Submission Lines will be specified.</td> </tr> </table>	Schema File	EuropeanSalesDeclarationError.xsd	Namespace	http://www.govtalk.gov.uk/taxation/vat/europeansalesdeclaration/1	Element	EuropeanSalesDeclarationError	Description	This element echoes back the header information of the ECSL Declaration submitted along with all the Submission Lines which have failed validation. All the elements included have already been described in section 5.	Rules &	Only the invalid ECSL Submission Lines will be specified.
Schema File	EuropeanSalesDeclarationError.xsd										
Namespace	http://www.govtalk.gov.uk/taxation/vat/europeansalesdeclaration/1										
Element	EuropeanSalesDeclarationError										
Description	This element echoes back the header information of the ECSL Declaration submitted along with all the Submission Lines which have failed validation. All the elements included have already been described in section 5.										
Rules &	Only the invalid ECSL Submission Lines will be specified.										

	<table border="1"> <tr> <td>Constraints</td> <td>This means that the ECSL Submission Line Status described in section 5.11.2 can only contain Error elements.</td> </tr> </table>	Constraints	This means that the ECSL Submission Line Status described in section 5.11.2 can only contain Error elements.
Constraints	This means that the ECSL Submission Line Status described in section 5.11.2 can only contain Error elements.		
Cause	The number of ECSL Submission Lines failing the validation rules described in section 4.5 exceeds the Failed Submission Line Rejection threshold (set to 30% by default or 0% if the Strict Validation Flag is “true”). Refer to 4.6 for details.		
Remedial Action	Correct the failing lines and re-submit. Ensure the Strict Validation Flag (see section 3.2.6) is not set to “true” unless this is the desired behaviour.		
Sample	<pre> <err:Error> <err:RaisedBy> HMRC VAT ESL XML CHANNEL </err:RaisedBy> <err:Number>1203</err:Number> <err:Type>business</err:Type> <err:Text> The declaration submitted contained an excessive amount of invalid submission lines. The entire submission has been rejected. The following lines have caused one or more validation failures. </err:Text> <err:Location>HMRC</err:Location> <err:Application> <ns:EuropeanSalesDeclarationError SchemaVersion="1.0" xmlns:ns="http://www.govtalk.gov.uk /taxation/vat /europeansalesdeclaration/1"> ... </ns:EuropeanSalesDeclarationError> </err:Application> </err:Error> </pre>		

7. TPVS Testing

7.1 Introduction

The Third Party Validation Service (TPVS) is a testing environment specifically tailored to commercial software vendors or trader organisations with in-house development capabilities to comprehensively test their product.

This environment hosts HMRC’s “machine-to-machine” (i.e. XML) services. These services are either based on the Government Gateway’s Transaction Engine (TxE) platform or on Web Services technology.

TPVS benefits from similar Service Level Agreements (SLA) as the live systems.

Note: The information required to gain access the TPVS environment is covered in a separate technical pack document.

7.2 Key Characteristics

The proposed TPVS solution is the result of two driving requirements:

- Providing an environment as functionally and technically similar as possible to the production service;
- Simplifying the testability, maintainability and operability of the environment.

With regards to the TxE-based services, the first requirement has led to the adoption of the Government Gateway’s “ISV” environment, so as to allow software developers to test the complete Document Submission Protocol (DSP)/GovTalk messaging stack. This allows a maximum reuse of the same functional and technical components as in the production environment, hence providing a superior level of confidence to the Software Vendor Community.

Note: The TPVS environment also provides a direct submission route as described in section 7.3.

The second requirement has led to the need for “stubbing out” (i.e. mimicking) certain external backend systems to avoid the significant operational and maintenance overhead this would otherwise involve for the Department.

Moreover, to further streamline the testability and maintainability of the TPVS environment, a common set of test data – known as a Driver Data Set – will be provided to assist the software developers in exercising particular successful or (most importantly) error scenarios. The persistence layer will be appropriately stubbed to avoid any changes being committed to the underlying test data set. This will allow software developers to repeatedly test a given scenario without the need of “resetting” the data.

7.3 Direct Submission Route

Although the submission of declarations via the Government Gateway’s ISV environment is the recommended route to ensure the software package is “production-ready”, the TPVS services can also be accessed via a direct submission route, bypassing the ISV Transaction Engine.

The key characteristic of this additional route is its synchronous nature: the response (or error) message to a given submission is provided as part of the same synchronous XML/HTTP service call.

This route has the advantage that software developers do not need to complete the Document Submission Protocol (DSP) layer before starting to test the business-specific modules of their product.

However, the XML request messages submitted are still expected to be GovTalk compliant: in particular the GovTalk Envelope Elements listed in section 3.1 must be provided. Otherwise stated, the XML request messages submitted via the Direct Submission Route should be identical to the ones sent via the ISV Transaction Engine.

Where there are any missing or incorrect GovTalk Envelope Elements, Gateway specific error messages will be generated as per the DSP/GovTalk documentation (see Prerequisites in section 1.2).

7.4 Driver Data Set

The TPVS-hosted XML ECSL Declaration Service will allow software developers to test all the successful and error scenarios described in the previous sections of this Technical Interface Specification. These test scenarios are covered in section 7.5.

As the XML ECSL Declaration Service does not have any external system dependencies, there is no requirement for a Driver Data Set.

To simplify testability, the only difference from the live environment set-up will involve the maximum number of allowed Submission Lines. This threshold will be set to 99 lines (instead of 9999).

7.5 Test Scenarios

The following table summarises some of the XML ECSL Declaration Service test scenarios which can be executed within TPVS.

Note: Complete samples are provided separately as part of the technical pack.

Title	Type	Expected Input	Expected Output
All Submission Lines Valid	Success	ECSL Declaration Request with: <ul style="list-style-type: none"> • 10 valid Submission Lines 	ECSL Declaration Response with: <ul style="list-style-type: none"> • 10 acknowledged Submission Lines (see section 5.11)
Limited Submission Line Failures	Success	ECSL Declaration Request with: <ul style="list-style-type: none"> • 8 valid Submission Lines • 1 Submission Line with invalid Country Code (see section 4.5.1) • 1 Submission Line with invalid EU Customer VRN (see section 4.5.2) 	ECSL Declaration Response with: <ul style="list-style-type: none"> • 8 acknowledged Submission Lines (see section 5.11) • 1 rejected Submission Line with 1 Error element containing “Country Not Supported For Specified Period” (see section 5.11.2) • 1 rejected Submission Line with 1 Error element containing “VAT Registration Number Invalid For Specified Country” (see section 5.11.2)

Title	Type	Expected Input	Expected Output
Excessive Submission Line Failures	Error	ECSL Declaration Request with: <ul style="list-style-type: none"> • 7 valid Submission Lines • 1 Submission Line with invalid Country Code (see section 4.5.1) • 1 Submission Line with invalid EU Customer VRN (see section 4.5.2) • 1 Submission Line with invalid Transaction Indicator (see section 4.5.3) and an invalid Country Code (see section 4.5.1) 	ECSL Declaration Error with: <ul style="list-style-type: none"> • Excessive Submission Line Failures error message (see section 6.6). More specifically, including: <ul style="list-style-type: none"> ○ 1 rejected Submission Line with 1 Error element containing “Country Not Supported For Specified Period” (see section 5.11.2) ○ 1 rejected Submission Line with 1 Error element containing “VAT Registration Number Invalid For Specified Country” (see section 5.11.2) ○ 1 rejected Submission Line with 2 Error elements; one containing “Transaction Indicator Not Supported For Specified Period”, the other containing “Country Not Supported For Specified Period” (see section 5.11.2)
Excessive Submission Line Failure – Strict Validation Flag	Error	ECSL Declaration Request with: <ul style="list-style-type: none"> • 9 valid Submission Lines • 1 Submission Line with invalid EU Customer VRN (see section 4.5.2) • Strict Validation Flag set to “true” (see section 0) 	ECSL Declaration Error with: <ul style="list-style-type: none"> • Excessive Submission Line Failures error message (see section 6.6). More specifically, including: <ul style="list-style-type: none"> ○ 1 rejected Submission Line with 1 Error element containing “VAT Registration Number Invalid For Specified Country” (see section 5.11.2)

Title	Type	Expected Input	Expected Output
Invalid Request Structure	Error	ECSL Declaration Request failing: <ul style="list-style-type: none"> Request Structural Validation (see section 4.1) 	ECSL Declaration Error with: <ul style="list-style-type: none"> Invalid Request Structure error message (see section 6.2)
Excessive Number of Submission Lines ²	Error	ECSL Declaration Request with: <ul style="list-style-type: none"> 100 Submission Lines (whether their valid or invalid is irrelevant for this scenario). 	ECSL Declaration Error with: <ul style="list-style-type: none"> Excessive Number of Submission Lines error message (see section 6.3)
Invalid Currency Code	Error	ECSL Declaration Request failing: <ul style="list-style-type: none"> Currency Code Validation (see section 4.3) 	ECSL Declaration Error with: <ul style="list-style-type: none"> Invalid Currency Code error message (see section 6.4)
Invalid Tax Period – Outdated Period	Error	ECSL Declaration Request failing: <ul style="list-style-type: none"> Tax Period Validation (see section 4.4.1) 	ECSL Declaration Error with: <ul style="list-style-type: none"> Invalid Tax – Outdated Period error message (see section 6.5.1)
Invalid Tax – Future Period	Error	ECSL Declaration Request failing: <ul style="list-style-type: none"> Tax Period Validation (see section 4.4.1) 	ECSL Declaration Error with: <ul style="list-style-type: none"> Invalid Tax – Future Period error message (see section 6.5.2)

² The maximum allowed number of Submission Lines is 99 for the TPVS environment (instead of the 9999 set up for live).

8. Glossary

8.1 Terms

Term	Description	Additional Information
Branch Identifier	Unique identifier for a member of a group-registered trader who has chosen to submit separate EC Sales Lists for each member of the group.	
ECSL Declaration Reference	Unique reference number provided by HMRC used to identify the declaration submission.	
EU Customer VRN	VRN of the purchaser of the goods within the VAT system of the EU member state in which the purchaser is registered.	Refer to the following link for the list of EU member states and corresponding VRN formats: http://ec.europa.eu/taxation_customs/vies/en/faqvies.htm#item11
Failed Submission Line Rejection Threshold	Percentage of failed ECSL Submission Lines over the total submitted, above which the whole ECSL Declaration has to be rejected. This parameter is set by default to 30%.	For instance, if an ECSL Declaration contains 10 Submission Lines, the whole declaration must be rejected if 3 or more Submission Lines fail validation.
Tax Quarter Number	Identifier of the yearly quarter for which the EC Sales List is due.	Enumeration of 4 possible values: {1, 2, 3, 4}
Tax Month	Identifier of the month for which the EC Sales List is dues	Enumeration of 12 possible value: {Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec}
Receipt Timestamp	Timestamp indicating when the ECSL Declaration was stored.	
Tax Period Due Date	Date for which the ECSL Declaration is due.	

Term	Description	Additional Information
Tax Quarter Year	Calendar year for which the ECSL Declaration is due.	
Tax Month Period Year	Calendar year for which the ECSL Declaration is due	
Transaction Indicator	Identifier for type of transaction: <ul style="list-style-type: none"> • 0: “B2B Goods” • 2: “Triangulated Goods” • 3 “Services” 	Enumeration of 3 possible values: {0, 2, 3}

8.2 Acronyms

Acronym	Description
DSP	Document Submission Protocol
EC	European Community
ECSL	EC Sales List
EU	European Union
SDST	Software Developer Support Team
SLA	Service Level Agreement
TPVS	Third Party Validation Service
TxE	Transaction Engine
VRN	VAT Registration Number