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|  | Application: NCTS |  |     |       |             |
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# Technical specification of G2B service for NCTS5

## New Computerised Transit System Phase 5



Projekt je sufinancirala Europska unija iz Europskog socijalnog fonda.

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|  | Application: NCTS     |                   |  |  | APIS IT |
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# 1. INTRODUCTION

## 1.1. Purpose of the document

NCTS (New Computerised Transit System) is an information system for conducting paperless transit procedure. Based on electronic messages exchange, it supports the continuous transit procedure of goods under customs supervision applied by customs administrations of EU members and EFTA countries, i.e. members of the Convention on the Common transit procedure.

For communication with the traders' systems, the standard G2B service is used which is a part of the common information system infrastructure of the Croatian Customs administration (IS CURH) in charge of IS CURH business integration with the trader's business applications on the principles of exchanging business messages. G2B service is technologically realized as a web service (SOAP/HTTPS) available over the Internet.

This document describes the specifics of G2B service related to the NCTS application in phase 5.

Technical specification of G2B service without details which refer to application-specific use (ex. NCTS, ECS, EMCS, ) is described in a separate document *Technical specification of G2B service*.

The figure below portrays the position of G2B service in the entire IS CU environment.

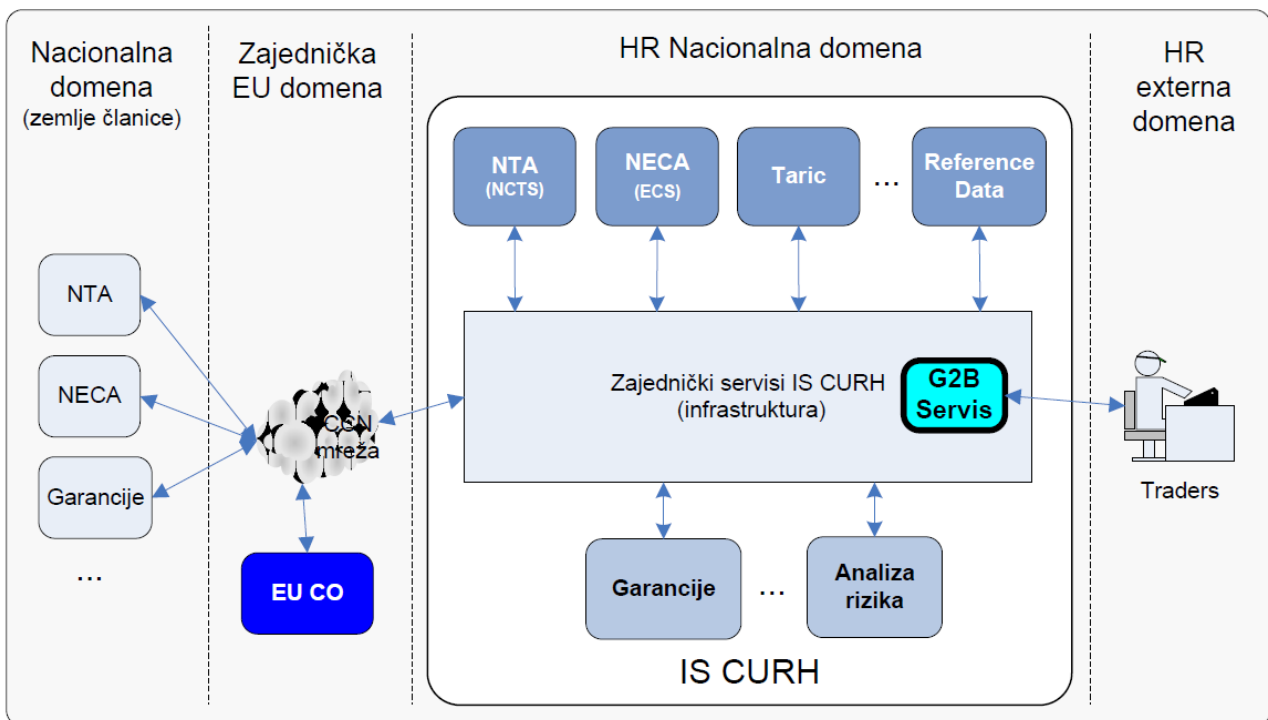




Figure 1: Architecture concept

|  |                       |                   |  |  |                |
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## 1.2. Index and abbreviations

| TERM/ABBREVIATION | DESCRIPTION   |
|-------------------|---|
| NCTS              | New Computerised Transit System   |
| G2B SERVICE       | The purpose of G2B service is the exchange of electronic documents between the trader and the Information system of the Customs Administration (IS CU).                 |
| IS CURH           | Customs Administration IT System  |
| SOAP              | Communication protocol, independent of the platform, based on XML that is used for the exchange of information between the applications (Simple Object Access Protocol) |
| ECS               | Export Control System   |
| EMCS              | Excise Movement and Control System  |

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## 2. SPECIFICS OF G2B SERVICE USAGE FOR NCTS APPLICATION

In this chapter trader's messages used in NCTS application are listed as well as G2B service operations with description of specifics related to NCTS application.

### 2.1. List of NCTS business messages for transit declarations


Below is a list of business messages that are exchanged between traders' IT System and NCTS for processing of transit customs declarations.

| <b>Incoming messages in communication with the trader</b> |                 |  |
|---|-----------------|--|
| <b>No.</b>  | <b>Message</b>  | <b>Message description</b>                               |
| 1.  | CC013C-MSG.NCTS | Declaration amendment                                    |
| 2.  | CC014C-MSG.NCTS | Declaration invalidation request                         |
| 3.  | CC015C-MSG.NCTS | Declaration data   |
| 4.  | CC034C-MSG.NCTS | Query on guarantees                                      |
| 5.  | CC054C-MSG.NCTS | Request of release                                       |
| 6.  | CC170C-MSG.NCTS | Presentation notification for the pre-lodged declaration |
| 7.  | CC007C-MSG.NCTS | Arrival notification                                     |
| 8.  | CC044C-MSG.NCTS | Unloading remarks  |
| 9.  | CC141C-MSG.NCTS | Information about non-arrived movement                   |

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| <b>Outgoing messages in communication with the trader</b> |                 |                                       |
|---|-----------------|---------------------------------------|
| <b>No.</b>  | <b>Message</b>  | <b>Message description</b>            |
| 1.  | CC004C-MSG.NCTS | Amendment acceptance                  |
| 2.  | CC009C-MSG.NCTS | Invalidation decision                 |
| 3.  | CC019C-MSG.NCTS | Discrepancies                         |
| 4.  | CC022C-MSG.NCTS | Notification to amend declaration     |
| 5.  | CC028C-MSG.NCTS | MRN allocated                         |
| 6.  | CC029C-MSG.NCTS | Release for transit                   |
| 7.  | CC035C-MSG.NCTS | Recovery notification                 |
| 8.  | CC037C-MSG.NCTS | Response query on guarantees          |
| 9.  | CC045C-MSG.NCTS | Write-off notification                |
| 10.   | CC051C-MSG.NCTS | No release for transit                |
| 11.   | CC055C-MSG.NCTS | Guarantee not valid                   |
| 12.   | CC056C-MSG.NCTS | Rejection from office of departure    |
| 13.   | CC060C-MSG.NCTS | Control decision notification         |
| 14.   | CC140C-MSG.NCTS | Request on non-arrived movement       |
| 15.   | CC182C-MSG.NCTS | Forwarded incident notification to ED |
| 16.   | CC928C-MSG.NCTS | Positive acknowledge                  |
| 17.   | CC025C-MSG.NCTS | Goods release notification            |
| 18.   | CC043C-MSG.NCTS | Unloading permission                  |
| 19.   | CC057C-MSG.NCTS | Rejection from office of destination  |
| 20.   | CC906C-MSG.NCTS | Functional nack                       |
| 21.   | CC917C-MSG.NCTS | xml nack                              |




|  |                       |                   |  |  |                |
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## 2.2. List of G2B service operations

In the tables below the operations of G2B service together with the list of request and response attributes are listed.


| Operation name         | Request   | Response   |
|------------------------|---|--|
| <i>sendDocument</i>    | SendDocument<br>B2GDocument (version*)<br>RequestHeader (Id)<br>AppId<br>TraderId<br>DelegatorId*<br>TraderAppId<br>TraderMsgId<br>Content (Id)<br>DocType<br>MimeType<br>Description<br>Data (Encoding)<br>Signature | SendDocumentResponse<br>B2GDocument (version*)<br>RequestHeader (Id)<br>AppId<br>TraderId<br>DelegatorId*<br>TraderAppId<br>TraderMsgId<br>ResponseHeader (Id)<br>DocUuid<br>ReceiveTimestamp<br>Content (Id)<br>DocType<br>MimeType<br>Description<br>Data (Encoding)<br>Signature    |
| <i>getSentDocument</i> | GetSentDocument<br>AppId<br>TraderId<br>TraderAppId<br> DocUuid<br> TraderMsgId   | GetSentDocumentResponse<br>B2GDocument (version*)<br>RequestHeader (Id)<br>AppId<br>TraderId<br>DelegatorId*<br>TraderAppId<br>TraderMsgId<br>ResponseHeader (Id)<br>DocUuid<br>ReceiveTimestamp<br>Content (Id)<br>DocType<br>MimeType<br>Description<br>Data (Encoding)<br>Signature |

|  |                       |                   |  |  |                |
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| Operation name           | Request   | Response  |
|--------------------------|---|---|
| <i>ListSentDocuments</i> | ListSentDocuments<br>AppId<br>TraderId<br>TraderAppId<br>CorId                                    | ListSentDocumentsResponse<br>AppId<br>TraderId<br>TraderAppId<br>SentDocumentsList[]<br>DocUuid<br>TraderMsgId<br>Description<br>CorId<br>DocType<br>ReceiveTimestamp                                     |
| <i>ListMsgBox</i>        | ListMsgBox<br>AppId<br>TraderId<br>TraderAppId<br>CorId*<br>AckStatus*<br>DateFrom*<br>DateUntil* | ListMsgBoxResponse<br>AppId<br>TraderId<br>TraderAppId<br>MsgList[]<br>DocUuid<br>CorId<br>DocType<br>ReceiveTimestamp  |
| <i>getDocument</i>       | GetDocument<br>AppId<br>TraderId<br>TraderAppId<br>DocUuid  | GetDocumentResponse<br>B2GDocument (version*)<br>RequestHeader (Id)<br>AppId<br>TraderId<br>DelegatorId*<br>TraderAppId<br>DocUuid<br>Content (Id)<br>DocType<br>MimeType<br>Data (Encoding)<br>Signature |
| <i>acknowledge</i>       | Acknowledge<br>AppId<br>TraderId<br>TraderAppId<br>DocUuid[]                                      | AcknowledgeResponse<br>AppId<br>TraderId<br>TraderAppId<br>DocUuid[]<br>AcknowledgeTimestamp  |
| <i>echo</i>              | Echo<br>Msg   | EchoResponse<br>Msg<br>SeverTime  |

\* optional elements or attributes; [] marker for the list of attributes; () marker for attributes

Table 1: G2B Service Operations



|  |                       |                   |  |  |                |
|--|-----------------------|-------------------|--|--|----------------|
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In the tables below specifics of completing/filling request and response attributes are listed.

| <b>Attribute Request</b> | <b>Method of filling</b>   |
|--------------------------|--|
| RequestHeader.ApplId     | 'NTA.HR'   |
| RequestHeader.TraderID   | Trader identification number of the trader that sends the message  |
| Content.DocType          | ID of the business message that the trader sends<br>(corresponds to the root element of the matching message, ex. CC015C-MSG.NCTS)<br><br>Allowed types are:<br>CC007C-MSG.NCTS,<br>CC013C-MSG.NCTS,<br>CC014C-MSG.NCTS,<br>CC015C-MSG.NCTS,<br>CC034C-MSG.NCTS,<br>CC044C-MSG.NCTS,<br>CC054C-MSG.NCTS,<br>CC141C-MSG.NCTS,<br>CC170C-MSG.NCTS, |
| Content. MimeType        | 'text/xml'<br>(IE message that the trader sends to NCTS is always in xml format)   |
| Content.Data             | IE message content<br>(it must fulfil XSD of the message listed under DocType)   |
| CorId                    | DocUuid in accordance with the definition of the correlation identifier mentioned below.   |
| Encoding                 | 'EMBEDDED'<br>(IE message that the trader sends to NCTS is always in xml format)   |
| Signature                | Electronic signature in accordance with the document 'Rules of using the system of electronic exchange of data and providing service of electronic business of the Ministry of Finance, Customs Administration (e-Customs)'.   |

*Table 2: Specific of completing request attributes/attributes request*

Other attributes are filled in the standard way described in the document *Technical specification of G2B service*.

|  |              |        |                   |     |   |             |
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#### Defining the correlation identifier in NCTS:

- The customs system assigns a unique /single DocUuid to every document received in the customs systems or sent from it.
- The customs system assigns a unique /single DocUuid to every IE message that the trader sent and forwards it to the trader/trader's system.
- Every document that the trader receives from the customs system, besides DocUuid, also contains Corld.
- In the NCTS application, the filling out of Corld differs depending on whether the trader receives the error message (IE056 or IE057) or not.  
In case of error message, Corld is filled with DocUuid of the trader's message to which the error is related.  
Otherwise Corld is filled with DocUuid of the last correct (the one for which the error message IE056 or IE057 was not sent) trader's message for that movement.

The image below is a graphic example of using the correlation identifier.

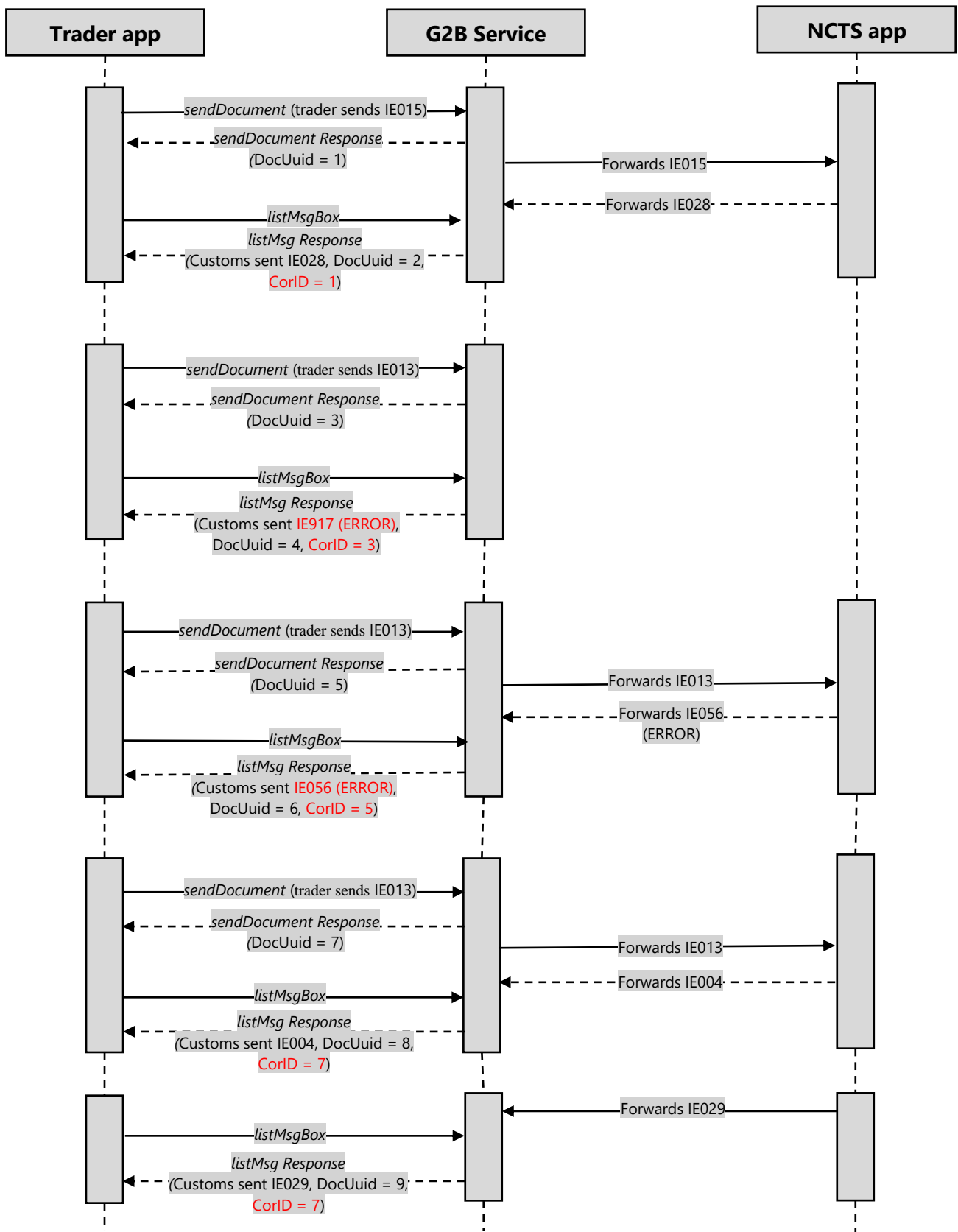



Figure 2: Example of using correlation identifier

|  |                       |                   |  |  |                |
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| Attributes Response    | Description  |
|------------------------|--|
| RequestHeader.Appld    | 'NTA.HR'   |
| RequestHeader.TraderID | Trader identification number of the trader that sends the message)   |
| Content.DocType        | ID of the document that the trader receives.<br>In case of IE message, corresponds to the root element of the matching message eg. CC028C-MSG.NCTS.<br>Allowed types are:<br>CC004C-MSG.NCTS,<br>CC009C-MSG.NCTS,<br>CC019C-MSG.NCTS,<br>CC022C-MSG.NCTS,<br>CC025C-MSG.NCTS,<br>CC028C-MSG.NCTS,<br>CC029C-MSG.NCTS,<br>CC035C-MSG.NCTS,<br>CC037C-MSG.NCTS,<br>CC043C-MSG.NCTS,<br>CC045C-MSG.NCTS,<br>CC051C-MSG.NCTS,<br>CC055C-MSG.NCTS,<br>CC056C-MSG.NCTS,<br>CC057C-MSG.NCTS,<br>CC060C-MSG.NCTS,<br>CC140C-MSG.NCTS,<br>CC182C-MSG.NCTS,<br>CC906C-MSG.NCTS,<br>CC917C-MSG.NCTS,<br>CC928C-MSG.NCTS (always in xml format).<br>In case of the accompanying document, the allowed type is DM101C-MSG.NCTS (in pdf format). |
| Content. Mime Type     | 'text/xml' or 'application/pdf'<br>In case of IE message, 'text/xml'.<br>In case of the accompanying document, 'application/pdf'.  |
| Content. Data          | Content of the document<br>In case of IE message it must fulfil XSD of the message listed under DocType.   |
| Corld                  | DocUuid in accordance with the mentioned definition of the correlation identifier  |
| Encoding               | 'EMBEDDED' (in case of IE message) or<br>'BASE64' (in case of the accompanying document in pdf format)   |
| Signature              | Electronic signature in accordance with the document 'Rules of using the system of electronic exchange of data and providing service of electronic business of the Ministry of Finance, Customs Administration (e-Customs)'.*  |

\* messages that the customs system sends to the trader are signed by G2B service

*Table 3: Specific of completing response attributes/ attributes response*

Other attributes are filled in the standard way described in the document *Technical specification of G2B service*.