# Impact Analysis Report / RFC-Proposal

**Section 1: Meta-data**

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| **RFC ID** | **RFC\_NCTS\_0129** (RTC-56168) |
| **Related Incident ID** | IM447361 |
| **RFC Initiator / Organization** | NA-BG |
| **CI** | **NCTS-P5 (DDNTA-v05.14.1 – CSE-v51.6.0)** |
| **Type of Change** | **Standard** **Emergency** |
| **Nature of Change** | Justification for Evolutive   |  | | --- | |  | |
| **RFC Source** | |  |  | | --- | --- | | **Legal & Policy Change**  **Organisational Changes** | **Business Change**  **IT Change** | |
| **Review by Business User recommended?** | **Yes No** |

***Change Summary***

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| **NCTS-P5: (DDNTA-v05.14.1 - CSE-v51.6.0) - Removal of R0028 from CC906C and CD906C** |
| Based on the ticket reported by NA-BG (IM447361) during the ieCA Legacy exercise- where IE002A send from NA-BG failed to be converted due to violation of ‘R0028’ (invalid check digit of MRN). Further analysis was performed concluding that   * R0028 shall be removed from CC906C, CD906C: taking into consideration that in case of invalid check digit, these messages will be sent to report the violation; * For request CD002C, CD027C, CD114C, CD164C only seems that is preferable to be rejected with negative business message (CD003C, CD038C, CD115C, CD165C) instead of CD906C, in case of invalid check digit, so the rejection message to be directly available to the Customs Officer. The validation R0028 will be updated in **Appendix K** for messages CD002C, CD027C, CD114C, CD164C; * R0028 shall be added in the MRN field of CC007C, so the trader at destination to provide a valid MRN (with no issues related to check digit). In addition, it shall be removed from CD003C, CD038C, CD115C, CD165C. |

**Section 2: Problem statement**

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| In the latest version of the CSE deliverable (NCTS-P5 DDNTA-v05.14.1 based on CSE-v51.6.0), R0028 is assigned on the following data items   * HEADER.MRN * TRANSIT OPERATION.MRN * GUARANTEE.GUARANTEE REFERENCE.GRN * GUARANTEE REFERENCE.GRN * EXPORT OPERATION.MRN   The wording is the following:    In DDCOM 20.3.0-v1.00, the algorithm of ISO 6346 standard is described in section "V.6.1.1 Check character algorithm for the MRN".   Currently, according to the NCTS-P5 DDNTA-v05.14.1 and DDCOM 20.3.0 specifications the following cases can be identified:  1. In case of XSD validation failure regarding the MRN: In data Items MRN and GRN in NCTS.P5 a specific XSD pattern is used. In case the XSD pattern validation fails, IE917 should be created with error code ‘51’. Based on DDCOM 20.3.0-v1.00, the XML CONTRL message structure (IE917) is used to exchange and report the errors detected in the XSD format.  2. Validation failure due to Rule R0028: In NCTS.P5 in the data Items MRN and GRN, Rule R0028 is used to verify that the check digit follows the ISO 6346 standard. In case of validation failure due to Rule R0028 (check digit), a CD906C message is created with Error type ‘14’, Error pointer ‘MRN’ and ‘Error Reason’ R0028. In case of downgrade during the Transitional Period, a message CD906A is created with Error type ‘93’, Error pointer ‘MRN’ and ‘Error Reason’ NCAvC, in order to report the aforementioned validation failure. This approach is currently valid for all messages in NCTS  3. In case of Unknown MRN (valid MRN): based on DDNTA-Main Document-v5.14.1-SfA-v1.00, if the MRN is valid as described in case 1 and 2 from XSDs and check digit perspective, business validation has to be performed in order to check if is a known or unknown MRN from the NTA database.  a. In case of Unknown MRN, if the IE002/IE027/IE114/IE164 is received, then a negative IE003/IE038/IE115/IE165 response will be sent (using the codes of CL221/CL184/CL225/CL224 respectively) and not an IE906 message.  b. In case of Unknown MRN, for the rest messages e.g. IE180, IE906 shall be created with Error type ‘90’, Error pointer ‘MRN’ and ‘Error Reason’ NCAvC.  After further investigation is seems preferable to reject IE002/IE027/IE114/IE164 message with a negative IE003/IE038/IE115/IE165 response, instead of IE906 (usually checked by the National Help Desk), due to the fact that these messages are directly available to the Customs Officer.  **As a result, the necessary modification will be performed so:**  1. In case of XSD validation failure regarding the MRN: In data Items MRN and GRN in NCTS.P5 a specific XSD pattern is used. In case the XSD pattern validation fails, IE917 should be created with error code ‘51’. Based on DDCOM 20.3.0-v1.00, the XML CONTRL message structure (IE917) is used to exchange and report the errors detected in the XSD format.  2. In case of validation failure due to Rule R0028 (check digit),   1. For messages IE002/IE027/IE114/IE164, then negative IE003/IE038/IE115/IE165 response will be sent (using the codes of CL221/CL184/CL225/CL224 respectively), not an IE906 message.   As a result, **Appendix K** the following updates shall be performed for R0028:   * ‘Validated by Recipient’ column shall be updated to ‘N’ for CD002C, CD027C, CD114C, CD164C messages  1. For the rest NCTS message (i.e. all messages other than request / response messages mentioned above), then CD906C message is created with Error type ‘14’, Error pointer ‘MRN’ and Error Reason ‘R0028’.   For this reason, removal of R0028 from MRN data item is proposed in messages CC906C and CD906C. The assignment of the Rule in these messages is incorrect, because in case the Rule R0028 is violated, the “incorrect” MRN shall be reported in the ‘CD906C.HEADER.MRN’ or ‘CC906C.HEADER.MRN’.  In case of downgrade during the Transitional Period, a message CD906A is created with Error type ‘93’, Error pointer ‘MRN’ and ‘Error Reason’ NCAvC, in order to report the aforementioned validation failure.  3. In case of Unknown MRN (valid MRN): based on DDNTA-Main Document-v5.14.1-SfA-v1.00, if the MRN is valid as described in case 1 and 2 from XSDs and check digit perspective, business validation has to be performed in order to check if is a known or unknown MRN from the NTA database.  a. In case of Unknown MRN, if the IE002/IE027/IE114/IE164 is received, then a negative IE003/IE038/IE115/IE165 response will be sent (using the codes of CL221/CL184/CL225/CL224 respectively) and not an IE906 message.  b. In case of Unknown MRN, for the rest messages e.g. IE180, IE906 shall be created with Error type ‘90’, Error pointer ‘MRN’ and ‘Error Reason’ NCAvC.  4. In addition, R0028 shall be added in the MRN field of CC007C message. Furthermore, it shall be removed from CD003C, CD038C, CD115C, CD165C. |

**Section 3: Description of proposed solution**

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| The **NCTS-P5 DDNTA-v05.14.1 (incl. Appendix Q2) and the CSE-v51.6.0** shall be corrected as follows (addition of **text highlighted in yellow and removal with** ~~red strikethrough~~):  **R0028** shall be removed from the following data items:  **More specifically in CD906C:**  ---HEADER  MRN R an18 G0002 ~~R0028~~  **In CC906C:**  ---HEADER  LRN D an..22 C0716  MRN D an18 C0716 G0002 ~~R0028~~  **In CC007C:**  ---TRANSIT OPERATION  MRN R an18 G0002 R0028  Arrival notification date and time R an19 G0002  Simplified procedure R n1 CL027  Incident flag R n1 CL027  **In CD003C:**  ---TRANSIT OPERATION  MRN R an18 G0002 ~~R0028~~  Declaration type D an..5 CL231 C0365 R0601 R0909 R0911  TIR Carnet number D an..12 S1004 C0411 C0466 R0990  Declaration acceptance date D an10 C0365 G0002  Release date D an10 C0365 G0002  Security D n1 CL217 C0365  Reduced dataset indicator D n1 CL027 C0365  Specific circumstance indicator D an3 CL296 S1007 C0466 C0812  Binding itinerary D n1 CL027 C0365  Request rejection reason code O n..2 CL221 G0367  **In CD038C:**  ---TRANSIT OPERATION  MRN R an18 G0002 ~~R0028~~  Declaration type D an..5 CL231 C0365 R0601 R0909 R0911  TIR Carnet number D an..12 S1004 C0411 C0466 R0990  Declaration acceptance date D an10 C0365 G0002  Release date D an10 C0365 G0002  Security D n1 CL217 C0365  Reduced dataset indicator D n1 CL027 C0365  Specific circumstance indicator D an3 CL296 S1007 C0466 C0812  Binding itinerary D n1 CL027 C0365  Request rejection reason code O n..2 CL184 G0367  Status D an3 CL153 C0365  **In CD115C:**  --TRANSIT OPERATION  MRN R an18 G0002 ~~R0028~~  Declaration type D an..5 CL188 C0365 R0601 R0909 R0911  Declaration acceptance date D an10 C0365 G0002  Release date D an10 C0365 G0002  Security D n1 CL217 C0365  Reduced dataset indicator D n1 CL027 C0365  Specific circumstance indicator D an3 CL296 S1007 C0466 C0812  Binding itinerary D n1 CL027 C0365  Request rejection reason code O n..2 CL225 G0367  **In CD165C:**  ---TRANSIT OPERATION  MRN R an18 G0002 ~~R0028~~  Declaration type D an..5 CL188 C0365 R0601 R0909 R0911  Declaration acceptance date D an10 C0365 G0002  Release date D an10 C0365 G0002  Security D n1 CL223 C0365  Reduced dataset indicator D n1 CL027 C0365  Specific circumstance indicator D an3 CL296 C0366  Binding itinerary D n1 CL027 C0365  Request rejection reason code O n..2 CL224 G0367  In addition, in **Appendix K** the following updates shall be performed in R0028:   * for CD002C, CD027C, CD114C, CD164C messages: R0028 will not be validated by recipient: ‘Validated by Recipient’ column shall be updated to ‘N’. No modification is foreseen in validation by sender.   The aforementioned updates will be depicted in Appendix K as following:    NCTS-Data Mapping- v0.43 file: NCTS-Data Mapping- v0.43” file will be updated to depict the change regarding the messages CD906C described above.  **IMPACT ASSESSMENT:**  It is considered that the change proposed via the current RFC-Proposal has impact on business continuity and therefore shall be deployed in a **Big Bang** approach. More specifically:    **Changes at semantic level**  The changes at the semantic level, namely concern the removal of R0028 from CD906C and CC906C.     * *With respect to the removal of R0028*   + If the sender of CD906C is aligned with the proposed changes (DDNTA 5.15.0) and the receiver is not aligned with the proposed changes (DDNTA 5.14.1), in case of invalid check digit, there will be no issue because R0028 is not validated by the Receiver.   + If the sender of CD038C, CD115C, CD165C is aligned with the proposed changes (DDNTA 5.15.0) and the receiver is not aligned with the proposed changes (DDNTA 5.14.1), in case of invalid check digit, then semantic error (CD906C) will be generated, due to violation R0028.   + If the sender of CD906C is not aligned with the proposed changes (DDNTA 5.14.1) and the receiver is aligned with the proposed changes (DDNTA 5.15.0), then CD906C is not possible to be sent without violating the rule R0028.   + If the sender of CD038C, CD115C, CD165C is not aligned with the proposed changes (DDNTA 5.14.1) and the receiver is aligned with the proposed changes (DDNTA 5.15.0), then CD038C, CD115C, CD165C is not possible to be sent with invalid check digit.   *Note that*: The changes introduced by the specific RFC affect also the External Domain (CC906C, CC007C). Thus, the implementation of this part of the RFC shall be examined at national level by the MSAs.   * *With respect to Appendix K validation update of R0028*   + If the sender of CD906C is not aligned with the proposed changes (DDNTA 5.14.1) and the receiver is aligned with the proposed changes (DDNTA 5.15.0), then CD906C is not possible to be sent without violating the rule R0028.   **Movement initiated under the previous DDNTA (5.14.1) release which continues its flow under the new DDNTA (5.15.0) release (open movement):**  The changes proposed concern rejections due to the reception of IEs containing an invalid check digit, at any point regardless of the movement flow. If a movement was initiated under the previous DDNTA (DDNTA 5.14.1) with an invalid check digit, it will continue to cause violations also after the alignment with the proposed changes (DDNTA 5.15.0). As described above, the differences will be the following:   * When an NA is aligned with DDNTA 5.14.1, no CD906C could be generated (for rejecting an IE having an invalid check digit), because R0028 (that applies on CD906) will be violated; * When an NA becomes aligned with DDNTA 5.15.0, it will be possible to generate an CD906C (for rejecting an IE (other than CD002C, CD027C, CD114C, CD164C) which contains an invalid check digit. Also, as described above, in DDNTA 5.15.0, in case of receiving a request IE with an invalid check digit, this will be rejected via the respective negative response message (CD003C, CD038C, CD115C, CD165C)   **Changes at syntactic level**  N/A  **Impact in case of no Implementation**  In case of not implementing the proposed changes, it will not be possible to generate an CD906C for rejecting an IE with invalid check digit, because the R0028 that applies on CD906C will be violated.  **Proposed** date of applicability in Operations (**T-Ops**):   1.12.2022  **Proposed** date of applicability in CT (**T-CT**):                     July 2022  **Expected** date of approval by ECCG (**T-CAB**):                  January 2022  **Impact on transition**: Yes  **Risk of not implementing the change:** Yes  **Impacted Messages:**   * Common Domain Messages: CD906C, CD002C, CD003C, CD027C, CD038C, CD114C, CD115C, CD164C, CD165C * External Domain Messages: CC906C, CC007C   Impacted CI Artefacts:   * **CSE-v51.6.0: Yes;** * **DDNTA-v05.14.1(Appendix Q2, PDFs): Yes;** * **CTS-5.6.1-v1.00: Yes;** * **CTP-5.7.0-v1.00: Yes;** * **CRP-v5.5-v1.00: Yes;** * **DMP Package-v5.6.0 SfA-v1.00 (incl. NCTS- Data Mapping- v0.43 file \_v0.43): Yes;** * DDNTA-5.14.1-v1.00 (Main Document): No; * Functional Specifications (FSS/BPM): No; * UCC IA/DA Annex B: No; * ACS: 5.5.0 & ACS-Annex-NCTS: 5.5.0: No; * TRP-5.7.: No; * DDCOM v20.3.0-v1.00: No; * ieCA 1.0.1.0: No; * CS/MIS2\_DATA: No; * CS/RD2\_DATA: No; * AES-P1 and NCTS-P5 Long-Lived “Legacy” (L3) Movements Study v1.40: No; |

**Impact on CI artefacts**

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| **DDNTA-v05.14.1 (Appendices)** | Cosmetic  Low  Medium  High  Very High   |  | | --- | | Appendices generated by CSE + Appendix Q2, Q2\_R\_C, K | |
| **CSE-v51.6.0** | Cosmetic  Low  Medium  High  Very High  Short description   |  | | --- | | Updates as described in section 3. | |
| **DMP-v5.6.0** | Cosmetic  Low  Medium  High  Very High  Short description   |  | | --- | | Updates as described in section 3. | |
| **CTP-5.7.0-v1.00** | Cosmetic  Low  Medium  High  Very High  Short description   |  | | --- | | Updates as described in section 3. | |
| **CRP-v5.5-v1.00** | Cosmetic  Low  Medium  High  Very High  Short description   |  | | --- | | Updates as described in section 3. | |

**Estimated impact on National Project**

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|  | Cosmetic  Low  Medium  High  Very High  Short description   |  | | --- | |  | |

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| **Document History** | | |  |
| **Version** | **Status** | **Date** | ***Comment*** |
| v0.10 | Draft by CUSTDEV | 09/11/2021 |  |
| V0.11 | Updates by CUSTDEV | 15/12/2021 | *Version Update* |
| v1.00 | SfA to NPMs | 25/02/2022 | *Updates in blue based on APO* |