# Impact Analysis Report / RFC-Proposal

**Section 1: Meta-data**

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| **RFC ID** | **RFC\_DDCOM\_0038** (UCCNCTSP6-228) |
| **Related Incident ID** |  |
| **RFC Initiator / Organization** | **DG TAXUD IT** |
| **CI** | **DDCOM-21.3.0-v1.00** |
| **Type of Change** | **Standard  Emergency** |
| **Nature of Change** | **Corrective  Evolutionary (Evolutive)**  Justification for Evolutive   |  | | --- | | Change of the suffix from ‘D’ to ‘C’ in many of NCTS-P6 message types. A simplifying evolution of the NCTS-P6 Technical Specifications. | |
| **RFC Source** | |  |  | | --- | --- | | **Legal & Policy Change**  **Organisational Changes** | **Business Change**  **IT Change** | |
| **Review by Business User recommended?** | **Yes  No** |

***Change Summary***

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| **DDCOM-21.3.0-v1.00: Updates on Exception Handling section (V.5) due to suffix changes from ‘D’ to ‘C’ for most NCTS-P6 messages.** |
| The reformulation of Section V.5 “Scenarios for Exception Handling during Transitional Period of NCTS-P6“ is required as there won't be any conversion between the NCTS-P5 and NCTS-P6 messages. It also describes the modifications of the diagrams in that section. |

**Section 2: Problem statement**

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| To mitigate major risks for the timely migration from NCTS-P5 to NCTS-P6, (impacting National Administrations and Economic Operators located in Opt-In and Opt-Out countries), the most appropriate solution is to simplify the transition from NCTS-P5 to NCTS-P6, by simplifying the NCTS-P6 Specifications in terms of message suffix.  In the latest DDNTA-6.3.0-v1.00, all NCTS-P6 IEs have been defined with suffix ‘D’, while the next DDNTA 6.4.0-v1.00 should incorporate the suffix change in the majority of the External Domain and Common Domain messages, apart from those used for NCTS-P6 ⬄ ICS2-CR communication.  In order to incorporate these changes, a major update should be applied in the DDCOM-21.3.0-v1.00 section V.5 “*Scenarios for Exception Handling during Transitional Period of NCTS-P6*”. Currently, this section examines the P5/P6 transition scenarios and the conversion of messages from 'C' to 'D'. However, the continued usage of ‘C’ type on the Common Domain eliminates the need for the P5⬄P6 message conversion.  The relevant *Figures* should be updated by removing the *ieCA actor* and the *upgrade/downgrade conversions* between NCTS-P5 and NCTS-P6. |

**Section 3: Description of proposed solution**

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| The following updates will be performed into the next release **DDCOM-21.4.0-v1.00** (~~deleted text strikethrough and red colour~~ and added text in yellow).  ***Section V.5 Scenarios for Exception Handling during Transitional Period of NCTS-P6***  ***V.5.1 Introduction***  The Transitional Period of NCTS-P6 enables communication between NAs with different or identical operational modes *(e.g. NCTS-P5 or NCTS-P6).* The ~~Common domain exchange~~ ~~patterns,~~ principles, the transitional analysis and the necessary transitional scenarios for the Transitional Period from NCTS-P5 to NCTS-P6 are defined in Section IV of DDNTA for NCTS-P6 [R44] ‘*NCTS-P6 Transitional Scenarios’*. These scenarios remain needed to clarify which exchanges of messages will be possible or not - during the Transitional Period - between NCAs operating in [NCTS-P6] and NCAs still operating in [NCTS-P5].  ~~This is detailed in Section IV of DDNTA for NCTS-P6 [R44], 'NCTS-P6 Transitional Scenarios.'~~  Between NCAs operating in [NCTS-P6 Opt-In] and ieCA/TED, the rejection messages used to exchange business or syntax errors will be CD906D and CD917D respectively. In all other cases, i.e. between NCAs operating in [NCTS-P6] and between NCAs operating in [NCTS-P6]/[NCTS-P5], the messages CD906C and CD917C will be used as rejection messages.  ~~The various exception handling cases that may happen on these exchange patterns, are depicted in the current section. Table 50 also summarises the exception handling per CD exchange pattern (please refer to column “State Transition Diagram (STD)-IE Scope Applicable in the Common Domain (CD)”):~~  **~~Table 50: Common Domain exchanges patterns during NCTS-P6 TP~~** *(the table will be removed)*  ~~The communication protocol is downgraded to NCTS-P5 whenever one of the two (2) key actors (i.e., the sending NA and the receiving NA) operates in NCTS-P5, because the new data elements introduced under NCTS-P6 are not available and also because there is no connectivity to the ICS2 CR. According to the aforementioned, if a message is produced from “NCTS-P5” system of NA (operating under NCTS-P6) and conversion (i.e. downgrade or upgrade of IE) is needed, then it is highly strongly recommended to use the native format (“NCTS-P5” interface) to minimise conversion needs between the two (2) countries running NCTS-P5 and NCTS-P6 applications in parallel.~~  ***~~V.5.2 Exception handling between NCTS-P5 NAs [Pattern #1]~~***  ~~The exception handling during the Transitional Period of NCTS-P6 for Common Domain exchanges between NAs in NCTS-P5 (Sending NA and Receiving NA are in NCTS-P5) shall be performed as per principles defined in Section V.4.6.~~  ***~~V.5.3~~V.5.2 Exception handling between NCTS-P5 and NCTS-P6 NAs***  The exception handling for Common Domain exchanges between NCTS-P5 and NCTS-P6 NAs ~~and NCTS-P5 NA~~ shall be performed as per NCTS-P5 protocol, i.e.:   * Functional errors should be reported as specified in (V.3.5) using CD906C (V.3.5.1); * Syntax (TMS) error should be reported as specified in (V.3.3) using CD917C.   For the following exception handling cases A, B, C and D ~~or E,~~ a set of facts shall be considered and especially when the errors are found in the exchanged ~~“converted”~~ message:   * 1. NCTS-P5 and NCTS-P6 exchange XML messages;   2. Error pointers may be different from NCTS-P6 to NCTS-P5 phases. This pertains to NAs functioning in both NCTS-P6 and NCTS-P5, utilizing different error pointers. For instance, in NCTS-P6, the error pointer might be formatted as "/CD001C/Consignment/HouseConsignment[1]/ConsignmentItem[1]/Packaging[1]/   shippingMarks," whereas in NCTS-P5, it could be formatted as "/CD001C[1]/Consignment[1]/HouseConsignment[1]/ConsignmentItem[1]/Packaging[1]  /shippingMarks," as specified in Section V.3.5 Functional error - IE906 (CD906C and CD906D)   * 1. ~~Error does not always imply error in the original received message It might concern the converted message and therefore must be investigated under incident management:~~   2. ~~Error in the original message,~~   3. ~~Conversion/data mapping problem,~~   4. ~~Erroneous implementation of R/C/TRT/BRT or Technical Rule.~~   The following schemas reflect the types of communication and exception handling actions between NCTS-P5 and NCTS-P6 NAs:  Type A: The NCTS-P5 NA receives a message from an NCTS-P5 NA. ~~The NCTS-P6 NA receives an NCTS-P5 message from an NCTS-P5 NA.~~ Then, the NCTS-P5 NA performs ~~NCTS-P6 NA sends the message to ieCA for upgrade and~~ Syntax or Business validation anderrors occur ~~in ieCA~~ on the exchanged ~~input~~ message;   |  |  | | --- | --- | |  |  | | **Figure removed***~~Figure 20: Exception handling between NCTS-P5 NAs~~* | **New figure** *Figure 20: Exception handling between NCTS-P5 NAs* |  |  | | --- | |  | | **Figure removed***~~Figure 21: NCTS-P5 – NCTS-P6 Errors reported on Input validation by ieCA~~* |   Type B: The NCTS-P6 NA receives ~~an NCTS-P5~~ a message from an NCTS-P5 NA. ~~Then, the NCTS-P6 NA sends the message to ieCA for upgrade and Syntax or Business validation errors occur on the output (upgraded) message. Figure 22~~ Figure 21 depicts the actions that happen either if the error is identified during the XML Validation step or during the Business Validation step by the receiving NCTS-P6 NA; ~~by ieCA (step 4) or by the validation of the receiving NCTS-P6 NA (steps 5-14);~~   |  |  | | --- | --- | |  |  | | **Figure removed***~~Figure 22: NCTS-P5 – NCTS-P6 Errors reported on the upgraded message by NA~~* | **New figure** *Figure 21: NCTS-P5 – NCTS-P6 Errors reported by NCTS-P6 NA* |   Type C: The NCTS-P~~6~~5 NA receives ~~needs to send~~ a message ~~to~~ from an NCTS-P~~5~~6 NA. ~~First, the NCTS-P6 NA sends the message to ieCA for downgrade and~~ ~~Syntax or Business validation errors are found by ieCA on the input message;~~ Figure 22 depicts the actions that happen either if the error is identified during the XML Validation step or during the Business Validation step by the receiving NCTS-P5 NA;   |  |  | | --- | --- | |  |  | | **Figure removed***~~Figure 23: NCTS-P6 – NCTS-P5 Errors reported on Input validation by ieCA~~* | **New figure** *Figure 22: NCTS-P6 – NCTS-P5 Errors reported by NCTS-P5 NA* |   Type D: The NCTS-P6 NA ~~needs to~~ sends a message to an NCTS-P5 NA. ~~First, the NCTS-P6 NA sends the message to ieCA for downgrade and~~ Syntax or Business validation errors are found by the receiving NCTS-P5 NA on the input message; ~~occur on the output (downgraded) message. The Figure 24 depicts the case where the validation error occurs in ieCA, while the Figure 25 depicts the case where the errors are identified by the receiving NCTS-P5 NA;~~   |  | | --- | | Diagram  Description automatically generated | | **Figure removed***~~Figure 24: NCTS-P6 – NCTS-P5 Errors reported on Output validation by ieCA~~* |  |  | | --- | |  | | **Figure removed** *~~Figure25: NCTS-P6 – NCTS-P5 Errors reported on Output validation by NA~~* |  |  |  | | --- | --- | |  |  | | **Figure removed** *~~Figure 26: Exception handling between NCTS-P6 NAs~~* | **New figure** *Figure 23: Exception handling between NCTS-P6 NAs* |   The following Table summarises the Business and Syntax validation scenarios between NCTS-P5 and NCTS-P6 operation modes.  Table 51 : Syntax and Business Validation Errors between NCTS-P5 and NCTS-P6 *(the table will remain unchanged)*  ***~~V.5.4 Exception handling between NCTS-P6 NΑs~~***  ~~The protocol for the exception handling for Common Domain messages exchanged between two NCTS-P6 NAs is applicable from the start of the~~ *~~Transitional Period of NCTS-P6~~*~~. This protocol is the only one applicable from the end date of the~~ *~~Transitional Period of NCTS-P6~~*~~.~~  ~~The NCA shall respond per level of error as follows:~~   * 1. ~~Functional errors should be reported as specified in (V.3.5) using CD906D;~~   2. ~~XML error should be reported as specified in (V.3.3) using CD917D (VII.5) and with Error Codes (Codelist CL030) applicable to NCTS-P6.~~   **IMPACT ASSESSMENT**  This RFC-Proposal is part of the **documentary changes** defined for the important **simplifications** for the **NCTS-P6** Common and External Domain messages (for both **Opt-In** and **Opt-Out** NAs). See also the relevant NCTS-P6 RFC-Proposals. This change shall ensure the consistency and alignment of DDCOM-21.4.0 with the (coming soon) NCTS-P6 DDNTA-6.4.0.  **Proposed** date of applicability in Operations (**T-Ops**):  National start of NCTS-P6 operations (at earliest 01.03.2025, at latest 01.09.2025)  **Proposed** date of applicability in CT (**T-CT**):                     Start of CT campaign (provisionally on  (01.12.2024)  **Expected** date of approval by ECCG (**T-CAB**):                  Together with DDNTA-6.4.0-v1.00  **Consequence of not approving and not implementing this RFC-Proposal**: The DDCOM will be desynchronised with DDNTA-6.4.0, with high risk of confusion for all National development teams, and high risk of rejections on the Common Domain.  **Impacted CI Artefacts:**   * **DDCOM-21-3.0-v1.00: Yes.**   **Impacted CIs covered by related RFC-Proposals:**   * DDNTA-6.3.0-v1.00 (Main Document): Yes; * DDNTA-6.3.0-v1.00 (Appendices A, K, Q2, X): Yes; * CSE-v60.4.4: Yes; * NCTS-P6 DMP-6.3.0-v1.00 Package: Yes; * CTP-6.1.0-v1.00:Yes; * TRP-6.2.0-v1.00: Yes; * NCTS-P6-CTS-1.0.0-v1.00: Yes; * NCTS-P6-CRP-6.0.0: Yes; * CS/MIS2\_DATA: Yes; * CS/RD2\_DATA: Yes.   **CIs with no impact from the current RFC-Proposal:**   * Functional Specifications NCTS-P6 (FSS/BPM): 7.10.0: No; * ICS2-CR-CTS-1.0.0: No; * ieCA 1.1.1.0: No; * UCC IA/DA Annex B: No; * AES-P1: No; * NCTS-P4: No; * NCTS-P5: No. |

**Impact on CI artefacts**

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| **DDCOM-21.3.0-v1.00** | Cosmetic  Low  Medium  High  Very High  Short description   |  | | --- | | **See section 3 above.** | |

**Estimated impact on National Project**

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| **None  Cosmetic  Low  Medium  High  Very High**  Short description   |  | | --- | | **For NAs not having started yet the inception for NCTS-P6, this change will have a positive impact** for NAs as the development for the NCTS-P6 is **simplified**, as further documented in the coming and related DDNTA 6.4.0-v1.00 specifications. | |

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| **Document History** | | | |
| **Version** | **Status** | **Date** | ***Comment*** |
| v0.10 | Draft by SOFTDEV | 08/03/2024 | *Draft by SOFTDEV* |
| v0.11 | Commented draft | 20/03/2024 | *Comments & track changes by DG TAXUD* |
| v0.20 | Updated by SOFTDEV | 02/04/2024 | *Updates following DG TAXUD’s comments* |
| v0.21 | Commented draft | 22/04/2024 | *All comments except one are resolved.* **Impact assessment** *and* **Estimated impact on National Project** *upgraded by DG TAXUD IT. One comment added on ieCA/TED.* |
| v0.30 | Updated by SOFTDEV | 02/05/2024 | *Updates following DG TAXUD’s comments* |
| v0.31 | Draft updated | 14/06/2024 | *Various updates with TC by DG TAXUD IT (tds). Response to comments validated.* |
| v1.00 | Final version | 15/06/2024 | *Version ready for implementation in DDCOM and for review by NPMs.* |
| v1.10 | Applied in DDCOM-21.4.0-v1.00(SfA-TAXUD) | 25/07/2024 | *Implementing comments from DG TAXUD on DDCOM-21.4.0-v0.10(SfR-TAXUD)* |
| v1.11 | SfA-NPM\_IMPL | 18/12/2024 | *Watermark and Document history (status) updated for info \_ Part of RFC-List.42 \_ Included in DDCOM-21.4.0-v2.00.* |