

<b>STN P</b>	<b>Digitálny spracovateľský reťazec pre dôkazy CBRNE Časť 1: Prehľad a koncepty</b>	<b>STN P CEN/TS 18053-1</b>  83 0030
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Digital Chain of Custody for CBRNE Evidence — Part 1: Overview and Concepts

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/24

Táto predbežná slovenská technická norma je určená na overenie. Prípadné pripomienky pošlite do septembra 2026 Úradu pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky.

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English Version

## Digital Chain of Custody for CBRNE Evidence - Part 1: Overview and Concepts

Digitale Beweiskette für CBRNE-Beweise - Teil 1:  
Überblick und Konzepte

This Technical Specification (CEN/TS) was approved by CEN on 26 May 2024 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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**CEN/TS 18053-1:2024 (E)**

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## **European foreword**

This document (CEN/TS 18053-1:2024) has been prepared by Technical Committee CEN/TC 391 “*Societal and citizen security*”, the secretariat of which is held by AFNOR.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## CEN/TS 18053-1:2024 (E)

### Introduction

In situations involving chemical, biological, radiological, nuclear, and explosive (CBRNE) incidents caused by natural or accidental events or deliberate actions like terrorism or warfare, it can be crucial to accurately identify CBRNE agents by collecting and transporting samples to a laboratory. A digital chain of custody system might contribute to ensuring the traceability and security of CBRNE evidence items throughout the process. This process involves various stakeholders, emphasizing the significance of maintaining the integrity of the chain of custody and documenting all actions, particularly at Custody Transfer Points (CTPs), for easy auditing of the involved stakeholders.

In any digital Chain of Custody (dCoC) process, it is essential to identify stakeholders with specific roles or participation in the dCoC process. These stakeholders may include the Mission Commander Team, the Reconnaissance Team, the Sampling Team, the Carrier Team, and the Laboratory Team. The data governance workflow aims to offer guidance on executing a secure digital transfer and identifying the stakeholders involved as contributors to the evidentiary materials at each stage of the process. The guidelines emphasize the importance of incorporating digital custody metadata (DCM) into the dCoC process to ensure the integrity and non-repudiation of digital evidence items and to trace the custodian. By including DCM, the dCoC process can provide comprehensive and accurate documentation of all steps involved in the custody, control, transfer, and auditing of the digital evidence items, thereby increasing transparency and accountability.

This document addresses services and final outputs concerning dCoC for CBRNE evidence items. The concepts and terminology presented in this document are utilized by the definitions in ISO 22095 Chain of Custody – General terminology and models. Additional definitions of concepts relevant to the CTP data governance process specification and custody transfer of metadata structures considered by the digital evidence log are also provided. Many of the terms and definitions listed here are also mentioned in the EN 17173 European CBRNE glossary; although not mandatory, reading these two standards is suggested to get familiarised with the terms and definitions listed for the chain of custody in the area of CBRNE.

The guidelines can be applied to other supply chains (e.g. food chains, retail logistics, etc.). The dCoC for CBRNE digital evidence items represents a paradigmatic context to address data governance considerations for evidentiary purposes in a highly demanding framework.

This document is intended to be used with Part 2 in order to ensure the implementation of the custody transfer data governance process. Part 2 provides the technical details regarding the implementation of the data structure for the DCM in each CTP in the dCoC.

**NOTE 1** It is important to emphasize that across the European Union, there are several regulatory and legislative procedures to handle the chain of custody for CBRNE incidents, so it is essential to take these considerations into account. The use of the guidelines can vary based on the digital evidence procedures adopted in each member state of the European Union.

**NOTE 2** If the digital log for each custody transfer (i.e. who owns the custody at each transfer point) is not preserved, the evidence submitted in the court might be challenged and ruled inadmissible.

## **1 Scope**

This document provides an overview of the concept of Custody Transfer Point (CTP) within the digital Chain of Custody (dCoC) process, including the identification and audit of the custody ownership and metadata governance to ensure the integrity of the data at each CTP. The document also provides:

- Definitions of the concepts within the dCoC process related to the digital evidence log for each custody transfer (i.e. who owns the custody at each transfer point);
- General guidelines for the data governance process within the CTP lifecycle, including identification of the role of the stakeholders;
- Digital metadata management policies and compliance with good practices for non-repudiation of the reported data regarding the ownership of digital evidence items within the custody transfer lifecycle.

This is part one of two documents for the provision of Digital Custody Metadata (DCM) for managing data related to the custody of digital evidence items. Part 2 complements this document by providing detailed guidance on the steps in the data governance process within each CTP lifecycle.

The document aims to provide guidance to both technical and non-technical personnel, including individuals accountable for compliance with statutory and regulatory requirements and industry standards. It is designed to be helpful for a broad range of professionals, regardless of their technical expertise, ensuring that all stakeholders involved in implementing the document's recommendations can understand and follow them effectively.

## **2 Normative references**

There are no normative references in this document.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**