

# ISO/IEC 15944-9:2023-06 (E)

## Information technology - Business operational view - Part 9: Business transaction traceability framework for commitment exchange

---

<b>Contents</b>		<b>Page</b>
<b>Foreword</b>		<b>vii</b>
<b>Introduction</b>		<b>viii</b>
<b>1 Scope</b>		<b>1</b>
<b>2 Normative references</b>		<b>1</b>
<b>3 Terms and definitions</b>		<b>2</b>
<b>4 Abbreviated terms</b>		<b>18</b>
<b>5 Principles and assumptions</b>		<b>18</b>
5.1	Overview	18
5.2	Important Open-edi characteristics that provide support for traceability	19
5.3	Principles for traceability	20
5.3.1	Overview of the principles	20
5.3.2	Traceability principle 1: Unambiguous identification	20
5.3.3	Traceability principle 2: Record-keeping	20
5.3.4	Traceability principle 3: Defined level of granularity	21
5.3.5	Traceability principle 4: Ensuring traceability among parties	21
5.3.6	Traceability principle 5: Precision in temporal and/or location referencing	21
5.4	Two types of tracking	22
<b>6 Traceability reference model</b>		<b>22</b>
6.1	General model	22
6.2	Traceability data in business transaction	23
6.2.1	Predefined and structured traceability data	23
6.2.2	Predefined contents of traceability data	23
6.3	General content of traceability data	25
6.3.1	General rules for identification of BTEs	25
6.3.2	Integration and interoperability of identification schema	26
6.3.3	Identification and description of traceable commitments and non-traceable commitments	28
6.3.4	Rules governing unambiguous identification of Person in support of traceability requirements	29
6.3.5	Business event	29
<b>7 Traceability requirements to business transaction components</b>		<b>31</b>
7.1	Overview	31
7.2	General requirements	31
7.2.1	Key components of a business transaction	31
7.2.2	Commitment exchange	31
7.3	Traceability requirements on Person	31
7.3.1	General requirements on Person	31
7.3.2	Requirements on a regulator	32
7.3.3	Requirements on a buyer	32
7.3.4	Requirements on Person as an individual — Privacy protection and individual accessibility requirements	32
7.4	Traceability requirements on process	33
7.5	Traceability requirements on data	34
7.5.1	Overview	34
7.5.2	Traceability data retention	34
7.5.3	State changes	34

7.5.4	Business transaction ID .....	34
7.5.5	Unambiguous traceability data .....	34
7.5.6	Traceability data sharing .....	35
7.5.7	Master data (in a business transaction) .....	35
<b>8</b>	<b>Open-edi collaboration space and traceability .....</b>	<b>35</b>
8.1	Overview .....	35
8.2	Basic Open-edi collaboration space: Independent view of traceability .....	36
8.3	Collaboration space: Roles of buyer, seller and regulator .....	36
<b>9</b>	<b>Traceability attributes for Open-edi scenario .....</b>	<b>37</b>
9.1	Overview .....	37
9.2	Template structure and contents .....	37
9.3	Template for specifying the scope of an Open-edi scenario — Traceability requirements perspective .....	37
<b>Annex A (normative) Consolidated controlled vocabulary definitions and associated terms, as human interface equivalents (HIEs), English and French language equivalency in the IT standardization context .....</b>		<b>42</b>
<b>Annex B (informative) Introduction to GS1 Glossary .....</b>		<b>45</b>
<b>Annex C (informative) Date/time referencing .....</b>		<b>49</b>
<b>Annex D (informative) Introduction to ISO/IEC 15944-5:2008, Annex D and Annex E regarding business location .....</b>		<b>50</b>
<b>Annex E (informative) Samples of international standards or specifications in support of traceability requirements .....</b>		<b>51</b>
<b>Annex F (informative) Mapping of BTEs through their identifiers in a traceability framework .....</b>		<b>52</b>
<b>Annex G (Informative) Introduction to sample regulations as the sources of requirements of traceability .....</b>		<b>55</b>
<b>Annex H (Informative) Exclusions and aspects not currently addressed to the scope .....</b>		<b>57</b>
<b>Bibliography .....</b>		<b>59</b>

## List of Figures

<b>Figure 1 — Open-edi environment .....</b>	<b>ix</b>
<b>Figure 2 — Integrated view — Business Operational Requirements .....</b>	<b>xi</b>
<b>Figure 3 — Model of traceability concepts .....</b>	<b>22</b>
<b>Figure 4 — Focus of BOV Open-edi standardization work required by traceability — Predefined and structured traceability data .....</b>	<b>23</b>
<b>Figure 5 — Content model for traceability in a business transaction .....</b>	<b>24</b>
<b>Figure 6 — Identification radar: What it covers .....</b>	<b>26</b>
<b>Figure 7 — Commitments including traceable and non-traceable commitments .....</b>	<b>28</b>
<b>Figure 8 — Information model of business event .....</b>	<b>30</b>
<b>Figure 9 — Collaboration space with regulator as external constraints of traceability .....</b>	<b>36</b>
<b>Figure F.1 — Entity and entity Mapping .....</b>	<b>52</b>
<b>Figure F.2 — Chain of commitment exchange traceability mapping among entity identifiers .....</b>	<b>53</b>
<b>Figure F.3 — Traceability route in a food business transaction with multi-parties .....</b>	<b>54</b>

## List of Tables

<b>Table 1 — Attributes for scenario scoping .....</b>	<b>37</b>
--	-----------