



**NSAI**  
Standards

Standard Recommendation  
S.R. CWA 16504:2012

# Simplified multilateral EDI - Secure electronic data interchange in non- hierarchical networks

## S.R. CWA 16504:2012

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces:*

*This document is based on:*  
CWA 16504:2012

*Published:*  
19 September, 2012

This document was published under the authority of the NSAI and comes into effect on:  
19 September, 2012

**ICS number:**

35.240.60

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**CEN**

**CWA 16504**

**WORKSHOP**

August 2012

**AGREEMENT**

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ICS 35.240.60

English version

## Simplified multilateral EDI - Secure electronic data interchange in non-hierarchical networks

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

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## **Foreword**

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 2012-08-10, the constitution of which was supported by CEN following the public call for participation made on 2011-08-23.

A list of the individuals and organisations which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organisations were drawn from the following economic sectors: large IT companies, ICT practitioners, academia as well as machinery and plant manufacturing.

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards or legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its members.

The final review/endorsement round for this CWA was started on 2012-05-04 and was successfully closed on 2012-07-09. The final text of this CWA was submitted to CEN for publication on 2012-08-13.

Below is a list of companies that endorsed this CWA:

- Fujitsu Technology Solutions GmbH
- WZL RWTH Aachen
- Otto Junker GmbH
- FIR RWTH Aachen
- myOpenFactory AG
- Politecnico di Milano
- IDEKO-IK4

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## 1 Scope

This CWA aims to give small and medium sized enterprises a fast to establish and easy to use alternative to traditional EDI approaches. The hope is that a wider adoption of EDI in Europe will streamline administrative processes in many companies and thus will foster competitiveness of our continent.

This workshop agreement is intended as a guideline for the exchange of business documents between companies within a non-hierarchical business network by electronic communication. Since each company has a multitude of business relationships in its network, it is important to keep communication to many partners easy to handle. Especially for small and medium sized enterprises, a multilateral approach will simplify electronic business communication as today the efforts to handle bilateral communication channels are too heavy.

The concept is to route the communication through a central platform in the Internet using a standardised data format which is described in this workshop agreement. This way a single data format can be utilised within a complete network of companies. The data format shall be lightweight enabling companies of all sizes to communicate. Additionally it shall be free of redundancies for purpose of clear semantics and unambiguous implementation. Both aspects are hardly possible with traditional data formats like EDIFACT. This is the reason why electronic communication still is not spread widely in Europe, especially amongst SME.

As any company uses different IT systems, it is necessary to connect each company to the mentioned platform individually using an individual data format and individual transmission channel between the platform and the company. The platform takes care of the transmission and the conversion between the individual data format and the standardised data format, which is described in this workshop agreement, using defined mapping procedures. This way mapping is reduced from various bilateral mappings to mapping to the standard format.

Besides technical issues, legal issues also need to be solved when exchanging business documents for all the member states of the European Union. The basics for solving these legal issues will also be addressed within this agreement.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 9594-8:2008, *Information technology — Open Systems Interconnection — The Directory: Public key and attribute certificate frameworks*

ETSI TS 102042 V.2.1.2:2010, *Electronic Signatures and Infrastructures (ESI) — Policy requirements for certification authorities issuing public key certificates*

ETSI TS 101 456 V.1.4.3:2007, *Electronic Signatures and Infrastructures (ESI) — Policy requirements for certification authorities issuing qualified certificates*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **workflow of documents**

*flow of all documents relating to each other within a business process*

Note 1 to entry: All documents within a workflow of documents represent a business process in reality.

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