

BUSINESS PLAN

CEN/TC 440 ELECTRONIC PUBLIC PROCUREMENT

EXECUTIVE SUMMARY

Business Scope and environment

CEN/TC 440 was established in 2015 with the ambition to cover the full end-to-end eProcurement process, with the exception of eInvoicing, which is covered by CEN/TC 434. Since the establishment of the TC, several initiatives have emerged within the European Commission, which provide mandatory specifications for use in the public pre-award processes, such as the eForms¹ and the ESPD². CEN/TC 440 will respect these and will not develop competing specifications. To ensure that deliverables developed by CEN/TC 440 add value and meet the needs of the private and public actors along the supply chain (SC), **CEN/TC 440 is focusing on developing deliverables to support interoperability in information exchange and data sharing in the business processes related to sourcing, tendering and operative processes like ordering and fulfilment (called pre- and post-award processes in the public sector).**

At the time of writing there are no formal European standard specifications completely supporting the above-mentioned collaborations and processes in public and private procurement. Without standardised processes and data structures, businesses and other organisations face a disparate environment of solutions, formats and specifications, both in relation to business to government (B2G) and business to business (B2B) procurement processes. This is particularly relevant for SMEs to remain competitive in the European market.

Being targeted at European eProcurement the deliverables of CEN/TC 440 will be developed to support EU strategies³ and EU legislation.

Benefits of interoperability, digitalisation, and use of standards

Activities in CEN/TC 440 will provide a common focal point for definition of the electronic information sharing and exchange of business transactions in the eProcurement in the public sector (B2G) as well as in the private sector (B2B). CEN/TC 440 deliverables will help to:

- Ensure open and free cross-border markets by improving interoperability between the stakeholders of the European Market;
- Implement innovative procurement programs and use of modern technology;
- Reduce transaction costs in procurement and related processes and create efficiency savings for the public and private sector;
- Reduce market-entry barriers and costs and open-up markets for economic operators as well as for providers of eProcurement services;
- Increase transparency and foster competition in the market between economic operators;
- Find the right markets and sellers and facilitate international cross-border trade;
- Enable digital actors (e. g. IT service providers) to create the adequate environment and make future-proof investments;
- Use new digital technologies like distributed ledger technologies (blockchains), micro-mobility, smart manufacturing ([Industry 4.0](#)) etc. in procurement and related processes;

¹ https://single-market-economy.ec.europa.eu/single-market/public-procurement/digital-procurement/eforms_en

² https://eur-lex.europa.eu/eli/reg_impl/2016/7/oj

³ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52012DC0179>; <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022DC0031>; <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2022:32:FIN>

- Use process innovations regarding sustainability as well as supply-chain resilience and due diligence in procurement and related processes;
- Gain more insights into the proper performance and the effectiveness of sourcing and operative procurement business;
- Integrate related processes, such as logistic and financial processes, into procurement;
- Complement standards initiatives in logistics, eInvoicing and Financial Services;
- Provide technological platforms and networks to implement electronic procurement.

Priorities

To develop European standard specifications covering business process choreography, additional business control information, semantic information models and syntax bindings to support interoperable information exchange and data sharing in business processes related to eSubmission, eContract, eCatalogue, eOrdering, and eFulfilment. CEN/TC 440 will also provide guidance on requirements imposed by emerging technologies as well as the role that standards may play in the adoption of such technologies to support innovation.

The content of the business plan will be periodically reviewed and updated due to upcoming technologies and regulations. The eProcurement Innovation Guideline is intended to help identify these technologies and chances and to define a long-term strategy for CEN/TC 440.

1 BUSINESS ENVIRONMENT OF CEN/TC 440

1.1 State of the field: Standards for supply chain management and procurement processes

The supply-chain business processes and activities of public and private eProcurement are widely supported by computer systems, typically in the form of an enterprise resource planning (ERP) system⁴. While these systems are aimed at supporting the activities internal to a given organisation, the business processes they serve are frequently sharing and exchanging information with other parties, such as:

- Sending and receiving tenders;
- Making price lists/catalogues for goods and services available as basis for supply chain planning, ordering and fulfilment;
- Sending and receiving orders and order confirmations;
- Sharing information related to the actual delivery of goods and services;
- Sharing information related to products or organisations to facilitate risks assessment and to achieve regulatory compliance along the supply chains;
- Sharing information for implementing innovative procurement and supply chain programs and techniques.

At the time of writing, in the current European market, there are no formal European standard specifications covering these information exchange processes. As a result, public and private sector market actors instead must rely on a multitude of formats and specifications. These are either typically developed to support specific sectorial requirements, such as those of the electronics sectors, the retail industry, etc.. Specifications are also provided by user communities such as OpenPeppol, reusing CEN WS/BII specifications⁵, as well as provided by other standard developing organisations such as UN/CEFACT⁶. Apart from sector specific specifications there are also specifications that have been developed to comply with legislation and covering only parts of the public procurement process like the eForms⁷ or the European Single Procurement Document Exchange Data Model (ESPD-EDM⁸) in the pre-award area.

Without standardised processes, businesses and other organisations face a disparate environment of solutions, both in relation to B2G and B2B procurement processes. These challenges increase when engaging in cross-sector and cross-border eProcurement, where in addition to the different national rules and the language barriers, there is no guarantee of semantic and technical interoperability.

⁴ Enterprise resource planning (ERP) is the integrated management of main business processes, often in real time and mediated by software and technology. (https://en.wikipedia.org/wiki/Enterprise_resource_planning)

⁵ <https://www.cen.eu/work/areas/ICT/eBusiness/Pages/WS-BII.aspx>

⁶ <https://www.unece.org/index.php?id=3130>

⁷ eForms are an EU legislative open standard for publishing public procurement data. They are standard forms used by public buyers to publish notices on Tenders Electronic Daily—an online portal for public procurement notices from across the EU ([curement/digital/eforms_en](https://www.cen.eu/work/areas/ICT/eBusiness/Pages/WS-BII.aspx)).

⁸ eESPD is an electronic self-declaration document to be submitted by sellers interested in tendering for contracts for the supply of goods, works or services to public bodies located anywhere within the [European Union](https://www.cen.eu/work/areas/ICT/eBusiness/Pages/WS-BII.aspx).

1.2 Regulatory and legal environment

The European Commission has addressed eProcurement in a range of eGovernment and digitalisation policy initiatives, such as the Tallinn declaration⁹, a Digital Agenda for Europe and the eGovernment action plan¹⁰, which call for digitalization and interoperability of the procurement process. EU Member States have in response developed various strategies to ensure the digital transformation of the public procurement domain in their national ecosystems.

European regulatory activities have mainly focused on improving the state of play in the pre-award phase, and as a result there are no specific EU regulations covering the post-award phase, except for sector specific regulations, such as those in the energy sector, and eInvoicing.

As part of the legislation covering the pre-award phase, the EU has adopted the public procurement directives that mandates the use of eSubmission, the ESPD implementing regulation, and adopting the eForms standards implementing regulation. These regulations govern public procurement only and do not cover the whole pre-award phase. As a result, there is still a need for further elaboration of the semantic and technical aspects of interoperability.

The EU has also introduced the eInvoicing directive (2014/55/EU) to reduce the barriers created by the existence of many invoicing formats used in B2B and the low level of digitalisation of the invoice exchange in European public administration. Standards supporting this are developed by CEN/TC 434 Electronic Invoicing.

Several European countries have established or are working on legislative regulations regarding Supply Chain Due Diligence. Such regulations require public and private organisations to identify risks against human rights, e.g. child labour or slavery, sustainability etc. in their supply chains and to take actions against them. Examples for such regulations are:

- France: “Loi de vigilance”¹¹ (Law on Vigilance passed in 2017);
- Germany: “Gesetz über unternehmerische Sorgfaltspflichten in Lieferketten”¹² (Law on Corporate Due Diligence passed in 2021);
- Netherlands: “Wet zorgplicht kinderarbeid”¹³ (Child Labour Due Diligence Law passed in 2019).

In other countries like Austria or Switzerland or on the European level similar initiatives have been started. In particular, the European commission has proposed a Directive on Corporate Sustainability Due Diligence¹⁴ to foster sustainable and responsible corporate behaviour throughout global value chains in the beginning of 2022. Such regulations will be considered in CEN/TC 440 as far as sharing relevant information along the procurement chain is needed to comply to these regulations.

⁹ <https://digital-strategy.ec.europa.eu/en/news/ministerial-declaration-egovernment-tallinn-declaration>

¹⁰ <https://ec.europa.eu/digital-single-market/en/european-egovernment-action-plan-2016-2020>

¹¹ <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000034290626/>

¹² http://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&jumpTo=bgbl121s2959.pdf

¹³ <https://zoek.officielebekendmakingen.nl/stb-2019-401.html>

¹⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0071>

1.3 Other relevant international, regional or national standards or voluntary initiatives

As already noted there are a multitude of formats and specifications available in the market. Some of these are identified below.

1.3.1 ISO and CEN technical committees and workshop agreements

Standards and specifications relevant to procurement, information management and payments are developed in a range of ISO and CEN technical committees. Those relevant to the work of CEN/TC 440 include:

- CEN WS/BII3;
- CEN/TC 434 Electronic Invoicing;
- CEN/TC 442 Building Information Modelling;
- CEN/TC 461 Public Procurement;
- ISO/IEC/JTC 1/SC 32 Data Management and Interchange;
- ISO/TC 68 Financial services;
- ISO/TC 154 Processes, data elements and documents in commerce, industry and administration.

1.3.2 Other initiatives

There are a range of other organisations and initiatives involved in developing industry standards, sharing best practice, and developing guidelines regarding eProcurement and information and data exchange, including:

- ASCM – Association of Supply Chain Management
- CEF/DSI – Connecting Europe Facility / Digital Service Infrastructure
- EDIFICE – EDI Organisation of the Electronics Industry
- EESPA – European eInvoicing Service Provider Association
- EIF – European Interoperability Framework
- EIRA – European Interoperability Reference Architecture
- ePO – eProcurement Ontology (Project of the European Commission)
- EUPLAT – European Association of Public eTendering Platform Providers
- EXEP – Multi-Stakeholders Expert Group on eProcurement
- FIEC – European Construction Industry Federation
- GS1 – Global Standards 1
- OpenPeppol (eDelivery) – Open Pan-European Public Procurement Online
- UN/CEFACT – United Nations Centre for Trade Facilitation and Electronic Business

2 BENEFITS EXPECTED FROM THE WORK OF CEN/TC 440

Activities in CEN/TC 440 will provide a common focal point for definition of the electronic information sharing and exchange of business transactions in public eProcurement (B2G) as well as in the private sector (B2B) and thereby allow for:

- Mapping of different formats, data models and syntaxes (e. g. UBL; UN/CEFACT);
- Efficient and effective implementation of electronic information sharing and exchange of business transactions;
- Interoperability between independent implementations;
- Reliable and resilient supply chains and Supply Chain Due Diligence;
- A continuous flow of item/product information on quality and quantity (stock information and related forecasts, item substitutes, alternative ordering arrangements, etc.) across sectors, e.g. in crisis situations or when supply chains are under stress.

2.1 Stakeholder benefits

The deliverables provided by CEN/TC 440 will provide a variety of benefits for the stakeholders of CEN/TC 440.

European businesses (including sellers and customers in the procurement process):

- Reduce transaction costs and create efficiency savings – for both public and private actors;
- Enable competition between IT service providers and prevent vendor lock-in effects;
- Reduce barriers for developing new innovative business models;
- Facilitate the implementation of innovative procurement programs and the use of modern technology.

ICT service/solution providers:

- Help reduce market entry costs for procurement ICT solution suppliers and open-up markets for new suppliers;
- Create certainty and future-proof the investments for those developing IT services to support procurement, logistics and Supply Chain Management (SCM);
- Improve the ability of ICT providers to operate across borders;
- Provide standardised “building blocks” that will facilitate development of new innovative IT-based procurement and SCM services;
- Provide a framework that can be customized to specific markets and thus makes smaller markets accessible for ICT providers;
- Improve connectivity through larger networks such as OpenPeppol resulting in access to larger markets.

Policy makers (including the European Commission and national authorities):

- Facilitate the development of reliable and resilient IT infrastructure as a key prerequisite for providing procurement-related and SCM-related IT services for the European market;
- Complement standards initiatives in eInvoicing (CEN/TC 434) and Financial Services (ISO/TC 68) enabling end-to-end interoperability in the procurement process;
- The availability of standardised IT-based procurement services will reduce the barriers for SMEs to participate in the eProcurement processes;
- Enable the fulfilment of public policy objectives, such as sustainable public procurement, by allowing for tracking of information related to labels and certificates along with the item information as well as information on sustainable services such as CO2 compensation;
- Ensure open and free cross-border markets.

2.2 Scoping of new, digital technologies

CEN/TC 440 deliverables will facilitate the use or adoption of digital technologies in the pre- and post-award procurement processes. CEN/TC 440 will provide guidance on how the CEN/TC 440 deliverables can be used to facilitate the use of the various new digital technologies:

- **Micro-mobility delivery processes:** CEN/TC 440 deliverables will enable and facilitate new types of delivery processes based on micro-mobility vehicles, such as drones and delivery robots, by providing the required information about the physical objects, their dimensions, functions, and their states, measured by sensors, and its interfaces to eProcurement and logistic processes. For micro-mobility this includes geo-location information and information about the physical characteristics of offered and delivered goods (measurements, transport requirements, etc.).
- **Distributed ledger technologies:** CEN/TC 440 deliverables will support adoption of distributed ledger technologies in procurement by ensuring a common understanding of steps in the procurement process. This includes creating a common understanding of information regarding on- and off-chain assets (physical and digital) within the procurement process, such as item-related provenance and audit information like certificates and testation.
- **3D printing/additive manufacturing:** CEN/TC 440 deliverables will help facilitate the development of a new kind of procurement process where goods are produced directly by the customers themselves.
- **Automatic procurement processes:** CEN/TC 440 deliverables will support the move towards an automatized procurement process, by enabling faster processing and delivering of orders, allow for more frequent transactions, enable automated matching between order and delivery as well as invoice and allow for faster payment of invoice.
- **Smart manufacturing:** CEN/TC 440 deliverables will help facilitate integration of the eProcurement processes with new innovative manufacturing processes also known as Industry 4.0, which are based on the Internet of Things technologies.
- **Innovative data sharing and management:** CEN/TC 440 deliverables will facilitate the implementation of new ways of sharing information, in particular sharing data via APIs in accordance with the European strategy for data¹⁵.

2.3 Scoping of process innovations

CEN/TC 440 deliverables will facilitate the use and the adoption of new process innovations in the pre- and post-award procurement process. CEN/TC 440 deliverables aims to facilitate sharing the required information between the actors involve in the eProcurement processes, as well as to provide guidance on how the CEN/TC 440 deliverables can be used to facilitate innovations:

- Sustainable procurement: CEN/TC 440 deliverables will facilitate the fulfilment of sustainability objectives in line with the Green Public Procurement policy by the EC as outlined in COM(2008) 400¹⁶.
- Supply chain due diligence: CEN/TC 440 deliverable will facilitate due diligence in supply-chains supporting the management of human and environmental risks in the supply-chain in line with the proposed European directive on corporate sustainability due diligence¹⁷.
- Supply chain resilience: CEN/TC 440 deliverables will facilitate the information sharing in supply-chains to improve the risks and to make supply-chains more resilient.
- Innovative procurement programs: CEN/TC 440 deliverables will facilitate innovation in the eProcurement processes and the use of modern technology. To this end, CEN/TC 440 will provide guidance on how the CEN/TC 440 deliverables can be used to support introduction of new technologies and innovative business processes.

¹⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593073685620&uri=CELEX%3A52020DC0066>

¹⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008DC0400>

¹⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0071>

3 PARTICIPATION IN THE CEN/TC

All CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organisations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organisation in your country.

Experts from 21 countries as well as experts from the European Commission are currently participating in the work of CEN/TC 440.

4 OBJECTIVES OF CEN/TC 440 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of CEN/TC 440

The scope of CEN/TC 440 is to facilitate end-to-end electronic public procurement, including both pre- and post-award processes. Thus, the objective of CEN/TC 440 is to:

- *Develop a set of European standardisation deliverables to ensure interoperability in the sharing and exchange of information between actors involved in supply chain activities of the processes of public procurement aligned as much as possible with processes of private eProcurement.*

However, since the establishment of CEN/TC 440, several initiatives have emerged within the European Commission, such as the eForms and the ESPD, which effectively standardise parts of the pre-award processes. CEN/TC 440 aims to align its standardisation deliverables with them.

On the short term, CEN/TC 440 will focus on the standardisation deliverables most required by the European market, but on the long term the European standardisation deliverables for electronic information sharing and exchange of business transactions provided by CEN/TC 440 will also address several key topics, including:

- The potential use of **new technologies**, such as distributed ledger technology, to support better procurement processes;
- The potential of reorganized relationships between the seller and its customer, to support **innovative procurement** processes;
- **Risk assessment** by highlighting the responsibilities of the actors in different business scenarios as well as enabling the provision of required product-related information;
- **Sustainable procurement** by providing information related to labels and certificates along with the item information as well as information on sustainable services, such as services for CO2 compensation, in order to enable buyers to assess and manage the environmental, social, and economic impacts of their buying decisions.
- **Supply chain due diligence** by providing information on sellers and involved third parties in the supply-chain.

4.1.1 Business processes in scope

The business processes included in pre- and post-award procurement for both public and private eProcurement as seen from the CEN/TC 440 perspective are illustrated in table 1.

The business processes in scope for CEN/TC 440 include:

- **eAccess**, Electronic access to tender documents and specifications, including electronic access to supporting documents for sellers in the preparation of a Tender response, e.g. clarifications, questions and answers. This includes expressing interest in a business opportunity to be listed in the procurement procedure.
- **eSubmission**, the business process and activities related to submitting tendering documents as part of tendering processes.
- **eEvaluation**, the business processes of providing clarification on the content of tendering documents.
- **eContract**, the business process and activities related to signing and enactment between contracts authorities and winning tenderers, as well as signing of contract amendments.
- **eQuoting**, Activities preparatory to issuing an order. including the exchange of electronic messages with winning tenderers who have signed a framework agreement with the buyer (contracting body), a request for quotation and the response to the quotation (e.g. framework agreements with reopening competition), etc..
- **eCatalogue**, the business processes and activities related to establishing and maintaining a product/price catalogue, possibly as part of a specific contract.
- **eOrdering**, the business processes and activities related to issuing of an electronic order by the buyer (contracting body) and its acceptance by the seller or conversely issuing of an electronic order agreement by the seller.
- **eFulfilment**, the business processes and activities related to electronic exchange of documents that enable monitoring the execution of the order or the contract.

Additional collaborations and processes may be added induced by legal means and/or upcoming technical innovation and challenges. See also Table 1 – CEN/TC 440 Business Areas.

Table 1 - CEN/TC 440 Business Areas

Business Areas		Example information exchange
Planning	Planning of procurement sources and supply chain structures associated collaborations as well as milestones in the procurement process, electronic tracking of the achievements and demand management. Planning is an internal business process and is for now not covered by the CEN/TC 440 work programme.	
Sourcing / Pre-Award	eNotifying	Information exchange, publication and dissemination of notices related to procurement opportunities such as Prior Information Notices, Contract Notices and Contract Award Notices. Aspects of eNotifying are already specified by the Publication Office of the European Union. <ul style="list-style-type: none"> • Prior Information Notice • Contract Notice • Contract Award Notice
	eDiscovery	Search for interesting business opportunities on a publication portal. Aspects of eDiscovery are already specified as a service of the Publication Office of the European Union. <ul style="list-style-type: none"> • Search notice query transaction • Notice metadata transaction
	eAccess	Electronic access to tender documents and specifications, including electronic access to supporting documents for sellers in the preparation of a Tender response. This includes expressing interest in a business opportunity to be listed in the procurement procedure. <ul style="list-style-type: none"> • Express Interest in Call for Tenders • Call for tenders • Questions and answers to call for tenders • Qualification • Invitation to tender • European Single Procurement Document (ESPD); out of scope for CEN/TC 440 • Pre-award Catalogue Request
	eSubmission	Secure submission of tenders and/or catalogues in electronic format to the contracting body (contracting authority/contracting entity), which can receive and process it in compliance with applicable legal requirements. <ul style="list-style-type: none"> • Tender • Tender Withdrawal • Qualification/ Virtual Company Dossier • European Single Procurement Document (ESPD); out of scope for CEN/TC 440 • Pre-award Catalogue Response
	eEvaluation	Evaluation of the electronic tenders and/or catalogues received by the contracting body following the closing deadline of a tender competition, including electronic exchange to enable the clarification of tender content by evaluations. <ul style="list-style-type: none"> • Clarification questions and answers
	eAwarding	Information exchange regarding award of the contract, including electronic exchange to support tenderers requesting additional information about the result of the procedure. eAwarding is an internal business process and therefore out of scope for CEN/TC 440. <ul style="list-style-type: none"> • Additional information • Notify Awarding
Contract	eContract	Signing, enactment, of a contract/agreement between the contracting authority/entity and the winning tenderer(s), as well as the signing of contract amendments. <ul style="list-style-type: none"> • Draft Contract • Signed Contract • Pre-Award Catalogue Request • Pre-Award Catalogue
	eQuoting	Activities preparatory to issuing an order. including the exchange of electronic messages with winning tenderers who have signed a framework agreement with the buyer (contracting body), a request for quotation and the response to the quotation (e.g. framework agreements with reopening competition), etc.. For B2B eQuoting may also be part of Pre-Award. <ul style="list-style-type: none"> • Request for Quotation • Quotation • Punch-out
Post-Award	eCatalogue	Establishing and maintaining a product/price catalogue, possibly as part of a specific contract. <ul style="list-style-type: none"> • Catalogue Request • Catalogue
	eOrdering	Issuing of an electronic order by the buyer and its acceptance by the seller or conversely issuing of an electronic order agreement by the seller. <ul style="list-style-type: none"> • Order • Order Confirmation • Order Response • Order Change
	eFulfilment	Electronic exchange of information that enable monitoring the execution of the order or the contract. <ul style="list-style-type: none"> • Despatch Advice • Receiving Advice
	eInvoicing	Issuing, sending, receiving and processing invoices and billing data. eInvoicing is covered by CEN/TC 434 and therefore out of scope for CEN/TC 440. <ul style="list-style-type: none"> • Invoice • Credit Note
	ePayment	Financial payment involving currency transfer between a buyer and a seller. ePayment is covered by ISO/TC 68 and therefore out of scope for CEN/TC 440.
Seller- and contract-management	Management of seller relationships and contracts, including archiving. Seller- and contract management is an internal business process and therefore out of scope for CEN/TC 440.	

4.1.2 Business processes out of scope

Business processes and information exchange related to eNotification is currently addressed by eForms. Likewise, business processes and information exchange regarding self-declaration is currently not addressed, as it is addressed by the European Single Procurement Document (ESPD).

Business processes and information exchange related to eInvoicing is currently addressed by CEN/TC 434 and will thus not be addressed by CEN/TC 440. Likewise, the business processes and information exchange related to ePayment is currently addressed within ISO/TC 68 Financial Services and will not be addressed by CEN/TC 440.

The objective of CEN/TC 440 is to support interoperable¹⁸ exchange of information across, as well as within, different business sectors. Back-office information processing, e.g. the internal processing and business evaluation of the actual information content, is out of scope.

4.2 Identified strategies to achieve CEN/TC 440 defined objectives.

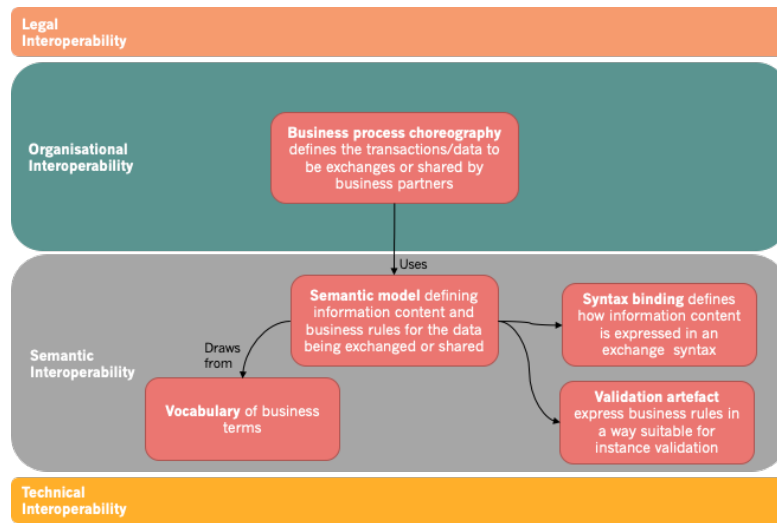
To achieve its objective, the TC will pursue the strategies outlined below.

4.2.1 Focusing on business process choreography and the representation of semantics

CEN/TC 440 will provide European standardisation deliverables covering:

- **Business process choreography**, defining the business transactions or data sets to be exchanged or shared in order to achieve a given business outcome in order to support interoperability at the organisational level.
- **Semantic information models**, defining the information content and business rules for the data being exchanged or shared in order to support semantic interoperability. The content of the semantic information models will be based on a common **vocabulary** of business terms aligned with similar activities within CEN/TC 434 and the European Commission project to establish a common eProcurement Ontology.
- **Syntax binding**, defining how the information content of its semantic models may be expressed in different exchange syntaxes available in the market, such as the OASIS UBL format.

¹⁸ In the European Interoperability Framework (IEF) the term “Interoperability” is defined as the ability of organisations to interact towards mutually beneficial goals, involving the sharing of information and knowledge between these organisations, through the business processes they support, by means of the exchange of data between their ICT systems. (<https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/1-introduction#1.1>)



Furthermore, CEN/TC 440 may provide European standardisation deliverables for:

- **Validation artefacts**, defining business and technical rules in a way suitable for instance validation ready for implementation and use in software.

The TC will work to ensure constancy in its terminology/business term vocabulary with corresponding work done in CEN/TC 434 and the eProcurement Ontology currently being developed within the Publications Office of the European Union.

4.2.2 Leveraging the expertise available through working groups

To secure timely production and availability of the deliverables, CEN/TC 440 will make use of the following organisational structure:

- **WG1 Architecture:** Responsible for providing deliverables in the 17011-series to ensure a consistent eProcurement architecture that allow for an incremental implementation based on actual user needs. WG1 will provide the needed information for framing the deliverables of the other working groups. WG1 deliverable will describe the relevant architectural patterns used by CEN/TC 440. WG1 will also provide coordinated guidance on requirements imposed by emerging technologies and process innovations as well as the role that standards may play in the adoption of such technologies and process innovations.

WG1 prioritized deliverables	
Ref	Title
CEN/TS 17011-1	eProcurement Architecture
CEN/TR 17011-2	eProcurement Innovation Guideline
CEN/TS 17011-3	eProcurement Extension and customisation guideline

- **WG2 Terminology:** WG2 is dormant. CEN/TC 440 will reuse and coordinate its requirements with the [eProcurement-Ontology](#).
- **WG3 eNotification:** WG3 is dormant. eNotifying and eDiscovery are currently specified by the Publication Office of the European Union and therefore out of scope for CEN/TC 440.

- WG4 Pre-Award:** Responsible for providing deliverables in the 17014-series to support business processes related to eAccess, eSubmission, eEvaluation, eAwarding, eContract and eQuoting. WG4 focuses on facilitating the execution of open and restricted procedures of public procurement. This includes expressing interest for a procurement procedure; access to procurement documents, qualification, invitation to tenders, submission of tenders including supporting processes and transactions like tender withdrawals, call for tender questions and answers, tender clarifications and Pre-Award eCatalogues.

WG4 prioritized deliverables	
Ref	Title
EN 17014-1	Electronic Public Procurement – Pre-Award – Part 1: Choreographies
EN 17014-2	Electronic Public Procurement - Pre-Award – Part 2: Transactions
CEN/TS 17014-3-1	Electronic Public Procurement - Pre-Award – Part 3-1: Syntax Binding, UBL

- WG5 eCatalogue:** Responsible for providing deliverables in the 17015-series to support business processes related to the maintenance and availability of product and price related information. WG5 focuses on facilitating the electronic end-to-end procurement by standardisation of data and processes related to the exchange of product information within the physical and the financial supply chain, with respect to product information that is exchanged by the means of electronic product catalogues.

WG5 prioritized deliverables	
Ref	Title
EN 17015-1	Electronic Public Procurement – Catalogue – Part 1: Choreographies
EN 17015-2	Electronic Public Procurement – Catalogue – Part 2: Transactions
CEN/TS 17015-3-1	Electronic Public Procurement – Catalogue – Part 3-1: Syntax binding, UBL

- WG6 eOrdering:** Responsible for providing deliverables in the 17016-series to support ordering of goods and services. eOrdering is the way in which the buyer communicates their needs to the seller in a structured way. Usually, this is based on a contract already finalized, however, sometimes order itself constitutes the contract. An order often refers to a catalogue.

WG6 prioritized deliverables	
Ref	Title
EN 17016-1	Electronic Public Procurement – Ordering – Part 1: Choreographies
EN 17016-2	Electronic Public Procurement - Ordering – Part 2: Transactions
CEN/TS 17016-3-1	Electronic Public Procurement – Ordering – Part 3-1: Syntax binding, UBL

- WG7 eFulfilment:** Responsible for providing deliverables in the 17017-series to support delivery and receipt of goods and services. Fulfilment is the task of providing the customer with the goods, services or utility supplies purchased from the seller. Fulfilment involves

communication from the seller to the customer about the initiation as well as communication from the customer to the seller in order to acknowledge the delivery or to complain about discrepancies.

WG7 prioritized deliverables	
Ref	Title
EN 17017-1	Electronic Public Procurement - Fulfilment - Part 1: Choreographies
EN 17017-2	Electronic Public Procurement - Fulfilment - Part 2: Transactions
CEN/TS 17017-3-1	Electronic Public Procurement – Fulfilment – Part 3-1: Syntax binding, UBL

4.2.3 Build upon and complement other initiatives and standardisation activities

CEN/TC 440 will aim to leverage and build upon work already available or under development by other initiatives and standards organisations. This may be achieved through the establishment of liaison or partner arrangements with organisations listed in section 1.3.

The following liaison agreements have already been established:

- From CEN/TC 440 to CEN/TC 434 and ISO/IEC/JTC 1/SC 3
- From CEN/TC 434 and CEN/TC 442 to CEN/TC 440

The following liaison agreement is intended:

- From CEN/TC 440 to CEN/TC 461

Participation agreements with the following partner organisations have been established:

- From CEN/TC 440 to OpenPeppol, EXEP and CEF/DSI
- From EDIFICE, FIEC and GS1 to CEN/TC 440.

4.2.4 Derivative use pilot

CEN/TC 440 is part of CEN pilot regarding derivative use and licensing of TC deliverables. See further details in Annex A.

4.3 Environmental aspects

The deliverables from CEN/TC 440 will in themselves contribute to the digitalisation of procurement and SCM processes as well as facilitate requirements driven by sustainable procurement requirements. Thus CEN/TC 440 will contribute to the “green shift” in society, Furthermore, the deliverables of CEN/TC 440 will be developed with a view to accommodate the expression of sustainability and environmental requirements, criteria and characteristics of products and services.

Annex A

Implementation of the 'derivative use' concept – CCMC document for use and distribution within CEN/TC 440 'Electronic Public Procurement'

1. CEN copyright framework

CEN Publications are voluntary documents containing intellectual property of demonstrable economic value, which are protected by national laws and international agreements, including when they are supporting public policies or referenced in technical regulations.

CEN has the copyright in all their Publications. Publications, including their entire content and their associated metadata, as compiled and structured in the databases of CCMC and the [CEN Members](#), together with their national implementations, are works constituting individuality and originality and are therefore [copyright-protected](#). CEN assigns the right to exploit the Publications to each individual CEN member. CEN members are primarily responsible for distributing Publications in their own territories.

The CEN-CENELEC copyright framework is described in the [CEN-CENELEC Guide 10](#) "Policy on dissemination, sales and copyright of CEN-CENELEC Publications".

2. CEN/TC 440 deliverables

The objective of the deliverables to be developed by CEN/TC 440 'Electronic Public Procurement' is to provide standardisation deliverables as a tool to ensure interoperability between independent software solution supporting electronic procurement processes. The intended users of these deliverables are (notably) software developers who are expected to incorporate/reproduce the content into derivative applications e.g. software. Another user group are policy makers, typically at national level and/or within a business sector, responsible for developing derivative guiding material on the implementation of the content to support (national) policy objectives.

This includes the reproduction of text from the standard, e.g. warning messages, definition and representation of business terms to be displayed to end-users in software implementations, and the reproduction of source code which may be included in the CEN deliverables.

CEN and its members have been invited to address this aspect of derivative use, in order to provide clarity to end-users on the implementation of the future CEN/TC 440 deliverables.

3. CEN/TC 440 pilot on derivative use

Some CEN standards contain images, information texts or software components that must be used by licensees to be able to use or apply the standard in a meaningful way. CEN and its members are inclined to recognize the copyright on such designs, information texts and software components.

The CEN/CA (Administrative Board), through decision 38/2019, approved the launch of a pilot within CEN/TC 440 to address the specificities of derivative use.

It is proposed that whenever there is an expectation that images, text or source code need to be reproduced in order to implement the CEN deliverables, **no additional licence or additional fee** should be requested to the implementers other than the usual fee to get access to the

deliverables. This approach assumes that the reproduction is **within the intended scope of implementation** of the deliverables.

The CEN/CA and the CENELEC/CA with decisions 115/2019 and 154/35 respectively confirmed that the reproduction of standard content by user's, in order to fulfil the standard requirements, i.e., intended implementation, shall not require an additional licence or fee unless the reproduction is for commercial purposes. And further invited CEN and CENELEC members to inform the Joint Commercial Advisory Group (JCAG) of any future requests for standard content reproduction, so that JCAG can assess the potential impact to the members sales of standards, including the need to revise CEN-CENELEC Guide 10.

4. Intended use of implementation of the deliverable

Only within this scope of intended implementation as described above, the CEN members allow the users, when purchasing a Publication, a non-exclusive, nontransferable right of use of images, texts and software components contained in a Publication, provided always that this is necessary for correct use of the standard by the intended user - licensee. The granting of the license would concern exclusively the unchanged use of the images, texts or software components.

The functional scope of the right of use shall be limited to the correct use of the Publication. Hence, as every Publication needs to give instructions for its field of application, it is proposed to include a description of the scope of the intended use within the Publications, and of the intended users in order to avoid conflict and confusion.

'Intended use' can be defined as the intended purpose of the Publication as defined by the relevant technical committee under conditions which can be reasonably foreseen. Usually, this is the intended use of the Publication.

Considering the scope of CEN/TC 440, which is about the development of Publication "to support the electronic public procurement processes and their accompanying information flows", the intended use of the Publication can be drafted along those lines:

"The Publication has been developed for use by XXXXX (e.g. software development companies), for the purpose of developing XXXXX (e.g. software applications –), which will be used by XXXXX (e.g. local governments). The product needs to be developed by XXXXX (e.g. software development companies) as a tool that complies with the requirements of this Publication".

This approach assumes that images, text or source code need to be reproduced unchanged in order to implement meaningfully the CEN deliverables.

This approach will be applicable for all CEN/TC 440 publications, current and future (including any update, revision). If successful, the intention is to transform the pilot into a policy applicable to all CEN and CENELEC TCs.

5. Identification of the clauses/figures intended for derivative use

As mentioned above, the intentions in terms of derivative use must be addressed in the scope of the deliverables. There is no specific requirement for the amount of clauses/figures that can be subject to derivative use. The key principle is the compliance with the deliverable. It must be evident from the standard content which clause are intended to be reproduced. Hence, efforts must be put on precisely defining the intended use, which has to be as clear as possible.

However, it is understood that the identification of specific clauses/figure can be part of the guidelines that one deliverable can provide, either as a requirement or as a recommendation. If CEN/TC 440 believes that the reproduction of a specific clause/figure into a software application is necessary to comply with the deliverable, the following example would be acceptable: *“Figure X.XX shall/should/could be reproduced in XXXX in order to demonstrate...”*

Further, the question of the modified reproduction of clauses/figures. If the content to be reproduced would be modified, then this would likely be a derivative use outside the scope of the intended implementation. However, this would need to be evaluated on each case, depending on the specific context. It is proposed that CEN/TC 440 provides guidance directly in the specific clause of the deliverable on what can be acceptable in terms of modification of a specific clause/figure – always keeping in mind that the reproduction is permitted within the scope of compliance with the deliverable.

If there is a need for policy makers, responsible for developing derivative guiding material on the implementation of the content to support (national) policy objectives, to reproduce contents of the deliverables into their own specifications, it will have to be addressed to CEN/TC 440 so that CEN/TC 440 can integrate this dimension in the scope of the deliverable. It would be part of the intended use of the deliverable, which could also concern the restriction and/or extensions of the specifications.

The TC is invited to collect information which could help clarify when such modification may be needed and in what context.

CCMC will be available to support CEN/TC 440 when drafting the specifications.

6. Experts participating in Technical Committees and copyright

A standard document or other technical deliverable is developed by a team of experts participating in a TC or a WG.

In the framework of the Berne Convention, the CEN/CENELEC national members shall ensure that the exploitation rights in contributions to European Standardisation made by themselves, their delegates in Technical Committees/Subcommittees and their experts in Working Groups are assigned to CEN/CENELEC for the benefit of its members.

However, it is recognized that the original copyright holder is not precluded from continuing to exploit his own contribution for his own purposes provided that such exploitation does not adversely affect the exploitation of the common work.