EFET ELECTRONIC CONFIRMATION MATCHING

VERSION 4 RELEASE 4 (V4.4)

Created by EFET

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1 About this Document

This document describes the EFET Electronic Commodity Matching (eCM) standard.

1.1 Revision History

Version	Date	Changes	Author of changes
2.1	April 04	Gathered Doc. 1-7 of EFET eCM standards and combined into one	
3.0	Sep 04	Issued	EFET eCM Project Work Group
3.1	Jul 05	Issued. Updated to include Broker Confirms	EFET eCM Project Work Group
3.1.1	Jan 06	Corrections to V3.1. This version contains no process enhancements.	EFET eCM Project Work Group
3.2	Feb 06	Updated to include Emissions Confirmation and minimum compliancy requirements to Chapter 7	EFET eCM Project Work Group
3.3	Dec 07	Updated to include financial instruments. Final review by KEMA Consulting.	EFET eCM Project Work Group
3.3.1	Feb 09	Updated follow SAT of v3.3 and development and testing of the KEMA Certification Service	SAT group on behalf of the EFET eCM Project Work Group
4.0	July 2010	Updated to include Physical Coal, amendment of cancellations, amendment of matched documents, tear-up of match documents and service based operation.	EFET eCM PwG Signed off by EFET BPOC 8th Sep 2010
4.0.1	June 2011	Minor corrections and clarifications. Changes to the Physical Coal schema structure.	EFET eCM PwG
4.0.2	September 2012	Introduction of Business Rule TRC021 and BCN018 for clarification of 'Trade Date' in the context of the 'UK Gas Day'.	EFET BPOC
4.2	April 2015	Updated to incorporate the developments introduced in CpML 4.2	EFET BPOC
4.3	March 2021	• Cleanup of document. • Trade Confirmation: o Rounding rules updated o 'PaymentEvent' and 'PaymentEventOffset': business rule adjusted o Ordering of exercise schedule adjusted o Rules for 'FormulaID' and 'CommodityReference' sections updated o Rules for Physical Index Pricing Dates updated o Rules for Calculation Periods updated. o Additional business rules updated: TRC020 o New business rules: TRC022, TRC023, TRC024 • Broker Confirmation: o Rounding rules updated	EFET BPOC

		○ Ordering of exercise schedule adjusted ○ Rules for Calculation Periods updated. ○ Additional business rules added: BCN019 • New value for 'EnergyProductType': EUAPhase_4 • New values for 'UnitOfMeasureType': MWhPerDay, MWZero, MWZeroh, SM3	
4.4	May 2021	• New values for 'UnitOfMeasureType': Fee, UKA (UK Allowance) • Emissions Commodity expanded to include UK Allowance (new value for 'EnergyProductType').	

1.2 Additional Information

This section lists web sites or documents with additional information related to the eCM standard.

Ref ID	Description	Source
[1]	EFET electronic Communmications Standard, V1.0, June 2010	
[2]	EFET Communication eCM Profile, V4.0, June 2010	
[3]	CpML, V.5.2, 02 Feb 2014	http://cpml.org
[4]	List of codes specific to EFET and CPML, for example, broker codes	http://www.efet.org/Standardisation/Static-data
[5]	Incoterm rules, published by the Internation Chamber of Commerce	http://www.iccwbo.org/incoterms/id3042/index.html
[6]	Full list of BSC (Balancing and Settlement Code) signatories	https://www.elexon.co.uk/bsc-related-documents/bsc-signatories-qualified-persons
[7]	Coal quality specifications as listed in SCoTA	http://www.globalcoal.com/scota/scotaSpecs.cfm
[8]	EIC codes published by ENTSO-E	https://www.entsoe.eu/data/energy-identification-codes-eic/eic-documentation/Pages/default.aspx
[9]		

1.3 Conventions

1.3.1 Use of Modal Verbs

For compliance with the eCM standard, implementers need to be able to distinguish between mandatory requirements, recommendations and permissions, as well as possibilities and capabilities. This is supported by the following rules for using modal verbs.

The key words "must", "must not", "required", "should", "should not", "recommended", "may" and "optional" in this document are to be interpreted as follows:

Key word	Description
Must	Indicates an absolute requirement. Requirements must be followed strictly in order to conform to the standard. Deviations are not allowed. Alternative expression: required, is mandatory
Must not	Indicates an absolute prohibition. This phrase means that the provision must not be used in any implementation of the eCM standard. Alternative expression: must be omitted
Should	Indicates a recommendation. Among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others. There may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course. Alternative expression: recommended
May	Indicates a permission. This word means that an item is truly optional within the limits of eCM. One data supplier may choose to include the item because a particular transaction requires it or because the data supplier feels that it enhances the document while another data supplier may omit the same item. Alternative expression: optional
Should not	This phrase means that there may exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label. Alternative expression: "not recommended"

1.3.2 Typographical Conventions

This documentation uses the following typographical conventions:

- 'AgentID': single quotation marks are used to indicate field names.
- "trader": double quotation marks are used to indicate field values.
- Reporting/Europe: Slashes are used to indicate paths or nested nodes within the schema, for example, ….
- TotalVolumeUnit: Field names and values as well as attributes are consistently written with camel case spelling, as in the schema. There are no spaces between words and each new word starts with an uppercase letter.

1.3.3 Notation of Schema

The CpMLDocument schema reference in chapter 6**, "**Electronic Business Processes – by Document Types**"** is a flat representation of the tree structure in the corresponding XSD schema.

For each main node in the schema, there is a separate section with a table that contains the sections and fields in that node. The fields are listed in the same order as in the schema.

Subsections are indicated with a gray background. The start and end of each section is clearly indicated. Subsections are nested within each other.

For each field, you find information about the usage type, see section 1.3.4, "Information on Field Usage", and the business rules. These rules determine the dependencies on other fields or values, where applicable.

Fields and value types are reused in different locations of the schema. Therefore, the general field descriptions and value type descriptions are described in separate sections in alphabetical, see Appendix A.

1.3.4 Information on Field Usage

Information on mandatory or optional use of a field is specified in column "Usage":

- **O = Optional**. These fields are logically optional and not required by business rules. The information may be present in the CpMLDocument.
- **C = Conditional**. These fields are logically conditional, meaning the field must be provided if and only if the specified conditions are met.
- **M = Mandatory**. Mandatory fields are logically required and must always be present, unless the parent field may be omitted.
- **M+C = Mandatory with condition**. Fields with this condition are logically required. According to the business rules, specific values must be set if the specified conditions are met.
- **M+CH = Mandatory, but part of a choice**. One of the fields in an XSD choice section must be provided. Thus, all fields within the choice are marked as mandatory in the schema.

1.3.5 Information on Field Occurrence

If nothing else is stated for a field, the following rules apply with regard to the minimum or maximum occurrence of the field:

- Conditional or optional fields: (0-1)
  These fields can be absent or occur exactly once within the given context.
- Mandatory fields: (1-1)
  These fields must occur exactly once within the given context.

In all other cases, the allowed number of repetitions is clearly indicated. Examples: (0-n) or (1-4).

2 Executive Summary

2.1 The Need for EFET Standards

2.1.1 Problem Definition

Communication is an essential key to the successful integration of business processes. Successful communication requires that the communicating parties speak the same language. This fact is as important in electronic communication as it is in face to face communication.

As volumes increase in energy trading, business transactions are occurring more rapidly, and trading volumes are growing, traditional means of communication like phone and fax are necessarily being replaced as a core communication medium, by automated electronic communication.

Increasingly energy trading companies are looking towards the integration of internal and external business processes, with the eventual aim of straight-through processing. This is to enhance process efficiency, as well as to reduce operational risk, both of which reduce overall transaction costs.

The energy trading industry does not have in use widely accepted electronic communication standards. Like the financial industry there are some standards for specific parts of the industry, but the fragmentation is arguably even higher in the energy trading industry. Currently each service provider (exchanges, broker platforms, clearing houses, matching services, etc.) and each software vendor use their own proprietary "standard", requiring implementation of a different interface and cumbersome translation for each of these "standards". This results in a costly and risky "spaghetti" network of interfaces.

To solve the business process integration problem, common electronic communication standards (a common language) must be established within the energy industry and adopted within individual organisations. The messages and processes that need standardisation in the Energy Trading industry include Trade Confirmations, Scheduling and Logistics, Clearing and Settlement, and Quotes.

By standardising the exchange of this information and the corresponding processes both internally and externally, companies could reduce costs and streamline business processes. Standardisation has to be driven by the industry itself, and coordinated by an accepted industry wide neutral body.

2.1.2 The Solution: EFET Standards

EFET is an industry wide neutral body that can coordinate the creation and maintenance of industry standards. EFET project workgroups comprising members from the Back Office Group and IT Taskforce are specifically responsible for defining the EFET Standards for electronic exchange of information.

The EFET standards will define the structure of the electronic messages, as well as how these electronic messages are exchanged. The EFET standards apply to all electronic messages exchanged in the energy trading environment, and therefore can be considered a general standard.

These standards will also define the reference codes (vocabulary of the language) to be used for commonly used data within these electronic messages. This includes the unique codes identifying the different trading parties, and the reference codes for energy specific characteristics such as market, commodity, etc. These reference codes could also be used in paper and fax communications.

2.2 The eCM Initiative

2.2.1 eCM as a Pilot

EFET has decided on a prioritised approach to the development of standards covering the various business processes to facilitate rapid deployment of the systems and infrastructure required to implement working services. The eCM Project Workgroup has been tasked with focusing on one part of the overall information exchange, but with consideration to broader integration of processes in the future. Developing standards for a specific business process rather than attempting to cover all process simultaneously, will enable the production of measurable benefits throughout the overall standardisation process.

The business process concerning the exchange and validation of electronic trade confirmations has been prioritised for the first phase of standardisation. This will be referred to as eCM, which stands for "Electronic Confirmation and/or Matching".

As a first step, the eCM process itself has been clearly defined and agreed. The workflow has been established defining how two trading parties will interact to confirm a deal and the message flows and message structure definitions needed to support this process have been defined.

These EFET eCM standards consist of the definition of the exact message flow, message content and message structure for the information exchanged during an eCM process.

2.2.2 EFET Compliant eCM Processes

The eCM Project Workgroup has structured the eCM process on a bilateral or peer-to-peer style of interaction where responsibility for accurate matching resides with each party. An alternative style of interaction using 3rd party agencies to implement matching on behalf of each party has been considered but rejected in favour of the peer-to-peer approach.

Note: The EFET compliant eCM processes describe how trade confirmations can be matched electronically. This does not mean that confirming a deal via fax is no longer possible. In fact, trade confirmations via fax will always exist as a fall back solution in case of technical problems with the electronic confirmation system, and for non-standardised, complex or structured products.

2.2.3 The EFET eCM Standards

The EFET eCM standards consist of the definition of the message flow, message content and message structure for the information exchanged during an eCM process.

The structure of the eCM messages, and to some extent the content of the messages, will form the basis for the development of other EFET messages that will be defined in the future. These EFET eCM standards will therefore act as an important initial step towards the definition of global EFET standards covering the complete business requirements of traders.

Disclaimer: This standard will not overrule other documents (e.g. EFET Master Agreement). Results of this standards may have influence on the next version on these documents.

2.2.4 Next Steps

In each subsequent phase, the general EFET Standards will be extended to support further business processes, including describing the standard interface between processes (see the EFET eCM Standards).

The general EFET Standards will be extended to support each specific process and to describe it in greater detail (see the EFET eCM Standards) once agreement has been reached upon the standardization of the process itself.

Service and/or system providers will be encouraged to comply with these standards. Companies will thus be able to achieve integration with these different service providers and/or systems without having to develop and maintain a different interface for each.

When the eCM project has been implemented, it is the intention to focus on other projects to stimulate electronic exchange of data, e.g. for nomination, scheduling, clearing, settlement and other processes to make energy trading more efficient.

EFET will cooperate with other organisations and stimulate harmonisation and standardisation to increase electronic exchange of data in the European Energy industry.

2.3 Conclusions

Communication is an essential key to the successful integration of business processes. To solve the business process integration problem, common electronic communication standards (a common language) must be established within the energy industry and adopted within individual organisations.

EFET has selected the trade confirmations process as the first project for standardisation. This project is called the eCM ("Electronic Confirmation and Matching") project and is driven by the urgent need for the back office to automate manual confirmation processes.

After consideration the peer-to-peer model of interaction has been preferred over the alternative agency based model as a progressive enhancement to the current faxed based process in which responsibility for accuracy of matching resides with each party.

It is expected that further standardisation work will be done to facilitate the electronic exchange of data to further increase efficiency in the European Energy Industry.

3 Overview

3.1 Roles and Responsibilities in Standardisation

The EFET Board oversee all the activities undertaken or sponsored by EFET. Responsibility for coordination of Back Office activities has been delegated to the Back Office Group. Responsibility for coordination of IT activities has been delegated to the IT Task Force. Project Workgroups, such as the eCM Project Workgroup, which carry out specific activities on behalf of EFET. The eCM Project Workgroup is sponsored by the EFET Board, controlled by the BO Group and comprises specialist personnel from both the Back Office and IT business areas.

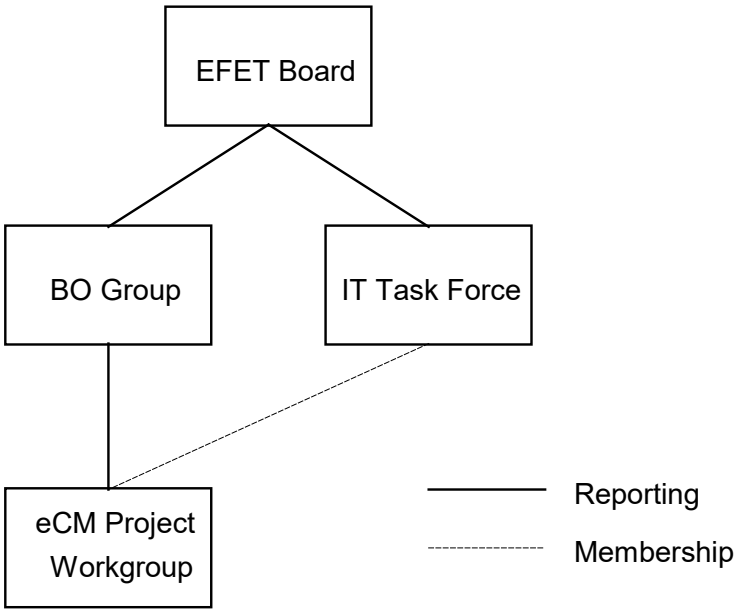


Figure 1 Organisation of the EFET working groups

3.2 Version Control

The EFET standards documentation for electronic confirmation matching comprises a single document with chapters and sections.

- The single document shall be a release item under control of the joint EFET back Office Group on behalf of the EFET Board with major versioning i.e. 1.0, 2.0, 3.0…
- Each chapter shall be a configuration item within the single document controlled by either the eCM Project Workgroup and audited via the Revision History between major releases leading to intermediate versioning i.e. 1.1, 1.2, 1.3…(Also release version with change bars)

Note that draft versions are signified by using a letter: 1.1a

The related XML Schemas are expected to be backward compatible within the same version. I.e., an eCM process implementation that is able to process Trade confirmations in version 3, release 3 is also able to process version 3, release 2 and version 3, release 1 – but not, e.g., version 2, release 3.

I.e., extensions to the EFET XML Schema within the same version, can only add optional elements or attributes or reduce the number of values in enumerations. Each eCM process

implementation should therefore be able to process earlier releases within the same version.

Should different versions be supported (since individual counterparties may update their systems at different times), dedicated eCM process implementation implementations should handle version-specific eCM protocols.

4 Current Processes and Business Requirements

4.1 Current Business Processes

4.1.1 Description of Current Trade Confirmation Process

The current trade matching processes are generally paper based requiring both parties to produce documents that summarise the transaction. These documents are passed between each party to confirm that the transaction details are accurate and valid.

The main steps in the process are:

1. A transaction is agreed between two parties and details of the transactions are entered into each party's trade management system
2. An internal check (usually manual) is normally undertaken by each party to ensure that the transaction details have been accurately entered into the trade management system
3. A Trade Confirmation document is then generated by the trade management system. The Trade Confirmation document is checked for accuracy. The trade confirmation might also be signed by the originator (normally the Seller) as an accurate summary of the trade details and then faxed or digitally sent to the recipient party (normally the Buyer) for that transaction
4. The recipient party then checks the trade confirmation. (A number of trade management systems will generate a confirmation independently of the fact that the party is the Buyer or the Seller. The Buyer will often use their version of the confirmation to check the details of the Seller's confirmation). If the recipient party agrees with the details of the transaction, they might sign the trade confirmation to confirm that the details are accurate and valid.
5. The recipient party's signed document might then be faxed back to the originator of the confirmation. This is then a paper affirmation or authentication.
6. Each party will enter information into their trade management system to indicate that the transaction has been authenticated.
7. The paper work associated with the trade data capture and trade confirmations will, at an appropriate point in time, be archived and retained for a number of years (depending upon local procedures and laws)
8. In the event that the transaction details are not agreed as accurate (or the Seller has not raised a confirmation):
    1. The party finding the mistake first will contact the other party (normally verbally) to indicate the details that are not agreed (or in the case where the Seller did not send a confirmation the Buyer will contact the Seller to indicate that the confirmation has not been received)
    2. After investigations the transactions details are agreed
    3. Steps 1 to 8 are repeated such that an accurate and confirmed transaction is recorded in each party's trade management system.

Many variations of this process exist. Depending on the agreements (Master Agreements like EFET2.1 or industry accepted terms and conditions like NBP97) that exist between the

two parties, both the Buyer and the Seller will send a confirmation or only Seller will send a confirmation and the Buyer will affirm or authenticate:

1. One of the parties (logically the Seller) has to send the trade confirmation to the other party. The Buyer will then check this confirmation against its own record of the trade. If consistent he will consider the trade confirmed. He might or might not send back by fax an authentication (signed acknowledgement authenticating the confirmation). Certain parties require an authentication of their confirmation to be sent back and will systematically expect one, others will not.
2. Both parties send each other the trade confirmation and each will check for itself the validity of the received party's confirmation against its own trade data. If consistent the trade is then considered "confirmed". Even in this case one of both parties might still send back an authentication of the received confirmation.
3. In the case where a trade is concluded by mediation of an intermediary (either on an e-OTC platform or a voice broker), the intermediary sends a broker "confirmation" of the transaction to both the Buyer and the Seller. It is also customary for a trader to check at the end of the day by phone, the trades concluded via a certain broker. Some e-OTC platforms either list the executed trades or immediately after execution send an email to the trader with the trade details.

Some industry participants refer in the confirmation to an existing Master Agreement in place between both parties. In case no Master is in place, the confirmation might contain certain legal language to ensure legal enforceability of the trade.

The content of the confirmations will also typically vary according to the product (gas, power, oil, …), the transaction type (forward, day ahead, intraday, options, …), the delivery point, Master Agreement and the legal framework.

In case of a dispute, the transaction tapes or the transaction log of an e-OTC platform will always prevail on the written documents (confirmations) irrespective if they are matched or authenticated. Of course, it goes without saying, that if the confirmations match or the confirmation of the Seller is authenticated by the Buyer, it would be highly unlikely for the traders to revert successfully to the transaction tapes and the trade would stand as confirmed.

Important: *Currently, no unique trade reference for a trading transaction exists between the parties (as is customarily the case for example for the purchase of airline tickets). Each party defines its own unique TradeID.*

4.1.2 Issues linked to Current Process

Major issues with the current process are:

- Cost and operational risk linked to manual processing of confirmations
- Archiving cost of paperwork
- Neither the process itself nor the material terms of the trade are standard, introducing complexity in the confirmation matching process and trade follow up
- Risk linked to delay in identifications of trade data capture errors and inconsistencies between parties.

5 Requirements for Electronic Business Processes

The Goal of the current project is to find a common solution for the automation of the transmission, reception, matching and processing of electronic trade confirmations.

The EFET organisation itself will provide a central EFET directory service and will ensure maintenance of the standard with the publication of new codes, etc.

5.1 eCM Business Process Scope

The aim of the EFET eCM Project Workgroup is to define a "standard electronic confirmation process" and thus provide a framework enabling parties to:

- Replace the manual transfer of information with the electronic transmission of standard confirmation data between two parties (on a peer-to-peer basis)
- Facilitate the reporting and capture within their trade management systems of electronic data related to the trade confirmation process
- Legal Requirements are covered by the Master Agreement which is refer to by each trade confirmation document.
- Security Requirements are covered by using ebXML as the basic transport protocol for transfer of eCM documents.

5.2 Electronic Business Processes – Overview

This section describes the workflow defined for the standard EFET compliant eCM process. For this purpose the actors and their systems are considered to be "black boxes". EFET has restricted itself to defining the interface requirements for the incoming and outgoing documents and matching criteria where appropriate.

Note: For the purpose of defining the role of Buyer and Seller for Financial Transactions where there is no exchange of any physical commodity or other indication the following convension is used within the eCM process: the party with the lesser identification code value (using alphabetical sorting) shall be deemed the ''Seller' and the counterparty with the greater identification code value (using alphabetical sorting) shall be deemed the 'Buyer'.

5.3 Actors and Roles

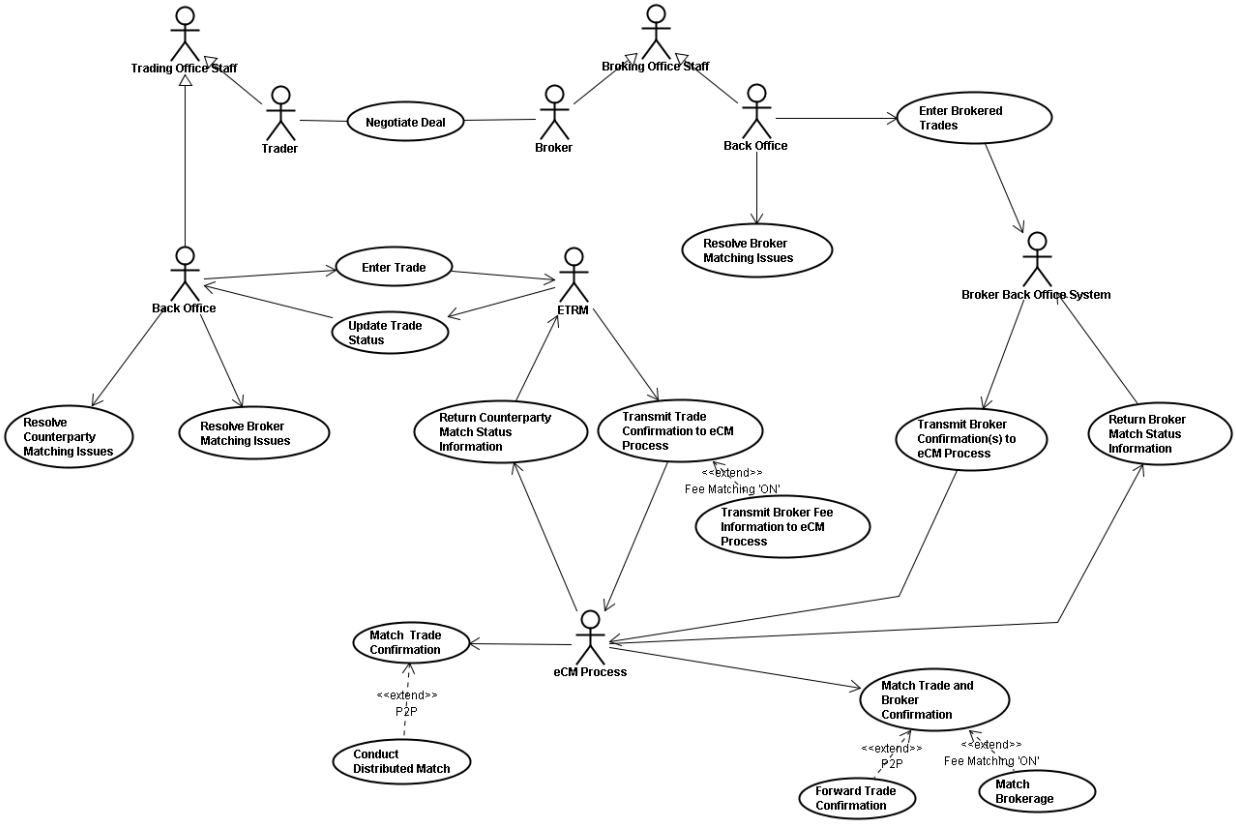


Figure 2 Use Case Diagram for eCM

Figure 2 Use Case Diagram for eCM provides an overview of the scope and context of the eCM process. A trade is carried out between traders or through the help of a broker. Once the transaction has been executed, each respective information system is updated with the trade data. Each information system then transmits a confirmation document to the eCM process which conducts the matching in order to reconcile any differences between the independent records of the trade data, any exceptions resulting from the matching process are manually resolved.

Version 4.0 of the eCM process introduces the concept of 'multi-tenanancy' as an possible deployment option for implementations of the process. The matching dialogue between 'tenants' of the same shared process instance can be optimised to dispense with some steps in the defined matching dialogue since all data required for achieving a match between two 'tenants' sharing the same implementation will be present locally; conversely, matching between counterparties who do not happen to be 'tenants' of the same implementation will require the full peer-to-peer dialogue to be completed. This approach permits some parties the option to reduce the operational overheads of operating their own eCM installation whilst retaining matching continuity with parties that prefer to retain operational control of their own independent implementation of the process.

5.4 High-Level Business Document Flows

5.4.1 High-Level Business Document Match Processing

The eCM process provides Traders and Brokers with the following matching capabilities:

- Counterparty Trade Confirmation Matching: the bilateral matching of Trade Confirmation documents between the two counterparties to a trade
- Broker Confirmation Matching: the independent bilateral matching of Trade and Broker Confirmation and optionally Broker Fee Information documents between the Broker of a trade and both (or either) of the Traders
- Trilateral Confirmation Matching: the cross matching of a Trader's Trade Confirmation and optionally Broker Fee Information document(s) with the Counterparty's Trade Confirmation and the Broker's Broker Confirmation document.

Trilateral matching is in effect the combination of both Counterparty and Broker Matching dialogues into a two 'legged' matching dialogue which matches the counterparty Trade Confirmation document with a Trader's Trade Confirmation document via one 'leg' and the Broker Confirmation with the same Trade Confirmation and optionally Broker Fee Information documents via the other 'leg'. Use of the same Trade Confrimation document ensures the integrity of the trilateral match and avoids the possibility that different versions of the deal are separately matched with the Broker and with the Counterparty over time leading to two independent matches for the same deal on differing commercial terms, should there have been an amendment of the deal between matching with Broker and Counterparty. The Trader is therefore prevented from independently submitting separate Trade Confirmation documents for the same trade to both the Counterparty Trade Matching dialogue and to the Broker Confirmation Matching dialogue.

5.4.1.1 High-Level Counterparty Trade Confirmation Matching Dialogue

Both trading parties submit a Trade Confirmation document to the eCM process. A Trade Confirmation document is considered to have fully entered the eCM process once it has been well processed. Successfully submitted documents are assigned to the 'Pending' state and become subject to matching otherwise they are rejected from the process.

The instance of the process where the buyer is registered takes the lead in initiating the matching dialogue and applies the 'Suggested Match' Processing algorithm specified in 5.6, "Business Document Processing" to establish a 'Suggested Match' which is communicated to the seller's instance and if successfully verified using the the 'Suggested Match Acceptance/Refusal' Processing algorithm specified in 5.6, "Business Document Processing", results in a 'Match Acceptance' to finalise the dialogue and establish the match between the two Trade Confirmation documents.

In the case of a 'multi-tenant' implementation the exchange of Trade Confirmation documents and subsequent issue of the 'Match Suggested' and 'Match Accepted' documents are not required within the matching process since it is no longer distributed and a single agreed result is achieved by virtue of using the 'locally' available Trader Confirmation documents present in the same shared process instance.

A 'Match' result in the form of a 'Box Result' document is returned to each party.

5.4.1.2 High-Level Broker Confirmation Matching Dialogue

The Trader and the Broker each submits a document, either a Trade Confirmation and optionally a Broker Fee Information document in the case of the Trader, or in the case of a Broker, a Broker Confirmation, to the process. The documents are considered to have fully entered the eCM process once they have been well processed and are then set to the 'Pending' status.

As indicated the Trader can optionally elect to match brokerage fees with the Broker through the eCM process. The choice is in effect a parameter to the matching algorithm (i.e. it can be enabled for matching or disabled for matching depending on the Trader's preference) causing the Broker Fee Information document to be included, or not, within the match. If the Trader elects to match brokerage then they must submit an associated Broker Fee Information document with any Trade Confirmation that they submit to the Broker Matching dialogue. If the Trader elects not to match brokerage then they must not submit an associated Broker Fee Information document with any Trade Confirmation that they submit to the Broker Matching dialogue, any Broker Fee Information document submitted in this case will be rejected from the process. The level of control (e.g. per counterparty, per broker, per commodity etc.) at which the matching parameter is controlled is a matter for implementers to decide.

Once the documents have been successfully submitted the Trader instance of the process applies the 'Trade Data' and Broker 'Match' Processing algorithm specified in 5.6.3, "'Trade Data' and Broker 'Match' Processing", to establish a 'Match' between the Broker Confirmation and the Trade Confirmation and optional Broker Fee Information documents which is communicated to the Broker instance through the issue of a 'Broker Match Notifcation'.

In the case of a 'multi-tenant' implementation, with Trader and Broker, the exchange of documents and subsequent issue of the 'Broker Match Notification' are not required within the matching process since it is no longer distributed and a single agreed result is achieved by virtue of using the 'locally' available documents present in the same shared process instance.

A 'Match' result in the form of a 'Box Result' document is returned to each party.

5.4.1.3 High-Level Trilateral Matching Dialogue

The Trader submits a single Trade Confirmation document to both the Counterparty Trade Confirmation Matching and to the Broker Confirmation Matching dialogues supported by the eCM process and in the latter case, optionally, a Broker Fee Information document. The appropriate match processing is invoked for each 'leg' of the match, as described previously for each dialogue.

The dialogue for each leg of the match proceeds independently as soon as the documents required by the dialogue have successfully entered the process. In either case the result of the Counterparty Confirmation Matching dialogue is deemed to take precedence over the Broker Confirmation Matching dialogue since the former relates directly to the confirmation of the underlying trade, whereas the latter is considered to corroborate the counterparty match result. The Broker leg of the trilateral match is therefore not considered fully 'Matched' until a 'Match' has been established in the Counterparty leg. The documents in the Broker leg are set to an interim state of 'Preliminary Matched' until the Counterparty leg is completed and then moved to the final 'Matched' state to complete the Trilateral Matching Dialogue.

Matching results for each leg of the trilateral match are returned for each dialogue in the form of 'Box Result' documents as described above to each relevant party.

5.4.2 High-Level Business Document Amendment Processing

Documents submitted for match processing can be amended by the document 'owner' if the originally submitted document is in an amendable state, otherwise the new document will be rejected by the eCM process.

Documents already in a 'Matched' state can be amended in version 4.0 of the eCM process however the new versions of a currently matching pair of documents can only be matched with one another as stated in 5.6.1, "'Suggested Match' Processing". This constraint enables the 'owners' of the documents in a matching pair to use the existing matching dialogues to mutually amend the content of the matched documents, and thus reconcile changes made to the terms of the underlying deal, after completion of the original match processing which established a link between the separately held trade records. Traders and Brokers may configure this dialogue on or off for 'Matched' documents. If the dialogue if configured 'off' by any party then an amendment submitted by any of the parties will be rejected from the process, otherwise it will be processed.

It is strongly recommended that implementers notify users of amendments to 'Matched' business documents.

A new document must contain the same reference number but a higher version number than the document to be amended. The high-level processing of amendments for each eCM business document in each matching dialogue is described below.

5.4.2.1 High-Level Trade Confirmation Amendment Processing

A Trade Confirmation document may already be 'Matched' as a result of, or be participating in, the Counterparty Trade Confirmation Matching dialogue, the Broker Confirmation Matching dialogue or both these dialogues as part of the Trilateral Matching dialogue. There will be no limit placed on this functionality within the process but business users must consider the relevance of the dialogue for a document that refers to an underlying trade that has passed its maturity date or other major lifecycle event.

It is not possible to cancel a 'leg' of a Trilateral Matching dialogue by amending the Trade Confirmation document to remove the broker or change the recipient, this can only be achieved using processing described in 5.4.3, "High-Level Business Document Cancellation Processing".

A Trade Confimation Document in the Counterparty Trade Confirmation Matching or in the Broker Confirmation Matching dialogue is in an amendable state if it has not yet fully entered the process or if it has fully entered the process and is in the 'Pending' or 'Matched' state.

A Trade Confimation Document in the Trilateral Matching dialogue is in an amendable state if it has not yet fully entered the process or if it has fully entered the process and is in the 'Pending' or 'Matched' state in the Counterparty dialogue and in the 'Pending', 'Matched' or 'Preliminary Matched' state in the Broker dialogue.

The successfully submitted 'new' Trade Confirmation document is assigned to the 'Pending' state. If the 'old' Trade Confirmation is matched then it remains in the 'Matched' state, otherwise the 'new' document replaces the 'old' Trade Confirmation document in each of the dialogues in which the 'old' document was active and the 'old' document is removed from

further processing and set to the 'Amended' state. If the amendment is to a 'Matched' trade Confirmation document then the status for the 'old' Trade Confirmation document is not changed to 'Amended' until after the 're-match' of the new counterparty Trade Confirmation documents.

If the original Trade Confirmation document has established a 'Preliminary Match' with a Broker Confirmation document, optionally including a Broker Fee Information document, in the Broker leg of the Trilateral Matching dialogue then the amendment of the matched Trade Confirmation document will cause the respective Broker Confirmation (and optionally the Broker Fee Information) document(s) to be set to the 'Pending' state along with the new Trade Confirmation document. Any 'Preliminary Match' between the original Trade Confirmation document and the Broker Confirmation is rolled back since the trade details in the Trader's ETRMS for the trade have changed and the matching with Broker must be started again. A Broker Match Notification document is issued to the Broker by the Trader to convey the change of state back to 'Pending', although this is not required for the case where Trader and Broker are tenants of the same shared process instance.

Note that no Broker Match Notification is issued in the case of an amendment to a Trade Confirmation matched with a Broker Confirmation.

A 'Box Result' document is returned from the process to each of the parties providing a status update to the ETRMS and Broker back end system as appropriate.

5.4.2.2 High-Level Broker Confirmation Amendment Processing

A Broker Confirmation document in the Broker Confirmation Matching dialogue is in an amendable state if it has not yet fully entered the process or if it has fully entered the process and is in the 'Pending', 'Matched' or 'Preliminary Match' state. There will be no limit placed on this functionality within the process but business users must consider the relevance of the dialogue for a document that refers to an underlying trade that has passed its maturity date or other major lifecycle event.

The successfully submitted 'new' Broker Confirmation document is assigned to the 'Pending' state. If the 'old' Broker Confirmation is matched then it remains in the 'Matched' state, otherwise the 'new' document replaces the 'old' Broker Confirmation document which is removed from further business processing and set to the 'Amended' state.

If the Broker Confirmation document has established a 'Preliminary Match' with a Trade Confirmation document, optionally including a Broker Fee Information document, in the Broker leg of the Trilateral Matching dialogue then the amendment of the matched Broker Confirmation document will cause the respective Trade Confirmation (and optionally the Broker Fee Information) document(s) to be set to the 'Pending' state along with the new Broker Confirmation document. Any initial match between the original Broker Confirmation document and the Trade Confirmation is rolled back since the trade details in the Broker's back end system have changed and the matching with the Trader must be started again. A Broker Match Notification document is issued to the Broker by the Trader to convey the change of state back to 'Pending', although this is not required for the case where Trader and Broker are tenants of the same shared process instance.

A 'Box Result' document is returned from the instance of the process to each of the parties providing a status update to the ETRMS and Broker back end system as appropriate.

5.4.2.3 High-Level Broker Fee Information Amendment Processing

A Broker Fee Information document in the Broker Confirmation Matching dialogue is in an amendable state if has not yet fully entered the process or if it has fully entered the process and is in the 'Pending' or 'Matched' state. There will be no limit placed on this functionality within the process but business users must consider the relevance of the dialogue for a document that refers to an underlying trade that has passed its maturity date or other major lifecycle event.

The successfully submitted document is assigned to the 'Pending' state. If the 'old' Broker Fee Information document is matched then it remains in the 'Matched' state, otherwise the 'new' document replaces the 'old' Broker Fee Information document is removed from further business processing and set to the 'Amended' state.

If the Broker Fee Information document has, with the associated Trade Confirmaiton, established a 'Preliminary Match' with a Broker Confirmation document in the Broker leg of the Trilateral Matching dialogue then the amendment of the matched Broker Fee Information document will cause the respective Trade Confirmation and Broker Confirmation documents for be set to the 'Pending' state along with the new Broker Fee Information document. Any preliminary match between the original Broker Confirmation document and the Trade Confirmation and Broker Fee Information is rolled back since the trade details in the Trader's ETRMS relating to the brokerage for the trade have changed and the matching with Broker must be started again. A Broker Match Notification document is issued to the Broker by the Trader to convey the change of state back to 'Pending', although this is not required for the case where Trader and Broker are tenants of the same shared process instance.

Note that the Broker Fee Information document can be amended according to this dialogue independently of the state of the Trade Confirmation document in the Counterparty 'leg' of a Trilateral Matching dialogue. If the Counterparty 'leg' is 'Matched' but the Broker 'leg' remains in 'Pending' due to a discrepancy in the brokerage the Counterparty can still amend the Broker Fee Information to achieve a full 'Match' with the Broker.

A 'Box Result' document is returned from the instance of the process to each of the parties providing a status update to the ETRMS and Broker back end system as appropriate.

5.4.3 High-Level Business Document Cancellation Processing

Documents submitted for match processing can be cancelled by the document 'owner' if the originally submitted document is in a cancellable state, otherwise the Cancellation document will be rejected by the eCM process. The Cancellation document is described in 6.6, "Cancellation Document". The high-level processing of the cancellation for each eCM business document in each matching dialogue is described below.

5.4.3.1 High-Level Trade Confirmation Cancellation Processing

A Trade Confirmation document may be participating in the Counterparty Trade Confirmation Matching dialogue, the Broker Confirmation Matching dialogue or in both these dialogues as part of the Trilateral Matching dialogue.

A Trade Confimation Document in the Counterparty Trade Confirmation Matching or in the Broker Confirmation Matching dialogue can only be 'Cancelled' if it is awaiting match processing and in the 'Pending' state or if it has not fully entered the dialogue.

A Trade Confimation Document in the Trilateral Matching dialogue can be 'Cancelled' from the Broker leg or from both of the legs of the dialogue; for reasons of backward compatibility with earlier versions of the standard it cannot be cancelled only from the Counterparty leg other than through cancellation of the Trade Confirmation document (from both legs) and resubmission just to the Broker Matching dialogue. The document can only be 'Cancelled' from a leg if it is awaiting match processing and in the 'Pending' state in the leg or if it has not fully entered the dialogue in the leg.

The successfully submitted Cancellation document is assigned to the 'Finished' state and the 'Cancelled' Trade Confirmation document is removed from further business processing and set to the 'Cancelled' state in the process and in the case of the Trilateral Matching dialogue, leg(s) of the trilateral match from which it has been cancelled.

If the Trade Confirmation document has established a 'Preliminary Match' with a Broker Confirmation document, optionally including a Broker Fee Information document, in the Broker leg of the Trilateral Matching dialogue then the cancellation of the matched Trade Confirmation document will cause the respective Broker Confirmation (and optionally the Broker Fee Information) document(s) for be set to the 'Pending' state. Any initial preliminary match between the original Trade Confirmation document and the Broker Confirmation is rolled back since the trade details in the Trader's ETRMS for the trade have changed and the match with Broker no longer exists. A Broker Match Notification document is issued to the Broker by the Trader to convey the change of state back to 'Pending', although this is not required for the case where Trader and Broker are tenants of the same shared process instance.

A Broker Fee Information document associated with a 'Cancelled' Trade Confirmation document will also be cancelled.

A 'Box Result' document is returned from the instance of the process to each of the parties providing a status update to the ETRMS and Broker back end system as appropriate.

5.4.3.2 High-Level Broker Confirmation Cancellation Processing

A Broker Confirmation document in the Broker Confirmation Matching dialogue can only be 'Cancelled' if it is awaiting match processing and in the 'Pending' state or if it has not fully entered the dialogue.

The successfully submitted document is assigned to the 'Finished' state and the 'Cancelled' Broker Confirmation document is removed from further business processing and set to the 'Cancelled' state.

If the Broker Confirmation document has established a 'Preliminary Match' with a Trade Confirmation document, optionally including a Broker Fee Information document, in the Broker leg of the Trilateral Matching dialogue then the cancellation of the matched Broker Confirmation document will cause the respective Trade Confirmation (and optionally the Broker Fee Information) document(s) for be set to the 'Pending' state. Any initial preliminary match between the original Broker Confirmation document and the Trade Confirmation and Broker Fee Information is rolled back since the trade details in the Broker's back end system for the trade have changed and the matching with Trader no longer exists. A Broker Match Notification document is issued to the Broker by the Trader to convey the change of state back to 'Pending', although this is not required for the case where Trader and Broker are tenants of the same shared process instance.

A 'Box Result' document is returned from the instance of the process to each of the parties providing a status update to the ETRMS and Broker back end system as appropriate.

5.4.3.3 High-Level Broker Fee Information Cancellation Processing

A Broker Fee Information document cannot be cancelled independently but only as a result of cancellation of the associated Trade Confirmation document.

5.4.3.4 High-Level Deal Tear-Up Request Cancellation Processing

A Deal Tear-Up Request document in the 'Finished' state can only be 'Cancelled' if the relevant Trade Confirmation or Broker Confirmation document is in the 'Tear-Up Requested' state.

The successfully submitted Cancellation document is assigned to the 'Finished' state and the relevant business document is moved from the 'Tear-Up Requested' state back to the 'Matched' state.

5.4.4 High-Level Matched Document Tear-Up Processing

The eCM v4.0 process introduces the ability for parties to 'tear up' matches between business documents. If an underlying deal is made void, or a fundamental change is required that cannot be achieved through amending the matched documents, such as changing a counterparty, then the change to the separate Trader and/or Broker backend systems can be reconciled using Tear-Up processing supported by the eCM process. Traders may configure this dialogue on or off. If the dialogue if configured 'off' then the Tear-Up Request will be rejected from the process, otherwise it will be processed.

5.4.4.1 High-Level Counterparty Match Tear-Up Dialogue

Either Trader can initiate this dialogue by submitting a Tear-Up Request document referencing their matched Trade Confirmation document. There will be no limit placed on this functionality within the process but business users must consider the relevance of the dialogue for a document that refers to an underlying trade that has passed its maturity date or other major lifecycle event.

The successfully submitted document is assigned to the 'Finished' state.

If the counterparty's Trade Confirmation document is in the 'Matched' state then the Trader's own Trade Confirmation document is moved to the 'Tear-Up Requested' state whilst the matched counterparty's Trade Confirmation document remains in the 'Matched' state.

If the counterparty's Trade Confirmation document is in the 'Tear-Up Requested' state then the Trader's own Trade Confirmation document and the Counterparty's Trade Confirmation document are both moved to the 'Cancelled' state.

If the Counterparty Confirmation moved to the 'Cancelled' state was one leg of a Trilateral Match then the Broker Confirmation document is also moved to the 'Cancelled' state since the Broker Confirmation Match leg of the Trilateral Match is no longer valid if the Counterparty Confirmation Match leg has been 'torn-up'. A Broker Match Notification document is issued to the Broker by the Trader to convey the change of state to 'Cancelled', although this is not required for the case where Trader and Broker are tenants of the same shared process instance.

In summary the matched Trade Confirmation documents are only moved to the 'Cancelled' state once an audited request has been received from both parties to the original match.

A 'Box Result' document is returned from the instance of the process to each of the parties providing a status update to the Traders' ETRMS and Broker's backend system.

5.4.4.2 High-Level Broker Match Tear-Up Dialogue

Only the Trader can initiate this dialogue by submitting a Tear-Up Request document referencing their matched Trade Confirmation in the Broker dialogue. There will be no limit placed on this functionality within the process but business users must consider the relevance of the dialogue for a document that refers to an underlying trade that has passed its maturity date or other major lifecycle event.

The successfully submitted document is assigned to the 'Finished' state.

If the Trader successfully submits the Tear-Up Request then the Trade Confirmation document and associated Broker Fee Information document, if one exists, and the Broker Confirmation document are set to the 'Cancelled' state. The consent of the Broker is not required since the authority to break the Broker match resides with the Trader. A Broker Match Notification document is issued to the Broker by the Trader to convey the change of state to 'Cancelled', although this is not required for the case where Trader and Broker are tenants of the same shared process instance.

If the Broker Confirmation Match was one leg of a Trilateral Match then the Counterparty Confirmation Match leg remains unaffected by this dialogue unless the Trader submits a Tear-Up Reqest for both legs of the Trilateral Match rather than just the Broker leg, in which case the 5.4.4.1, "High-Level Counterparty Match Tear-Up Dialogue" applies.

In summary the Broker cannot submit a Tear-Up Request since they can neither initiate a Tear-Up dialogue, nor can they participate in a Tear-Up dialogue initiated by the Trader. If a Broker wishes to initiate a tear-up then they must contact the Trader outside the eCM process and ask the Trader to conduct the tear-up.

A 'Box Result' document is returned from the instance of the process to each of the parties providing a status update to the Trader's ETRMS and Broker's back end system.

5.4.4.3 High-Level Broker Fee Information Tear-Up Processing

A Broker Fee Information document cannot be referenced by a Deal Tear-Up Request document and will only be set to the 'Tear-Up Requested' or 'Cancelled' state if the associated Trade Confirmation document is set to one of these states.

5.4.5 High-Level Business Document Submission and Result Process

Submission and Results processing is concerned with defining how the various business documents must be submitted to the eCM process by the backend systems of the Trader and Broker and how status information about the progress and results of processing the various documents must be returned. This information can be used by backend systems to update their own status information for each business document submitted to the eCM process. In earlier versions of the eCM Standard this process was left undefined since the interaction was internal to each organisation and not considered to be within the scope of standardisation; however, with the 'multi-tenancy' deployment option the Submission and Result dialogues become 'externalised', allowing Traders and Brokers to submit their documents to a shared process instance, external to their organisations, bringing the interaction within the scope of the eCM Standard.

5.4.5.1 High-Level Document Submission Dialogue

The Trader or Broker submits a business document to the process and receives a 'Box Result' message in return. On successful submission the Box Result for the relevant document will return the initial status of the document within the process e.g. 'Pending'. In case of an invalid submission the Box Result for the relevant document will contain the status 'Failed'.

5.4.5.2 High-Level Document Result Dialogue

The eCM process issues a Box Result message to the Trader or Broker (as appropriate) each time a successfully submitted document is moved to a new non-transient state within the eCM process e.g. 'Matched'.

5.4.6 High-Level Time Out Dialogue

Time Out processing has been removed in V4.0 of the process in favour of implementation specific reports highlighting 'aged' documents that have not be progressed to a resolved state.

Note that implementers must address this non-backwardly compatible change within their implementations of the process.

5.4.7 Role of the 'Multi-Tenant' Process Implementation in Peer-to-Peer Matching

A 'mult-tenant' implementation of the eCM process will be operated in common on behalf of several Traders and/or Brokers by a third party service provider. In this deployment configuration the service provider undertakes the 'Trader' or 'Broker' role in the case of peer-to-peer matching on behalf of the trading organisations and brokers that are using the service. In this case the service provider acts on behalf of the Trader or Broker and in particular:

1. Electronically signs the documents exchanged according to the peer-to-peer dialogue, as described in [1], on behalf of the Trader or Broker
2. Receives and processes the documents issued by the other party according to the peer-to-peer matching dialogue.

Peer-to-peer users must be aware that their Trade Confirmation data will be sent to the service provider to permit the service provider to complete a peer-to-peer match on behalf of the Traders and Brokers on whose behalf it is acting as a matching agent.

5.5 Detailed Business Document Flows

5.5.1 Detailed Business Document Match Processing

Table 1 Possible matching scenarios supported by eCM v4.0 identifies all supported configurations of the eCM v4.0 matching dialogues described in 5.4.1, "High-Level Business Document Match Processing", for each actor in each role: that is the Trader and Broker as either a 'Multi-Tenant' or 'Peer-to-Peer' user of the process.

Table 1 Possible matching scenarios supported by eCM v4.0

	Scenario	Multi-Tenant Trader 1	Multi-Tenant Trader 2	P2P Trader 1	P2P Trader 2	Multi-Tenant Broker	P2P Broker
Trader vs. Trader	1	x	x				
	2	x		x			
Trader vs. Broker	3	x				x	
	4	x					x
	5			x		x	
Trader vs. Broker vs. Trader	6	x	x			x	
	7	x	x				x
	8	x		x		x	
	9	x		x			x
	10			x	x	x	

Note that for simplicity the Submission and Result processing is not shown in each of the following sections but is described in its own section 5.5.5, "Detailed Submission and Results Processing".

5.5.1.1 Detailed Business Document Match Processing: Scenario 1

Figure 3 Counterparty Confirmation Matching dialogue with tenant Traders shows the detailed document flows for the Counterparty Confirmation Matching dialogue for the scenario in which both Traders share a multi-tenant implementation of the eCM process operated by a third party service provider.

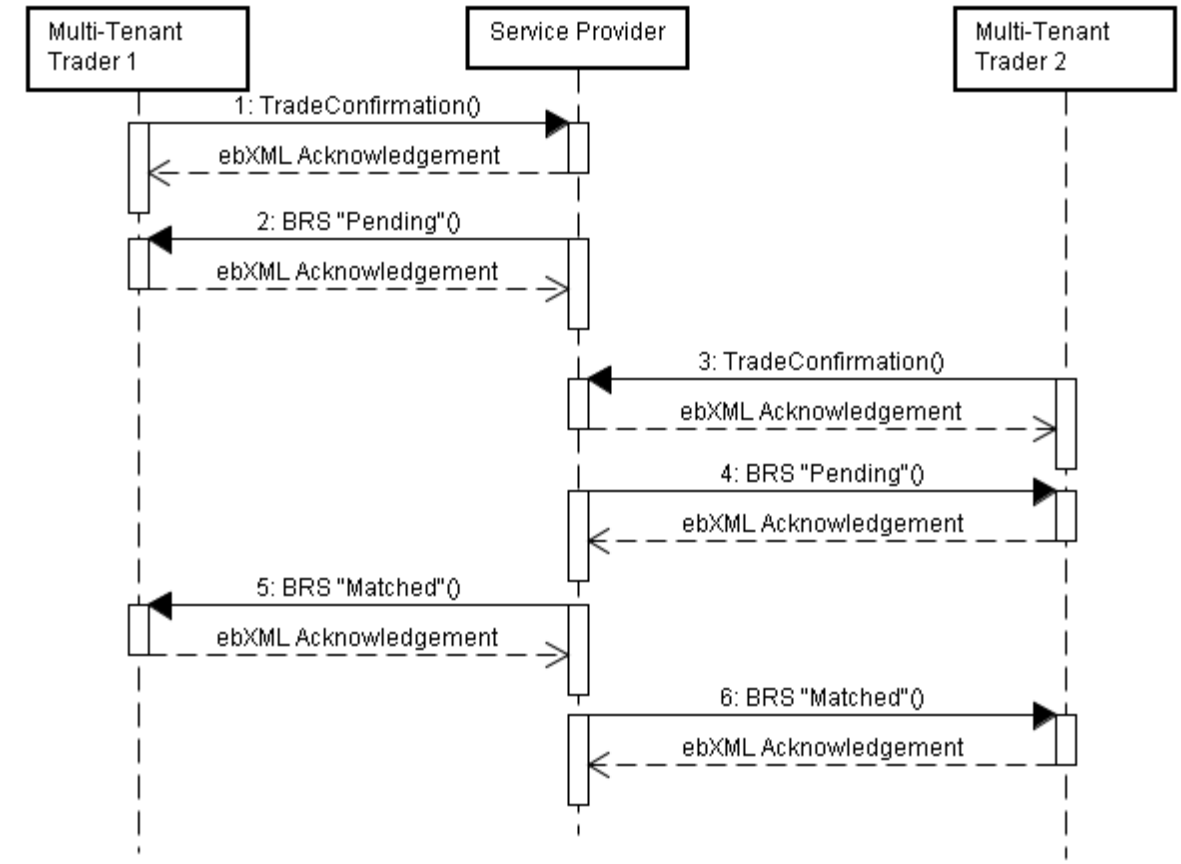


Figure 3 Counterparty Confirmation Matching dialogue with tenant Traders

5.5.1.2 Detailed Business Document Match Processing: Scenario 2

Figure 4 Counterparty Confirmation Matching dialogue with tenant 'buyer' and peer-to-peer 'seller' and Figure 5 Counterparty Confirmation Matching dialogue with tenant 'seller' and peer-to-peer 'buyer' show the detailed document flows for the Counterparty Confirmation Matching dialogue for both cases of the scenario in which a tenant Trader is matching through a service provider with a peer-to-peer Trader in both 'buyer' and 'seller' roles.

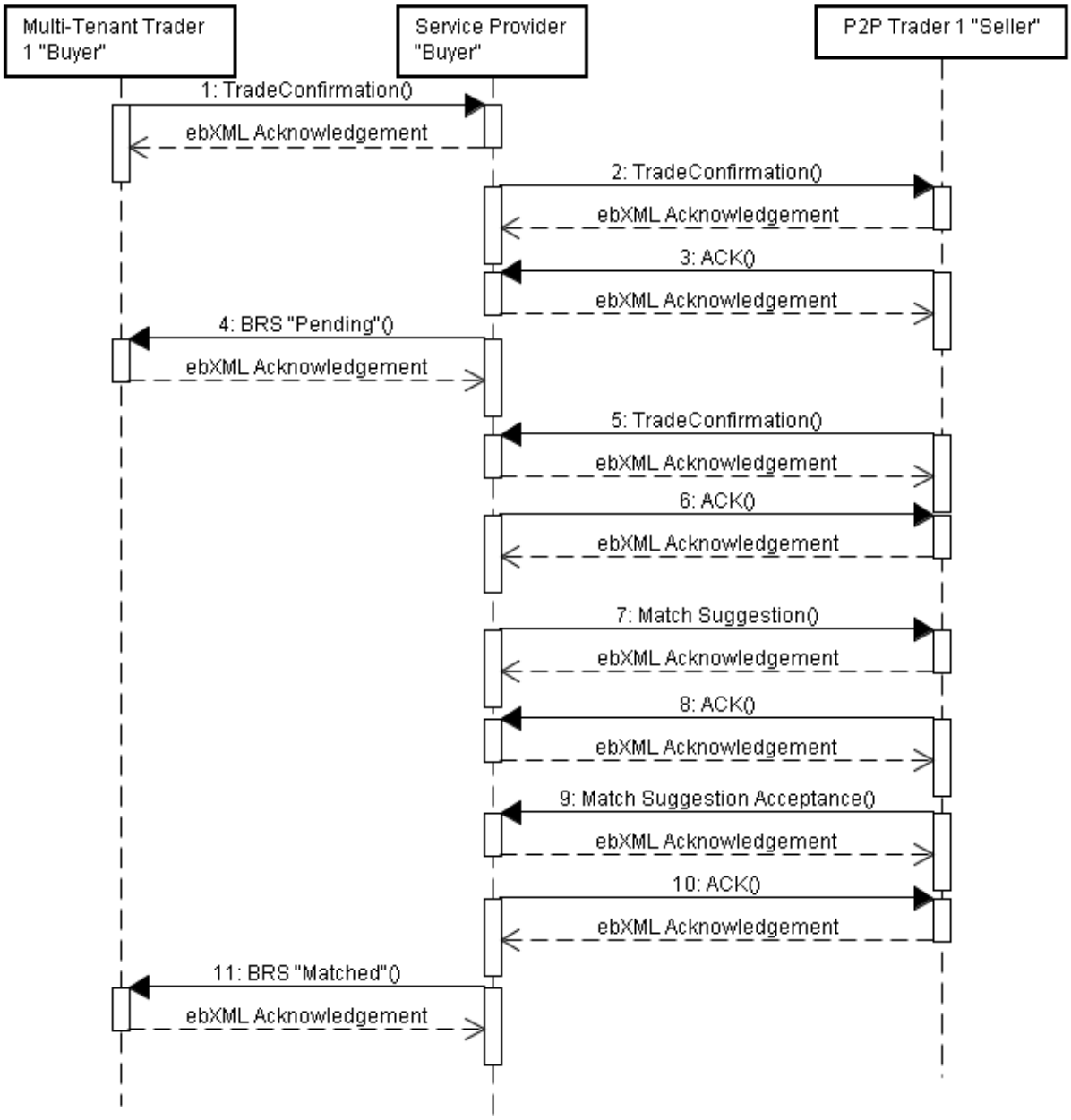


Figure 4 Counterparty Confirmation Matching dialogue with tenant 'buyer' and peer-to-peer 'seller'

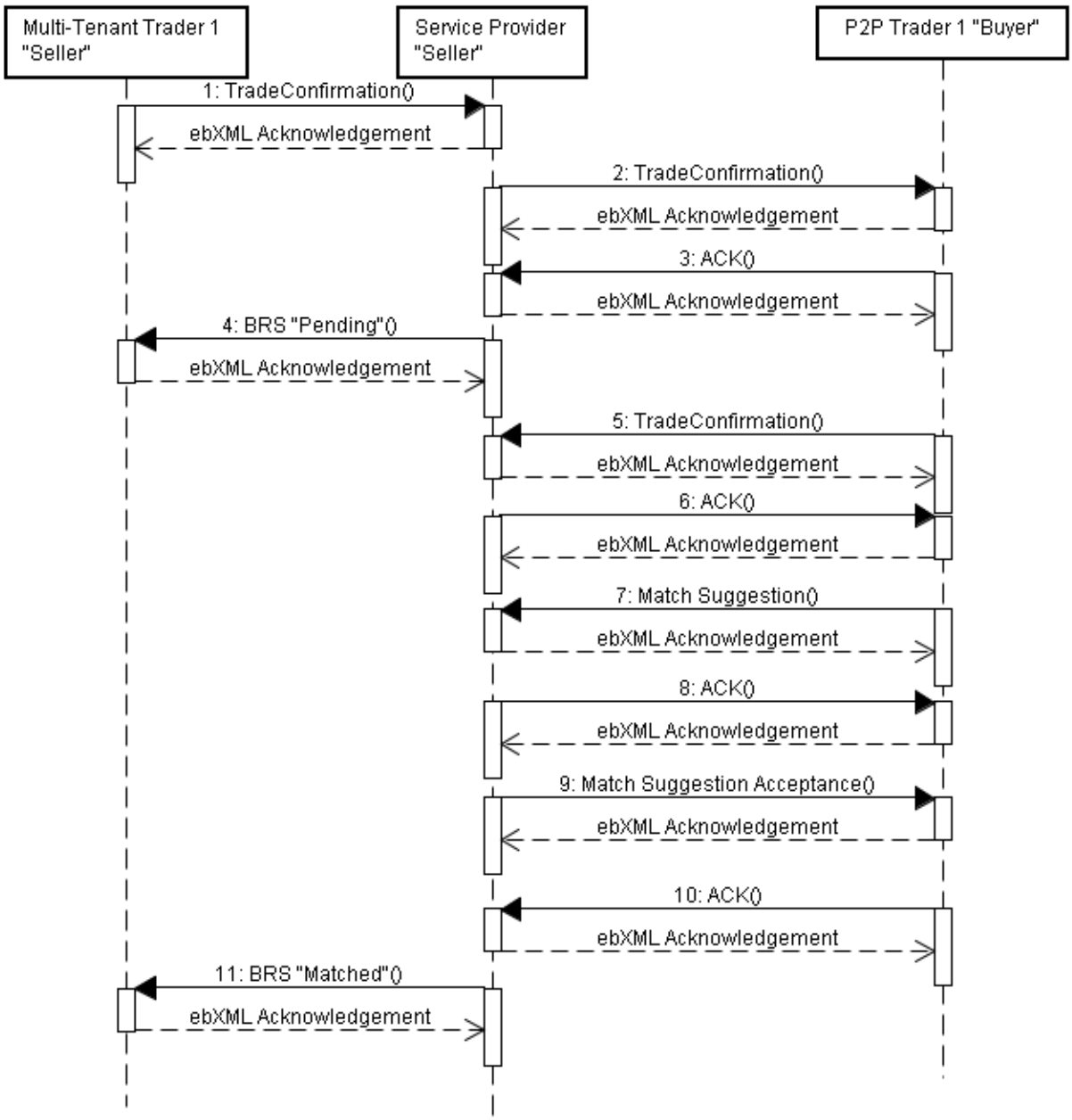


Figure 5 Counterparty Confirmation Matching dialogue with tenant 'seller' and peer-to-peer 'buyer'

5.5.1.3 Detailed Business Document Match Processing: Scenario 3

Figure 6 Broker Confirmation Matching dialogue with tenant Trader and Broker (incl. Broker Fee Information) shows the detailed document flows for the Broker Confirmation Matching dialogue for the scenario in which a tenant Trader and Broker share a multi-tenant implementation of the eCM process operated by a third party service provider.

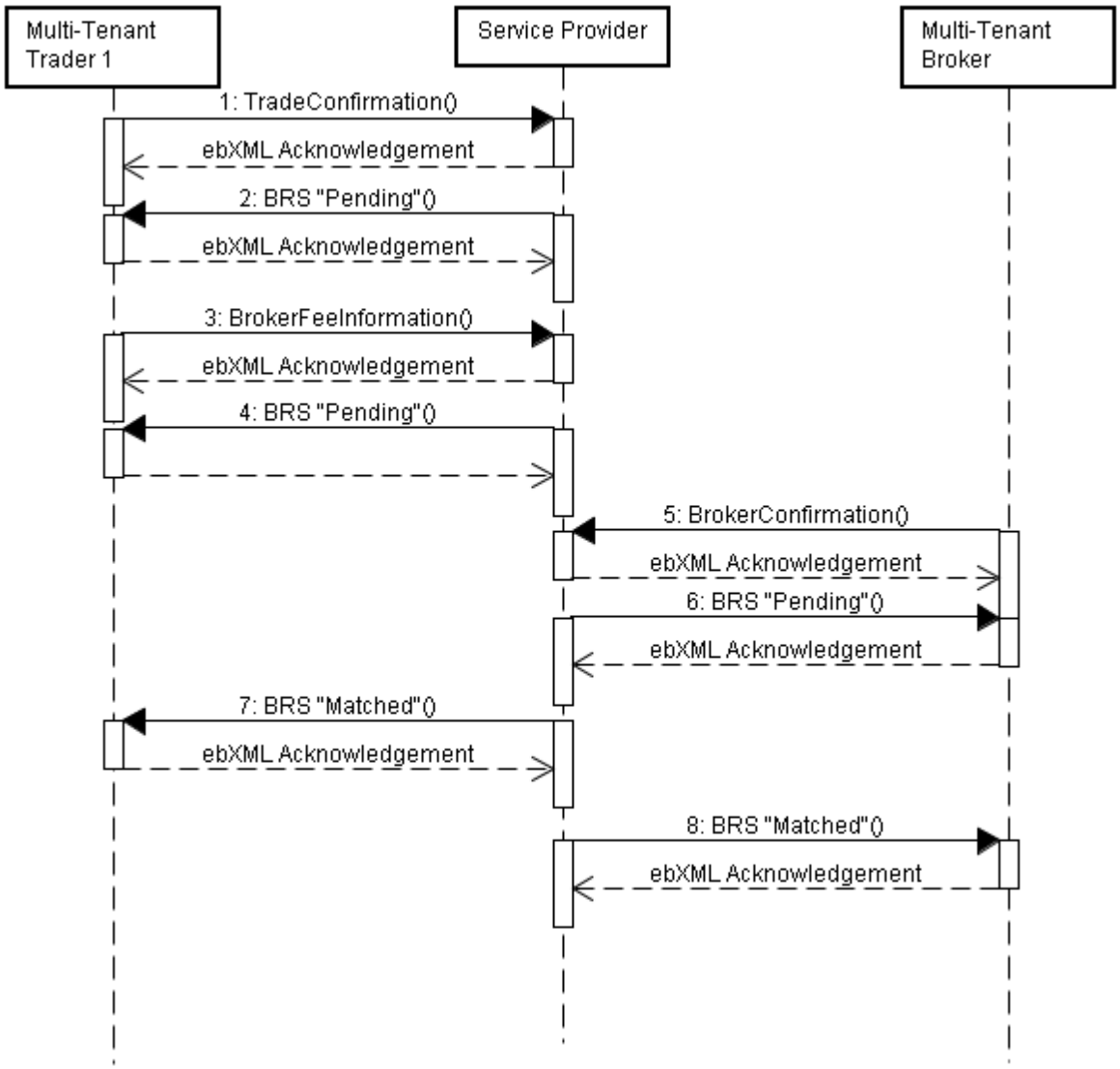


Figure 6 Broker Confirmation Matching dialogue with tenant Trader and Broker (incl. Broker Fee Information)

5.5.1.4 Detailed Business Document Match Processing: Scenario 4

Figure 7 Broker Confirmation matching dialogue with tenant Trader and peer-to-peer Broker (incl. Broker Fee Information) shows the detailed document flows for the Broker Confirmation Matching dialogue for the scenario in which a tenant Trader is matching through a service provider with a peer-to-peer Broker.

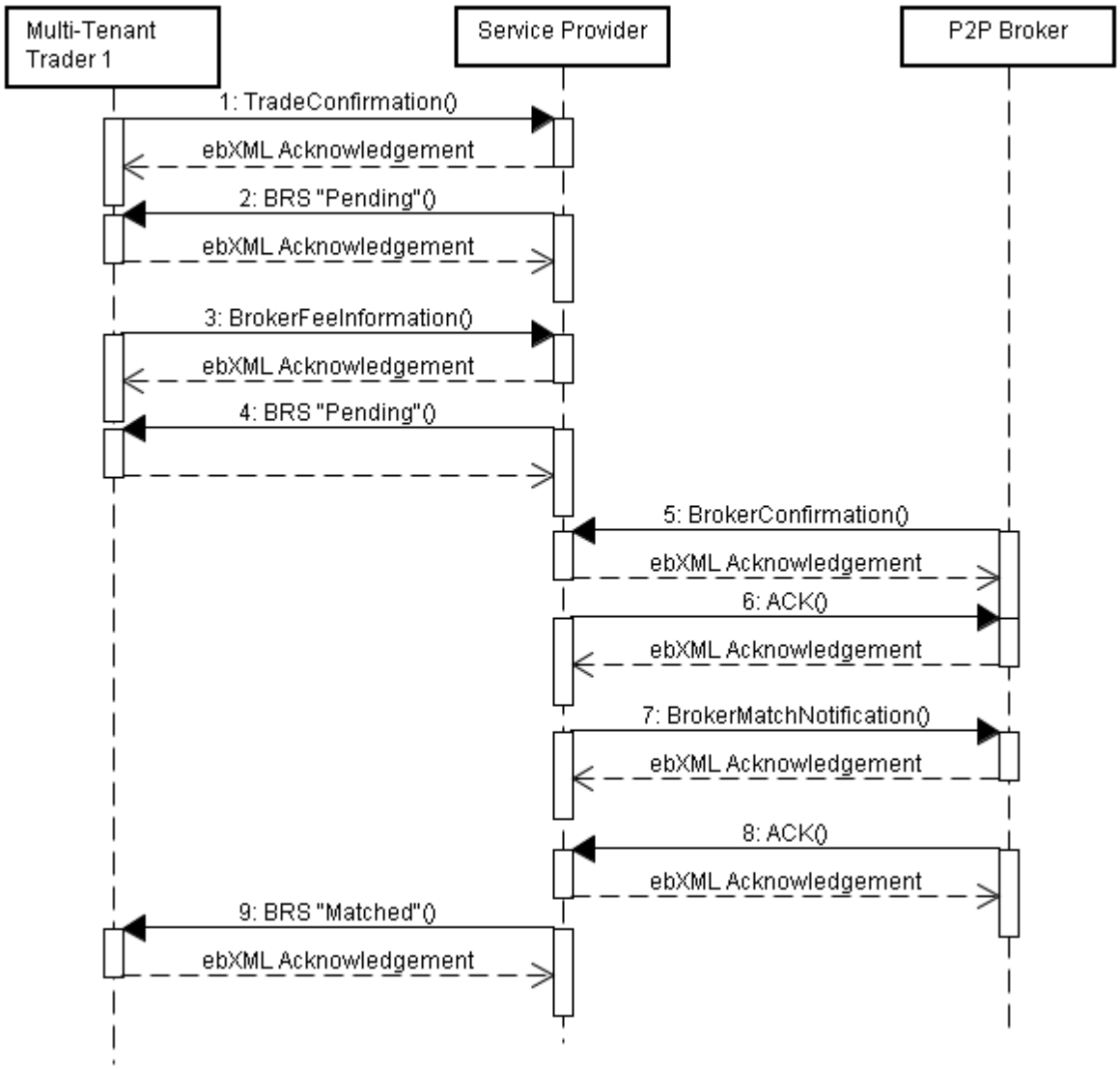


Figure 7 Broker Confirmation matching dialogue with tenant Trader and peer-to-peer Broker (incl. Broker Fee Information)

5.5.1.5 Detailed Business Document Match Processing: Scenario 5

Figure 8 Broker Confirmation Matching dialogue with tenant Broker and peer-to-peer Trader (incl. Broker Fee Information) shows the detailed document flows for the Broker Confirmation Matching dialogue for the scenario in which a tenant Broker is matching through a service provider with a peer-to-peer Trader.

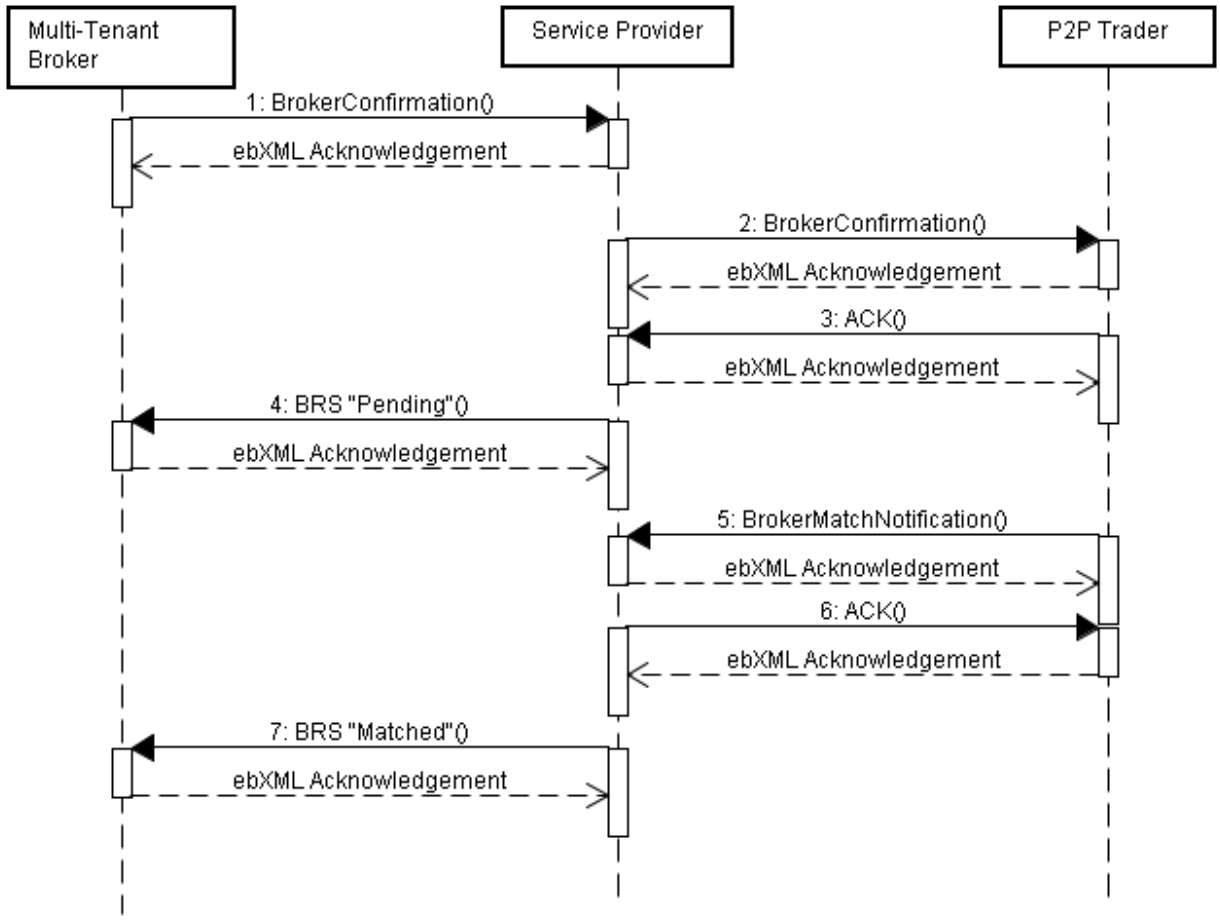


Figure 8 Broker Confirmation Matching dialogue with tenant Broker and peer-to-peer Trader (incl. Broker Fee Information)

5.5.1.6 Detailed Business Document Match Processing: Scenario 6

Figure 9 Trilateral Matching dialogue with tenant counterparties and Broker (incl. BFI) shows the detailed document flows for the Trilateral Matching dialogue for the scenario in which two tenant Traders and a Broker are matching through a service provider.

Figure 9 Trilateral Matching dialogue with tenant counterparties and Broker (incl. BFI)

5.5.1.7 Detailed Business Document Match Processing: Scenario 7

Figure 10 Trilateral Matching dialogue with tenant Traders and peer-to-peer Broker (incl. BFI) shows the detailed document flows for the Trilateral Matching dialogue for the scenario in which two tenant Traders are matching through a service provider with a peer-to-peer Broker.

Figure 10 Trilateral Matching dialogue with tenant Traders and peer-to-peer Broker (incl. BFI)

5.5.1.8 Detailed Business Document Match Processing: Scenario 8

Figure 11 Trilateral Matching dialogue with tenant Trader, tenant Broker and peer-to-peer Trader (incl.BFI) shows the detailed document flows for the Trilateral Matching dialogue for the scenario in which a tenant Trader and Broker are matching through a service provider with a peer-to-peer Trader.

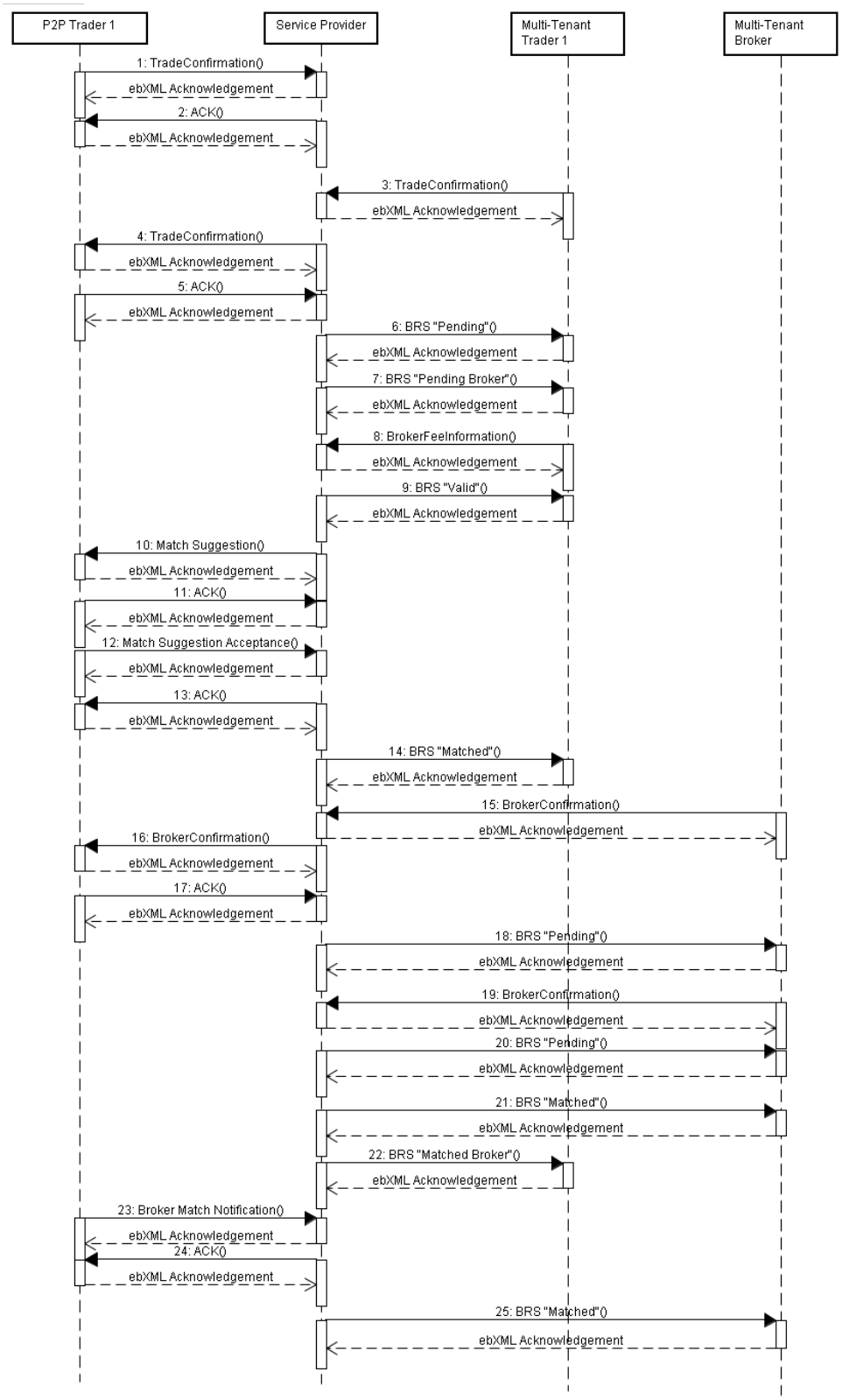


Figure 11 Trilateral Matching dialogue with tenant Trader, tenant Broker and peer-to-peer Trader (incl.BFI)

5.5.1.9 Detailed Business Document Match Processing: Scenario 9

Figure 12 Trilateral Matching dialogue with peer-to-peer trader and Broker and a tenant Trader (incl. BFI) shows the detailed document flows for the Trilateral Matching dialogue for the scenario in which a tenant Trader is matching through a service provider with a peer-to-peer Broker and Counterparty.

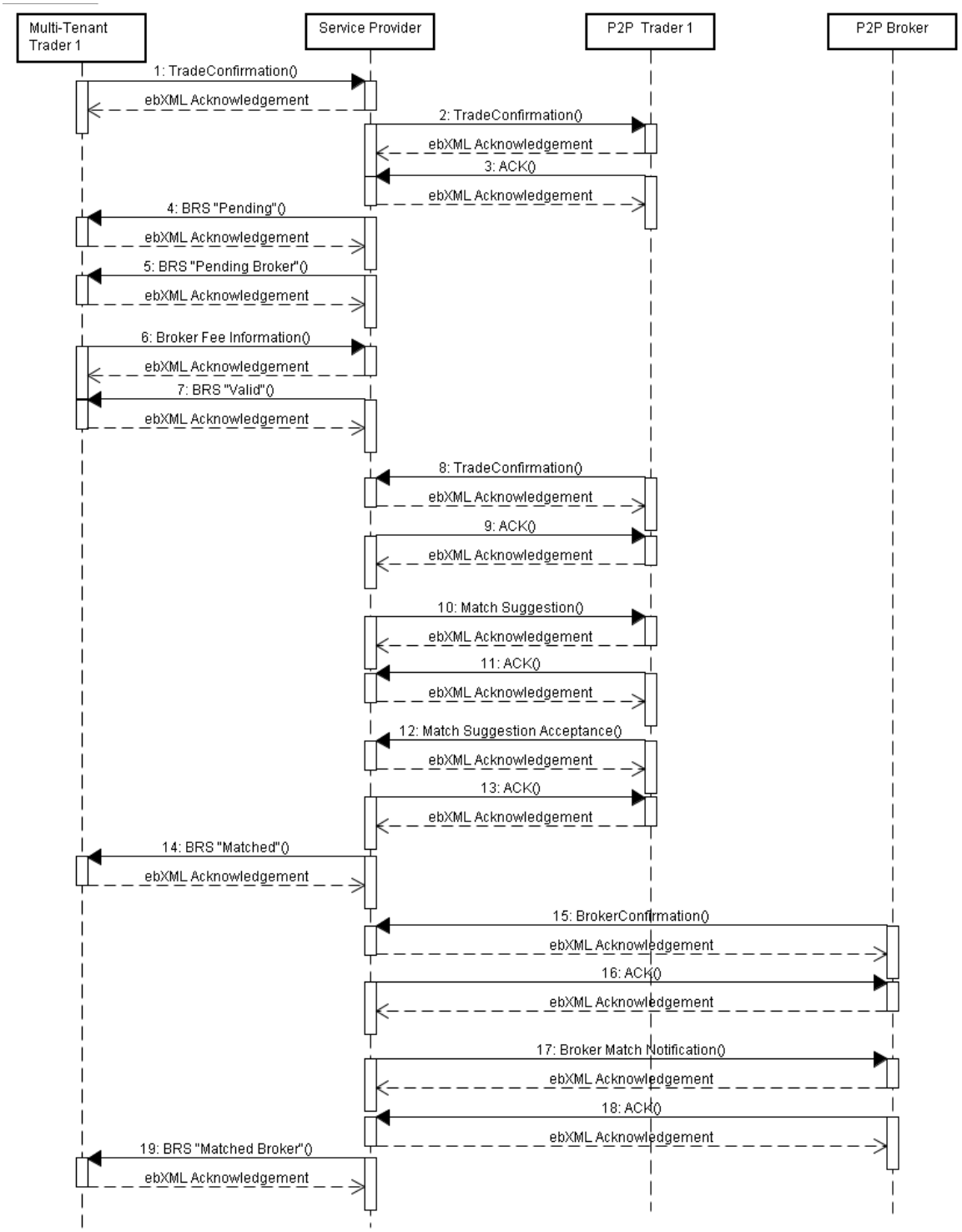


Figure 12 Trilateral Matching dialogue with peer-to-peer trader and Broker and a tenant Trader (incl. BFI)

5.5.1.10 Detailed Business Document Match Processing: Scenario 10

Figure 13 Trilateral Matching dialogue with tenant Broker and peer-to-peer Traders (incl. BFI) shows the detailed document flows for the Trilateral Matching dialogue for the scenario in which a tenant Broker is matching through a service provider with two peer-to-peer Traders.

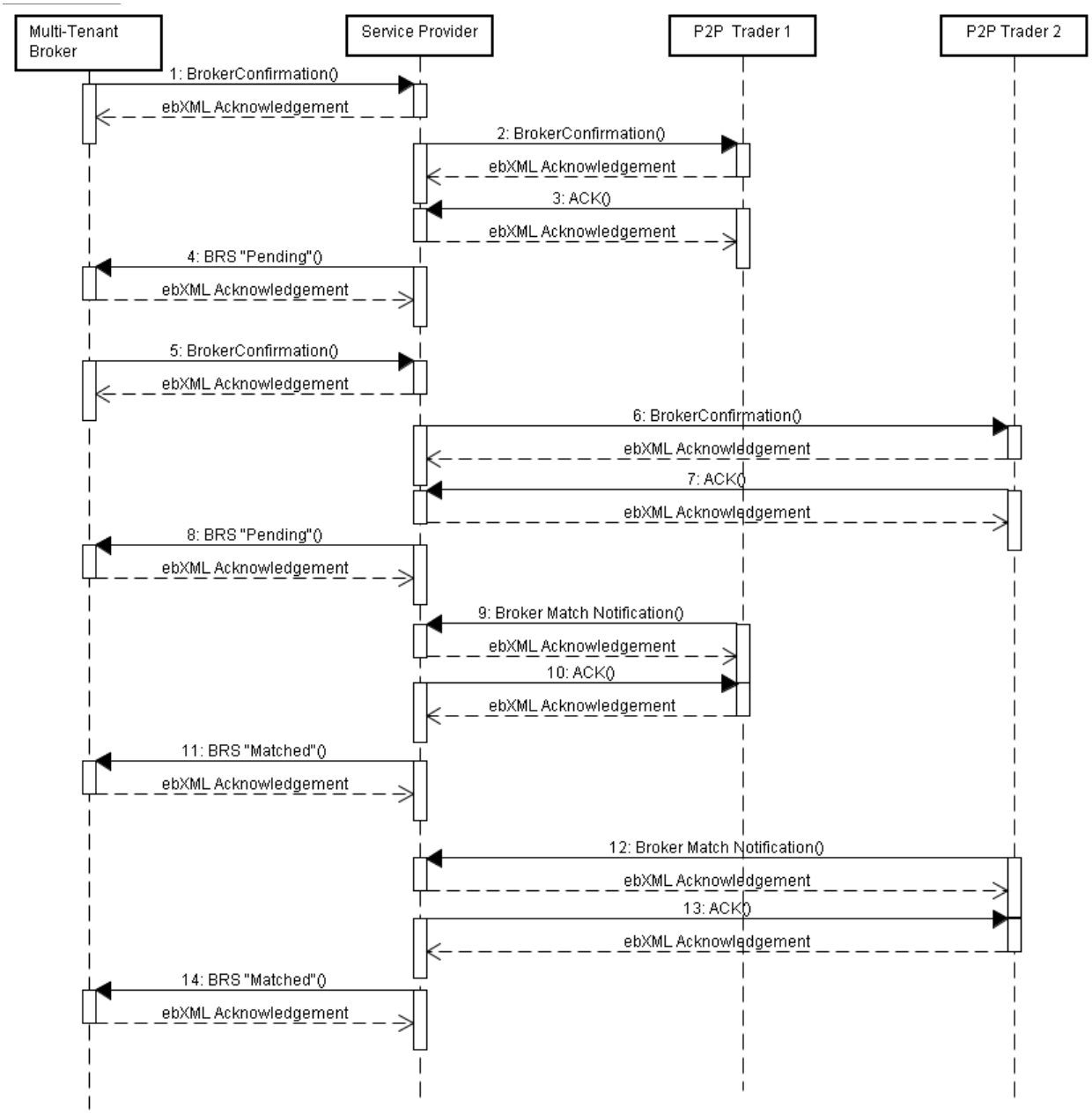


Figure 13 Trilateral Matching dialogue with tenant Broker and peer-to-peer Traders (incl. BFI)

5.5.2 Detailed Business Document Amendment Processing

The following sections show all the document flows involved in amending business documents. Not all permutations of role and deployment option have been shown however the combinations required to demonstrate all document flows for each deployment option have been included.

5.5.2.1 Trade Confirmation Amendment - Counterparty Dialogue

Figure 14 Document flows for amendment of a Trade Confirmation in the Counterparty Matching dialogue shows the submission of an amendment to a Trade Confirmation document and includes the flows for both deployment options: via the service provider and between the service provider and a Trader acting as peer-to-peer counterparties.

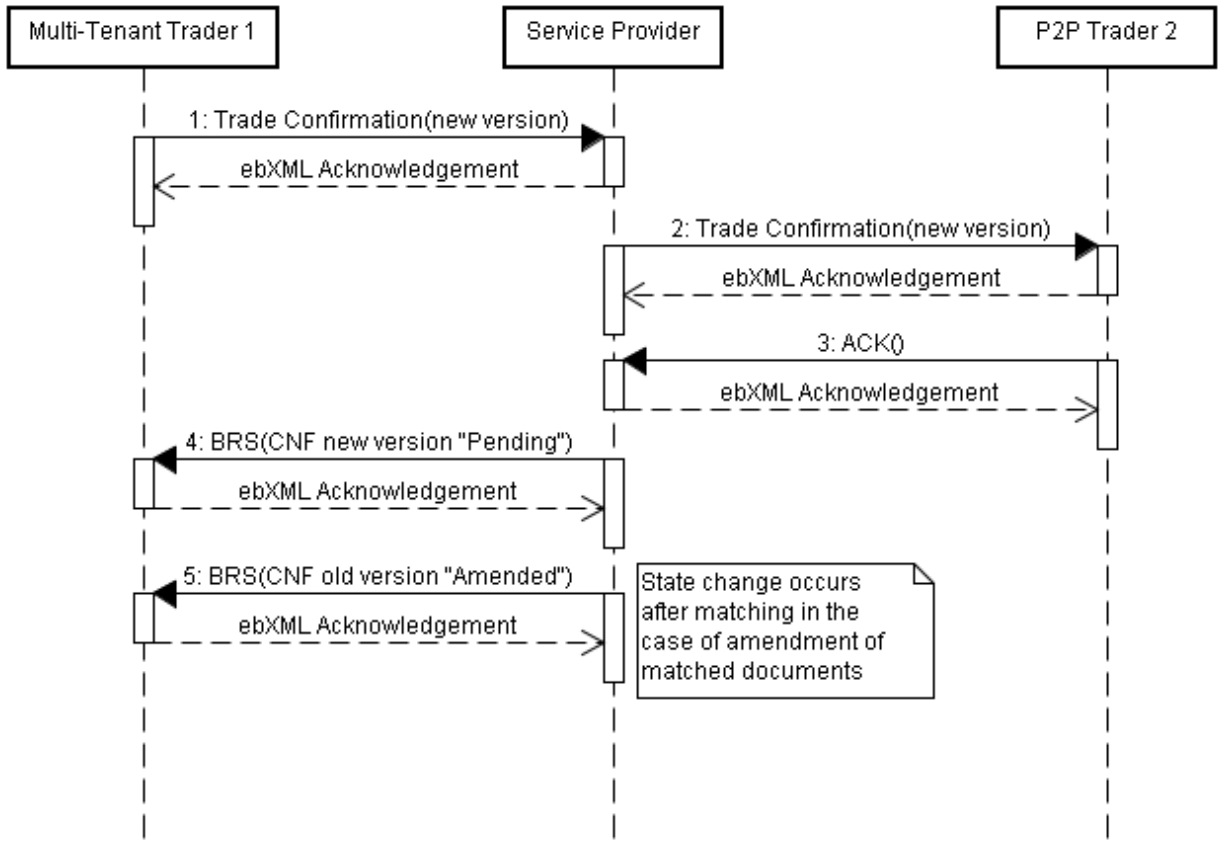


Figure 14 Document flows for amendment of a Trade Confirmation in the Counterparty Matching dialogue

5.5.2.2 Trade Confirmation Amendment - Broker Dialogue

Figure 15 Document flows for amendment of a Trade Confirmation in the Broker Matching dialogue shows the flows for submission of an amendment to the Trade Confirmation and the Broker Fee Information document for a multi-tenant Trader. Since matching is local to the Trader in both deployment options no documents are issued to the Broker.

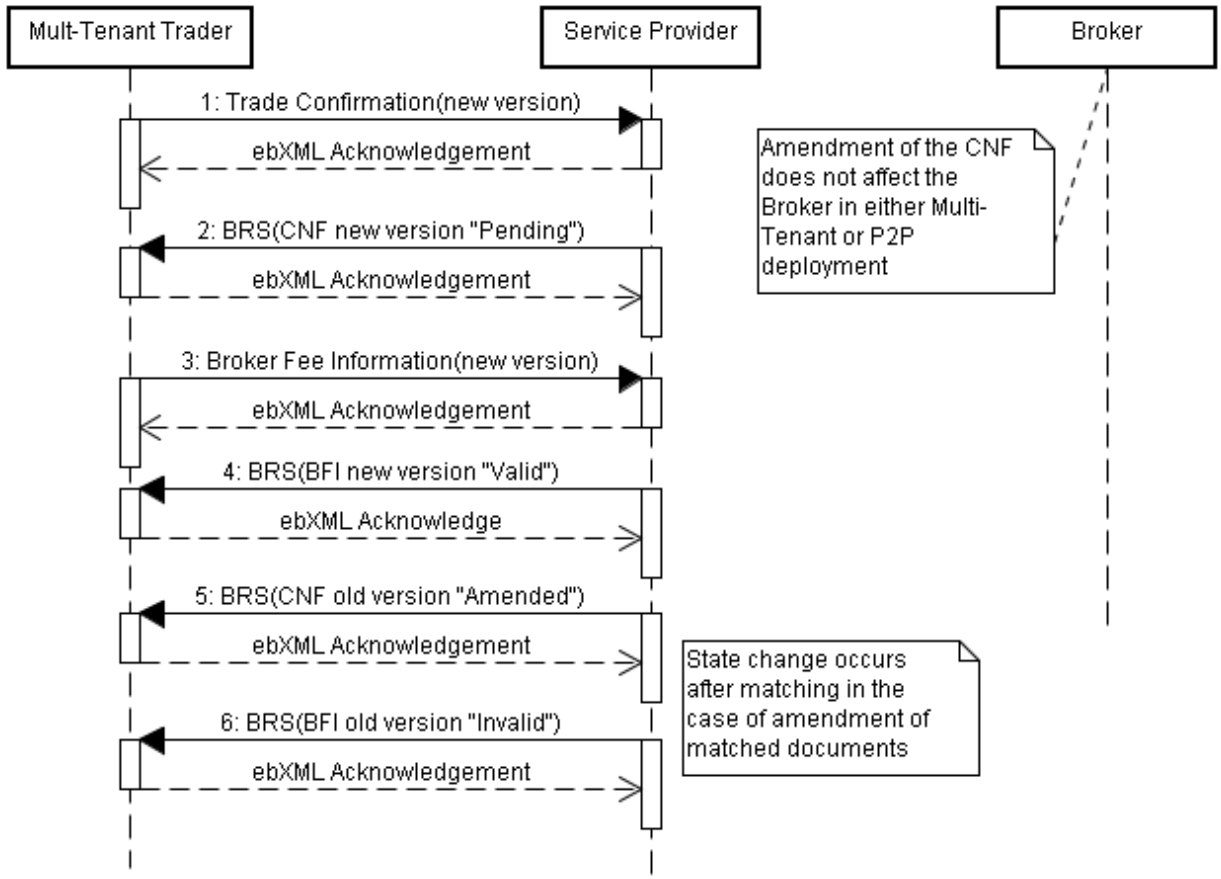


Figure 15 Document flows for amendment of a Trade Confirmation in the Broker Matching dialogue

5.5.2.3 Trade Confirmation Amendment - Trilateral Dialogue

Figure 16 Document flows for amendment of a Trade Confirmation document in a Trilateral Matching dialogue shows the flows when the Trade Confirmation is part of a trilateral matching dialogue with the counterparty Trade Confirmation and the Broker Confirmation, including the Broker Fee Information. The peer-to-peer and multi-tenant deployments for the Broker are included as alternative flows to ensure that examples of all the flows for each deployment option are shown, including the case where a 'Prelininary Match' with a Broker Confirmation is reversed as a result of amendment to ensure the integrity of the trilateral match.

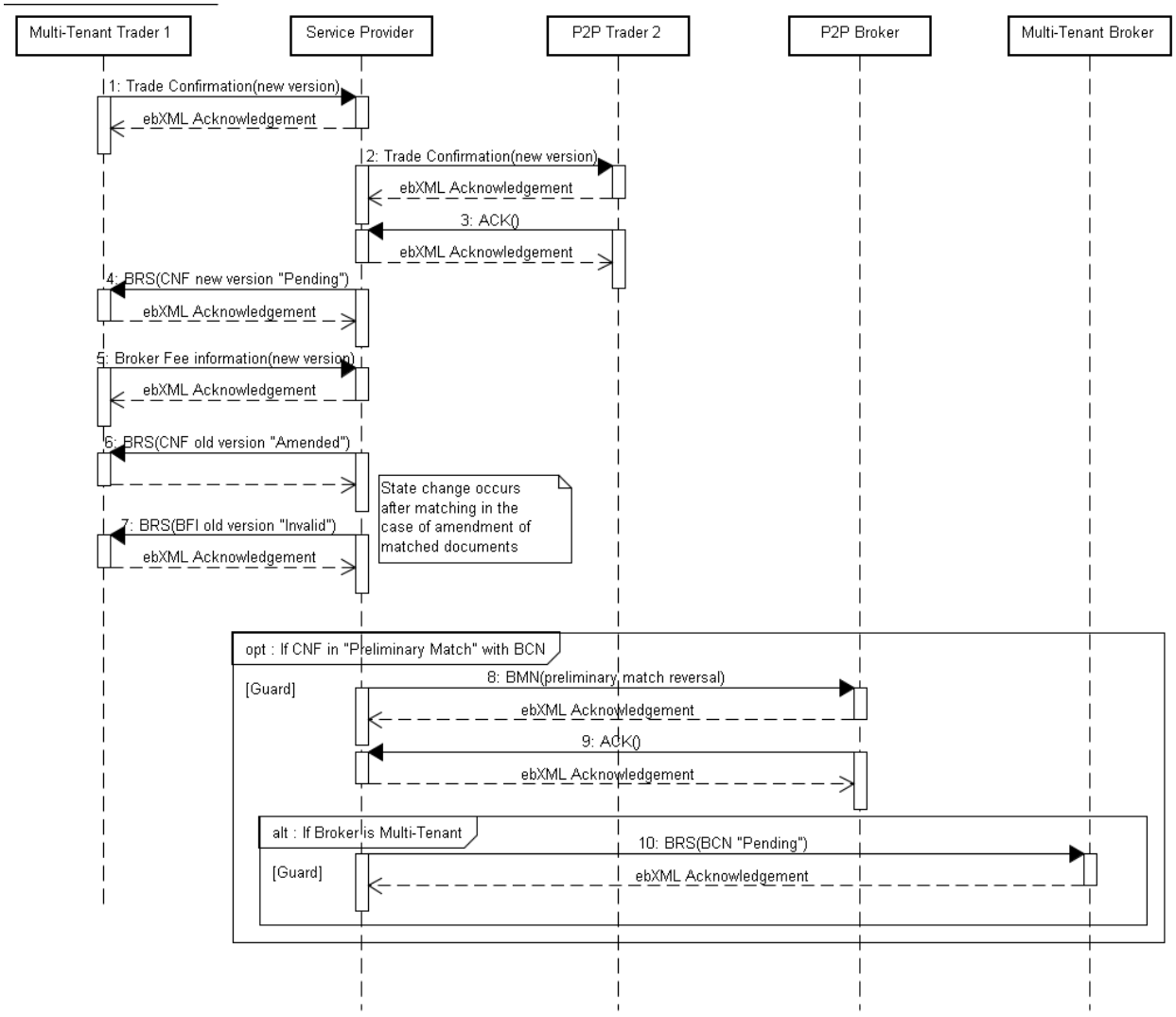


Figure 16 Document flows for amendment of a Trade Confirmation document in a Trilateral Matching dialogue

5.5.2.4 Broker Confirmation Amendment - Trilateral Dialogue

Figure 17 Document flows for amendment of the Broker Confirmation in the Trilateral Matching dialogue shows the flows for amendment dialogue with both Traders, one a peer-to-peer deployment and one a multi-tenant deployment. The reversal of the 'Preliminary Match' between the Broker Confirmation and the Trade Confirmation and Broker Fee Information documents is explicitly shown for the multi-tenant Trader.

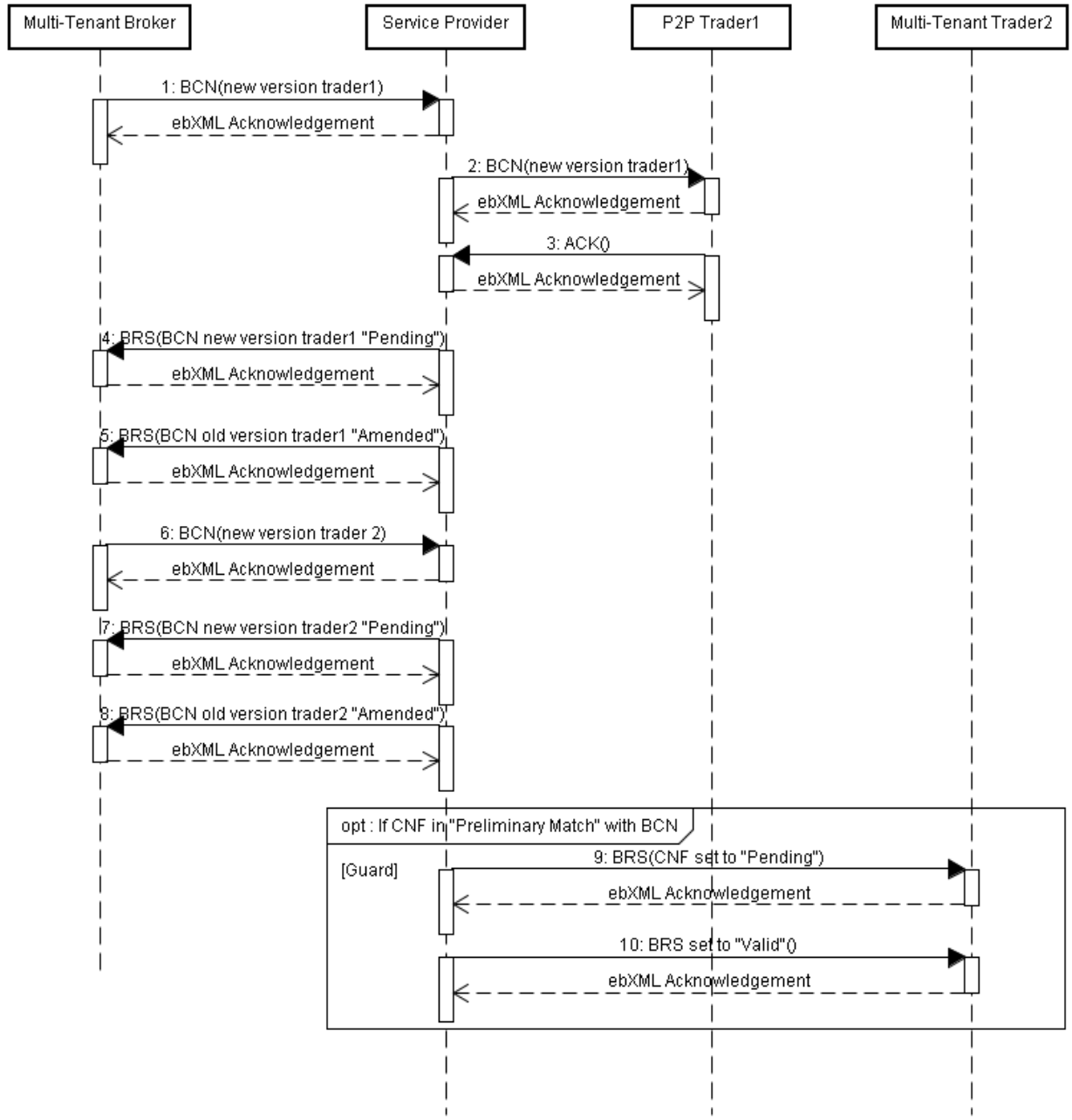


Figure 17 Document flows for amendment of the Broker Confirmation in the Trilateral Matching dialogue

5.5.3 Detailed Business Document Cancellation Processing

The following sections show all the document flows involved in cancellation of business documents. Not all permutations of role and deployment option have been shown however the combinations required to demonstrate all document flows for each deployment option have been included.

5.5.3.1 Trade Confirmation Cancellation - Counterparty Dialogue

Figure 18 Document flows for the cancellation of a Trade Confirmation document in the Counterparty Matching dialogue shows the cancellation of a multi-tenant Trader's Trade Confirmation document and the peer-to-peer flows between the service provider and the peer-to-peer Trader.

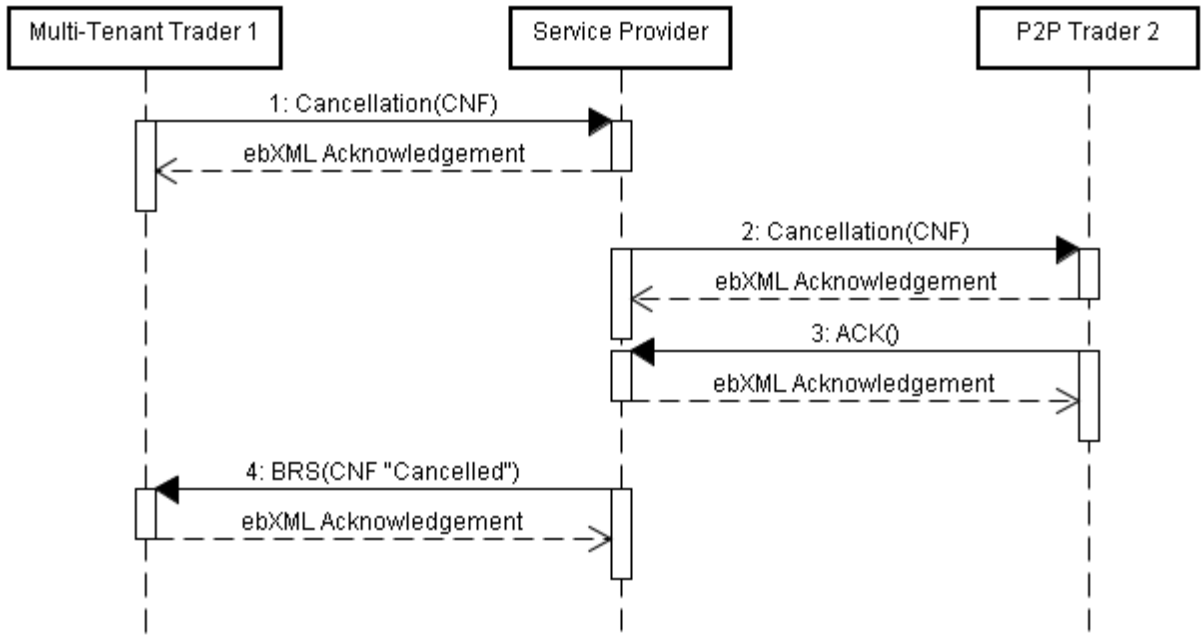


Figure 18 Document flows for the cancellation of a Trade Confirmation document in the Counterparty Matching dialogue

5.5.3.2 Trade Confirmation Cancellation - Broker Dialogue

Figure 19 Document flows for the cancellation of a Trade Confirmation document in the Broker Matching dialogue shows the flows between the multi-tenant Trader and the service provider, since the broker match is local to the Trader's shared process instance no communication is necessary with a peer-to-peer deployment of the Broker. The affect on the Broker Fee Information document of cancelling a Trade Confirmation is shown through the status updates coming back from teh process to the multi-tenant Trader.

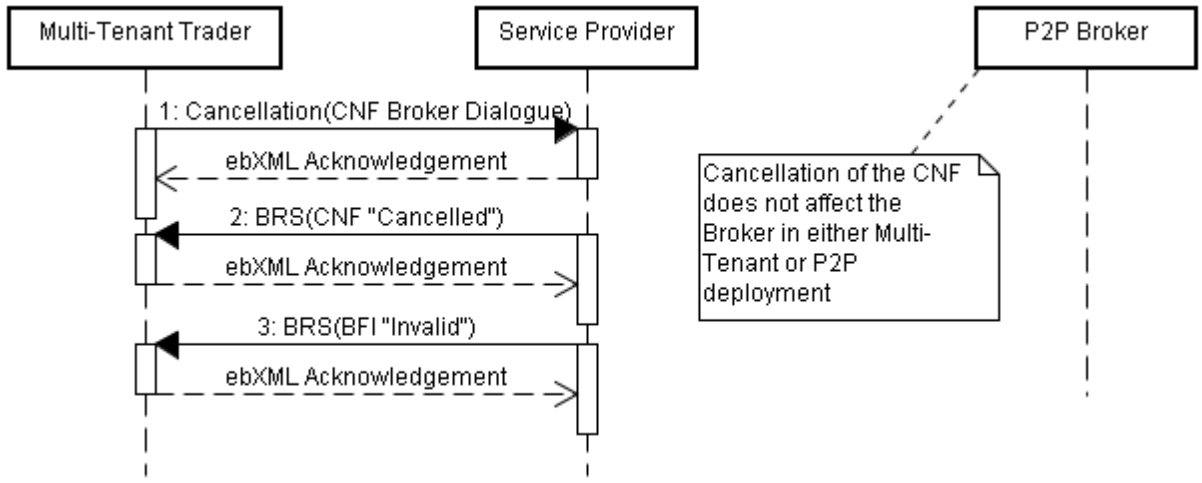


Figure 19 Document flows for the cancellation of a Trade Confirmation document in the Broker Matching dialogue

5.5.3.3 Trade Confirmation Cancellation – Trilateral Dialogue

Figure 20 Document flows for the cancellation of a Trade Confirmation dcoument in the Trilateral Matching dialogue shows the flows when the Trade Confirmation is part of a trilateral matching dialogue with the counterparty Trade Confirmation and the Broker Confirmation, including the Broker Fee Information. The peer-to-peer and multi-tenant deployments for the Broker are included as alternative flows to ensure that examples of all the flows for each deployment option are shown, including the case where a 'Prelininary Match' with a Broker Confirmation is reversed as a result of cacnellation to ensure the integrity of the trilateral match.

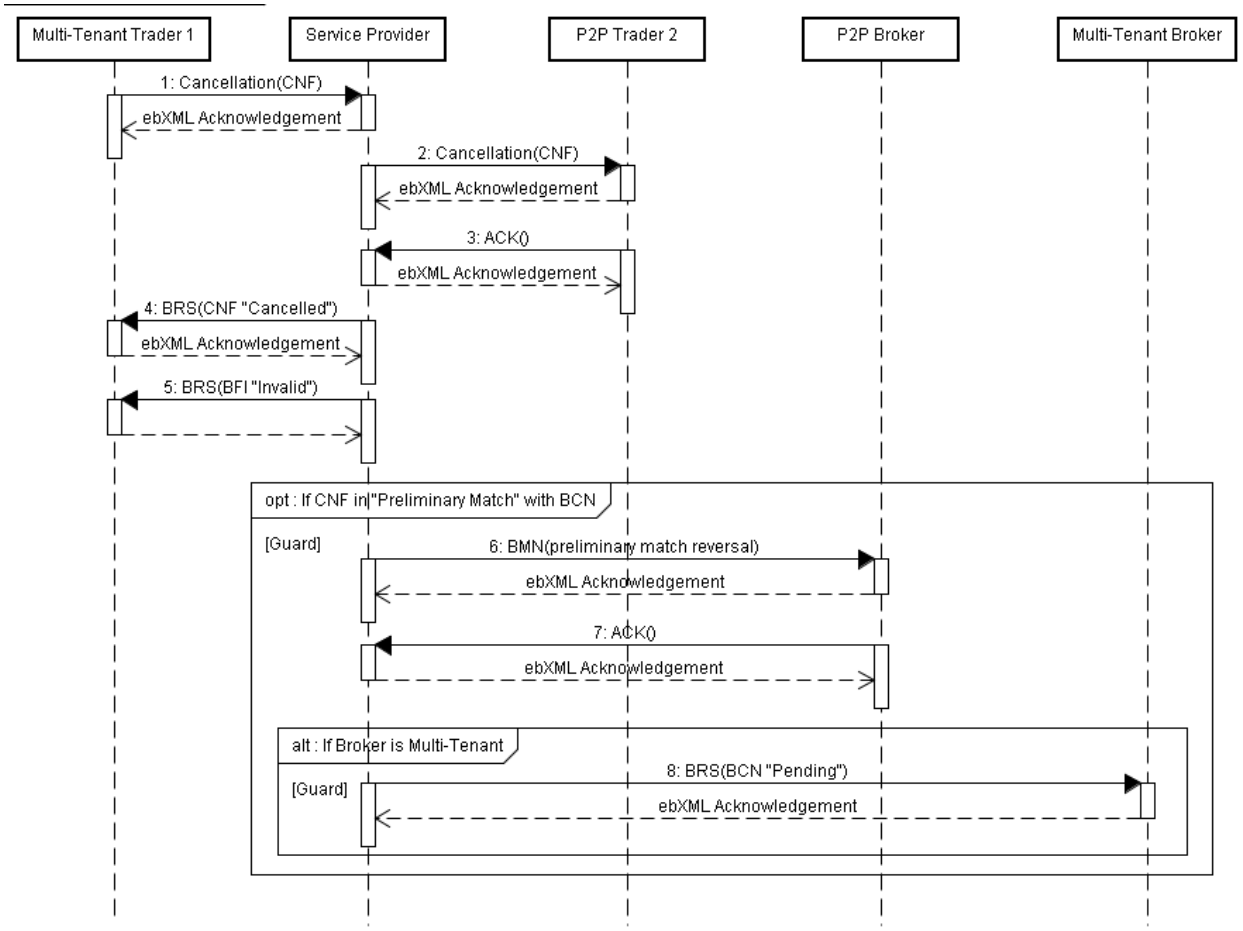


Figure 20 Document flows for the cancellation of a Trade Confirmation dcoument in the Trilateral Matching dialogue

5.5.3.4 Broker Confirmation Cancellation - Trilateral Dialogue

Figure 21 Document flows for the cancellation of a Broker Confirmation in the Trilateral Matching dialogue shows the flows for cancellation dialogue with both Traders, one a peer-to-peer deployment and one a multi-tenant deployment. The reversal of the 'Preliminary Match' between the Broker Confirmation and the Trade Confirmation and Broker Fee Information documents is explicitly shown for the multi-tenant Trader.

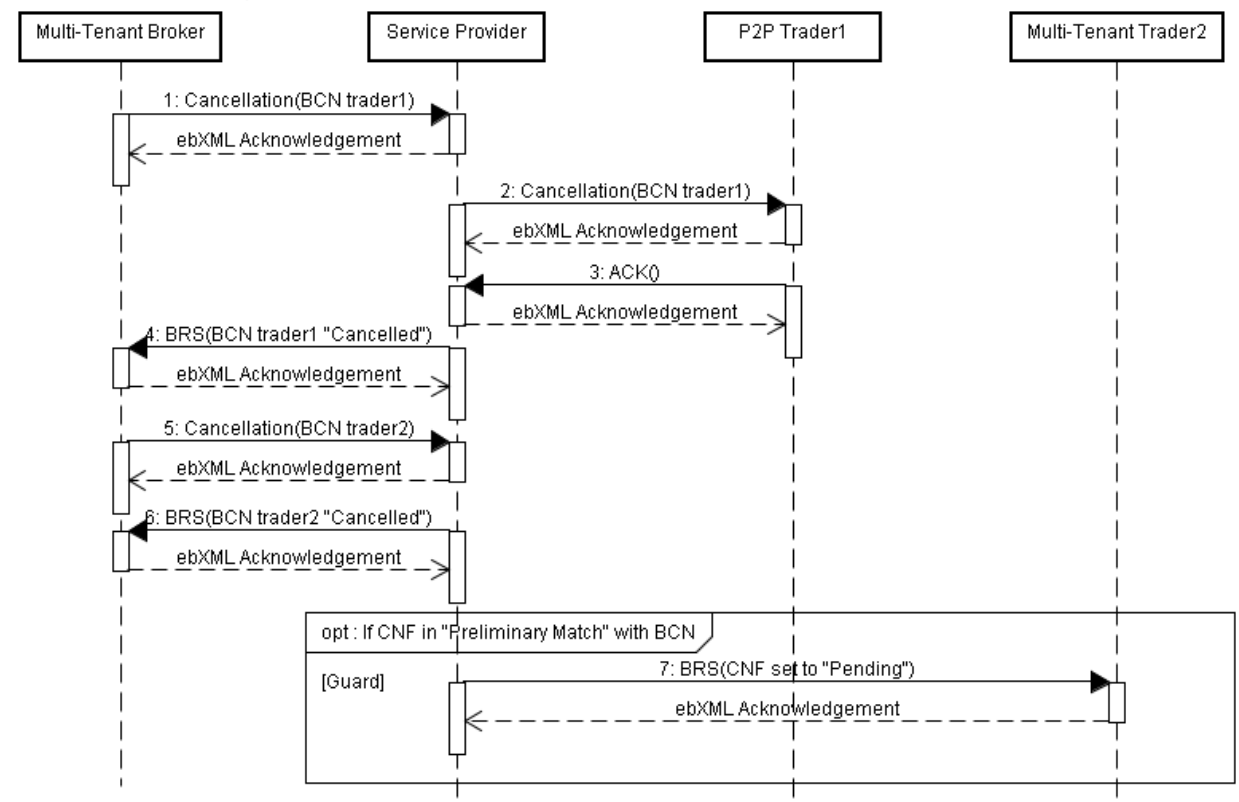


Figure 21 Document flows for the cancellation of a Broker Confirmation in the Trilateral Matching dialogue

5.5.4 Detailed Matched Document 'Tear-Up' Processing

The following sections show all the document flows involved in tearing-up an existing match between documents. Not all permutations of role and deployment option have been shown however the combinations required to demonstrate all document flows for each deployment option have been included.

5.5.4.1 Tear-Up of a Counterparty Match

Figure 22 Document flows for the tear-up of a pair of matched Trade Confirmation documents shows the flows for two counterparties agreeing to tear-up a match between two Trade Confirmation documents with one Trader using a service provider and the other using the peer-to-peer deployment.

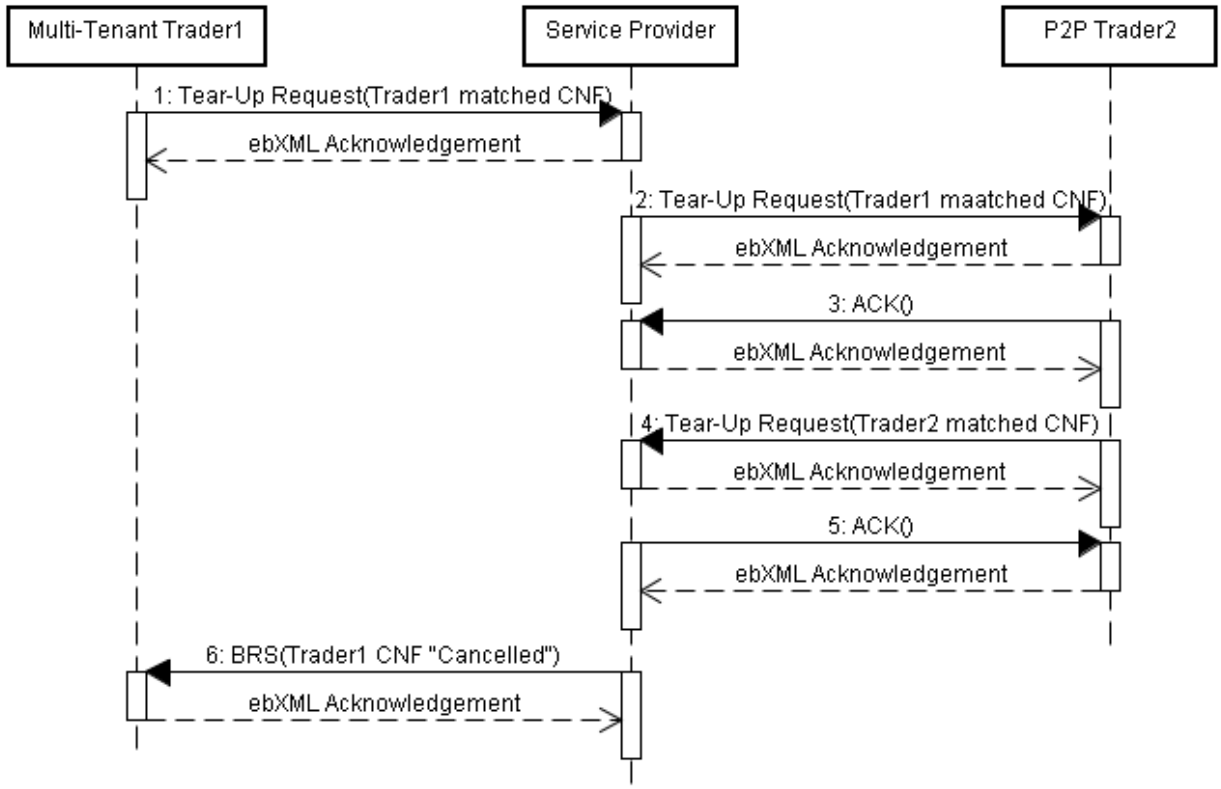


Figure 22 Document flows for the tear-up of a pair of matched Trade Confirmation documents

5.5.4.2 Tear-Up of a Broker Match

The tear-up of a match between a Trade Confirmation and a Broker Confirmation document can only be initiated by the Trader. Figure 23 Document flows for the tear-up of a match between a Trade Confirmation and a Broker Confirmation initiated by the Trader shows the flows for the dialogue when it is initiated by the Trader, note that the agreement of thee Broker is not required and the BCN is set directly to the Cancelled state. The dialogue alternative is included to show the document flow in the two deployment options for the Broker.

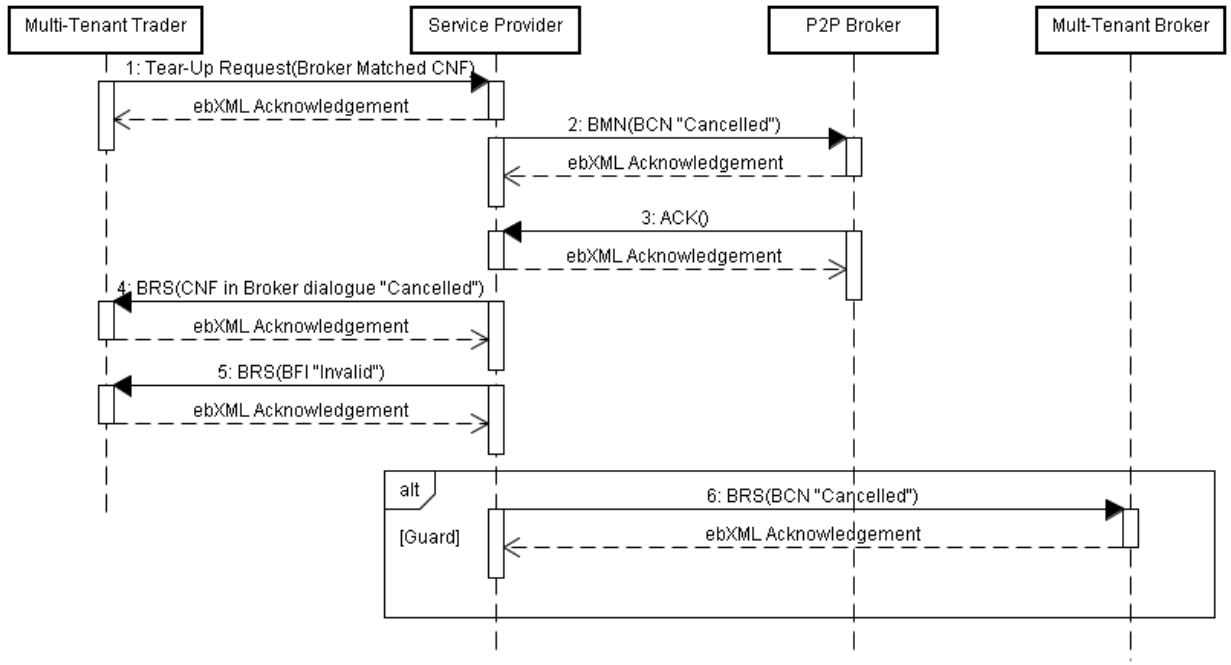


Figure 23 Document flows for the tear-up of a match between a Trade Confirmation and a Broker Confirmation initiated by the Trader

5.5.4.3 Tear-Up of a Trilateral Match

Figure 24 Document flows for reconciling the tearing-up of a previously matched deal shows the flows for the tear-up of a trilateral match between the Trade Confirmations for the two Traders and the resulting cancellation of the two matches (one for each Trader) with the Broker Confirmations for each side of the deal. The alternative flow is included to show what happens in both deployment options for the Broker.

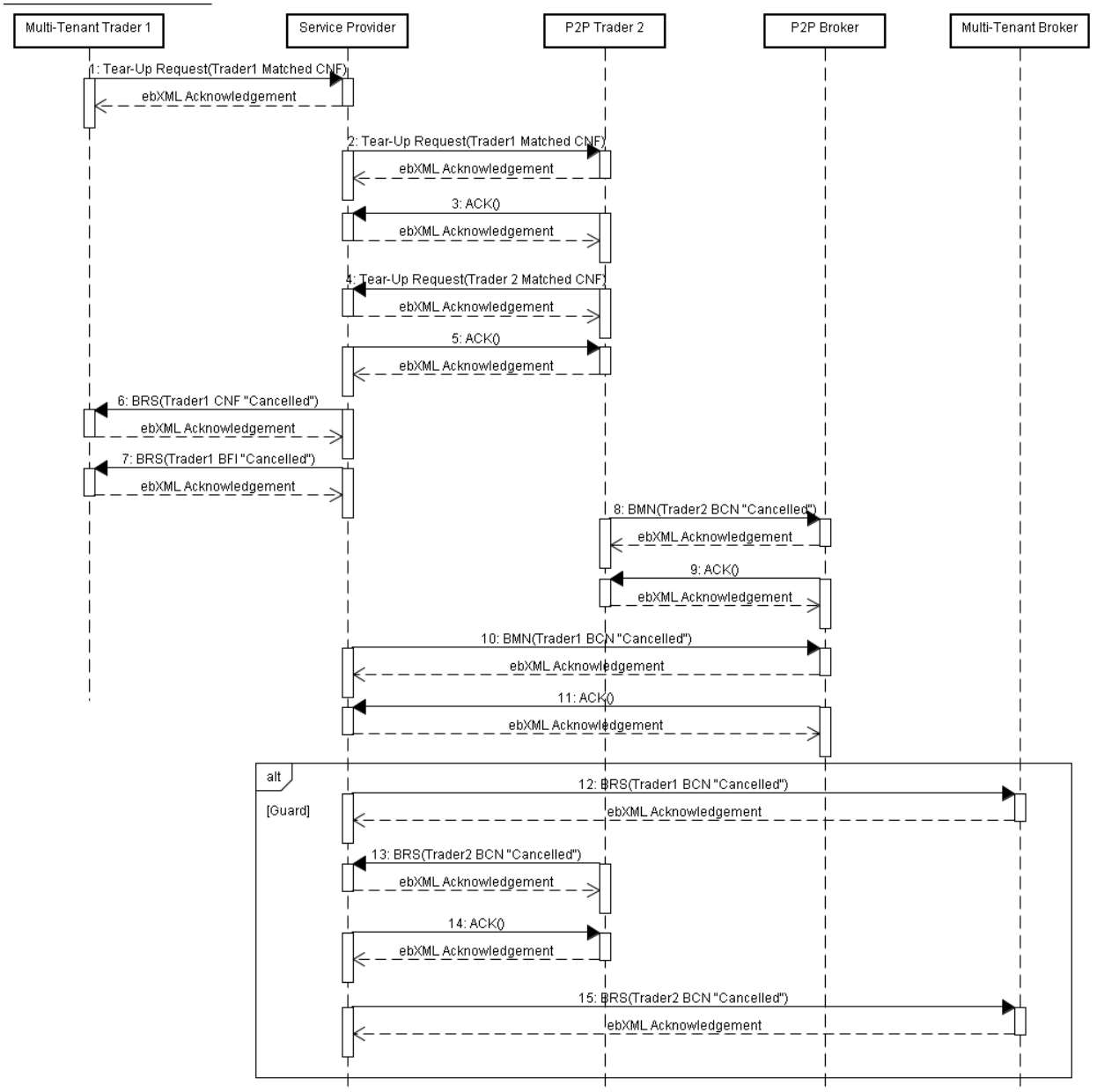


Figure 24 Document flows for reconciling the tearing-up of a previously matched deal

5.5.5 Detailed Submission and Results Processing

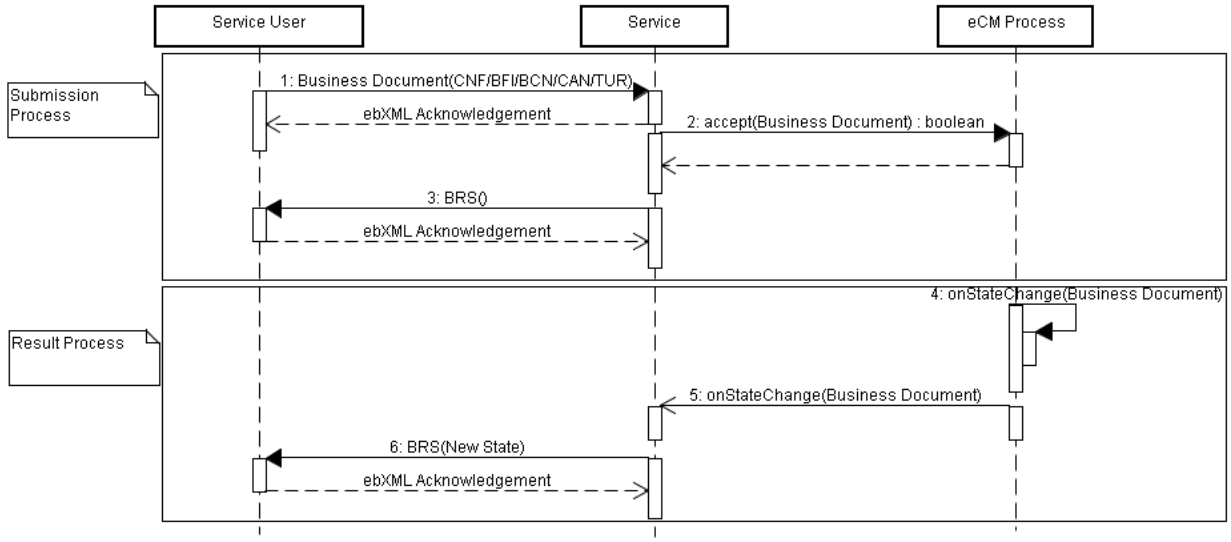


Figure 25 Document flows for the submission and receipt of results between the actors and the process

Figure 25 Document flows for the submission and receipt of results between the actors and the process shows the interface between the backend systems for the actors in the eCM process: Trader and Broker, and the process itself encapsulated as a 'Service' that can be deployed outside the organisation.

Note that the communication between the 'Service User' and the 'Service' must comply with the EFET electronic Communication Standard [1] and Profile [2].

5.5.6 Legal and Confidentiality Issues

For the legal validity of the electronic documents, EFET refers to the Master Agreement in place between participants for the legal issues. The Master Agreement will typically describe the legal specifications of electronic transactions.

Similarly the Master Agreement should contain a confidentiality clause applying to the trade confirmation data sent over to counter parties.

5.6 Business Document Processing

5.6.1 'Suggested Match' Processing

The Buyer is responsible for identifying Suggested Matches by correlating documents from within the set of Buyer and Seller side Trade Confirmation documents. The process is continuous whilst Trade Confirmation documents with the status of 'Pending' exist within the document set.

If an earlier version of a 'Pending' document is in the 'Matched' state then the set of Buyer and Seller side documents is further constrained to comprise only new versions of the current matching pair of counterparty documents.

Note that the mandatory, key fields used in the matching algorithm are defined by this standard as sufficient to adequately distinguish an underlying trade for the purposes of confirmation matching.

The following specific rules define when two documents may be considered identical for business purposes:

1. Two Trade Confirmation document field values (XML attributes or elements) are called identical if they consist of the same sequence of characters. Leading and trailing blanks are not accepted within document fields. Should the values be based on a numeric data type, the respective formatting rules apply. I.e., 1.0 matches with 1 or 100 matches 10E2. Equality of values is given if two numeric values are considered equal according to the XML Schema standard (http://www.w3.org/TR/xmlschema-2/).
2. Two Trade Confirmation document sections are called identical if the respective values of all key fields are identical. A section is defined as a sequence of XML elements. Such a sequence may either be the header part of a document or a repeatable section. Optional document fields (e.g."TradeTime") and substructures (e.g. "OptionDetails") count as part of the section.
3. Independent of the cardinality of an XML section, a repeatable section may be ordered or unordered. If a repeatable section is ordered, the order of the sections is defined by their sequential appearance.
4. Two lists of an ordered repeatable Trade Confirmation document section are called identical if both lists contain the same number of sections and if the n-th section of the one list is identical to the n-th section of the other list where n is between 1 and the length of the sequences.
5. Two lists of an unordered repeatable Trade Confirmation document section are called identical if there exists a one-to-one mapping between the sections of the one list and the sections of the other list such that each pair of sections is identical and all sections can be mapped.
6. Two different Trade Confirmation documents are considered identical if there exists
    - a one-to-one mapping between all corresponding lists of ordered repeatable sections of the two documents such that each pair of sequences is identical,
    - a one-to-one mapping between all corresponding lists of unordered repeatable sections of the two documents such that each pair of sequences is identical,
    - a one-to-one mapping between the two sets of remaining sections of the two documents such that each pair of sections is identical.

5.6.2 'Suggested Match Acceptance/Refusal' Processing

The Seller is responsible for validating Suggested Matches received from the Buyer with the aim of confirming a 'Match', as defined by the eCM Standards, between two documents with the set of Buyer and Seller side Trade Confirmation documents.

The Seller shall use information in the Match Suggestion document, received from the Buyer, uniquely identifying two documents. The Seller shall issue a MatchSuggestionAcceptance if the two documents are found to conform to the eCM Standard rules for identification of identical documents, otherwise a MatchSuggestionRefusal shall be issued by the Seller.

If the Seller issued a MatchSuggestionRefusal document, a related ReasonCode must be provided to the Buyer. Any further agreement will have to be done directly between the respective back office staff members.

Note that the matching dialogue between 'tenants' of the same shared process instance can be optimised to dispense with 'Suggested Match Acceptance/Refusal' Processing since the Seller and Buyer use the same and not independent instances of the process and document set, thereby limiting the the value of the 'independent' verification by the Seller of the 'suggested match' proposed by the Buyer. Conversely, the processing must be applied in the case of a distributed match as it is fundamental to the peer-to-peer processes that the Seller validate the proposal made by the Buyer.

5.6.3 'Trade Data' and Broker 'Match' Processing

Within the context of the Broker Confirmation dialogue two phases of match processing occur:

1. Trade Data Match processing, which compares trades data information held within the Trade and Broker Confirmation documents takes place first;

And optionally depending on the Trader's preference setting,

2. Broker Match Processing, which compares the Broker Fee Information document from the Trader with the brokerage fee fields within the Broker Confirmation document and which follows on from the successful pairing of a Trade Confirmation document with a Broker Confirmation document through the Trade Data Match processing

Trade Data Match processing is concerned with correlating Trade/Broker Confirmation documents based on mandatory, key fields that are defined by this standard as sufficient to adequately distinguish an underlying trade for the purposes of confirmation matching, from within the set of Trader and Broker side Confirmation documents.

The Trade Data Match process is similar to the 'Suggested Match' process but uses a subset of the mandatory, key fields as the broker does not hold all the information that a counterparty to the trade has and match processing is continuous whilst Trade/Broker Confirmation documents with the status of 'Pending' exist within the Trader/Broker document set.

If an earlier version of a 'Pending' document is in the 'Matched' state then the Trader/Broker document set is further constrained to comprise only new versions of the current matching pair of documents.

Broker Match processing is similar to 'Suggested Match Acceptance/Refusal' processing insofar as it is contingent on Trade Data Match processing and uses the unique DocumentID of the Trader Confirmation document output from that process to optionally retrieve the Broker Fee Information document which is then compared with the brokerage fee related data contained within the Broker Confirmation document.

5.6.4 Recommendations for 'Potential Match' Processing

Implementers are strongly advised to provide support to the user in the task of finding matching documents when a discrepancy has occurred. This standard therefore forsees the that 'potential match(es)' should be proposed when a 'Match' according to the algorithms defined in 'Suggested Match Acceptance/Refusal' Processing and 'Trade Data' and Broker 'Match' Processing cannot be established by the process.

The for a 'potential match' to exist between two documents the following key fields must match exactly (as described above) but other key fields need not match precisely.

- Buyer,

- Seller,
- Market,
- Commodity,
- TransactionType,
- DeliveryPoint,
- TradeDate,
- BrokerID,
- TotalVolumeUnit,
- Currency

5.6.5 Avoiding Race Conditions between two EFET Boxes

The states "Pending", "Potential Match", "MatchSuggested", and "Matched" reflect the processing sequence alongside the execution of the eCM protocol as defined in section 5.5, "Detailed Business Document Flows". This approach also avoids race conditions introduced by intermediate amendments that would lead to intermediate version changes and could spoil a match.

Moreover, whenever an Amendment is sent the new document must fully enter the process which in the case of the peer-to-peer processes includes entering the local and counterparty instance of the process before any later document is transferred that occurs later in the process. If the sending of an Amendment crosses the sending of a MatchSuggestion, the Seller will not respond to the MatchSuggestion unless a response for the Amendment is received. The Buyer, however, will reject this Amendment since the MatchSuggestion was sent before. Therefore, the Match will be processed based on the second-last version of the Seller's document.

6 Electronic Business Processes – by Document Types

This section has to be read in conjunction with Appendix A, "Definition of eCM Types and Codes".

The appendix provides the reference to the list of all the types and codes that are valid within the eCM. Wherever this document is referenced the codes associated with the attribute referenced must be obtained from this source. In particular the code lists contained in the appendix may evolve independently from this section.

6.1 Naming and Typing Conventions

Document rules check the validity of data within a given document against the document type definition.

Agreed abbreviations for document types:

- CNF = Confirmation
- REJ = Rejection
- MSU = Match Suggestion
- MSA = Match Suggestion Acceptance
- MSR = Match Suggestion Refusal
- CAN = Cancellation
- ACK = Acknowledgement
- BFI = Broker Fee Information
- BMN = Broker Match Notification
- BCN = Broker Confirmation
- TUR = Tear-Up Request
- BRS = Box Result

6.1.1 Partner Identification

The IDs used in Trade Confirmation, Match Suggestion, Match Suggestion Acceptance, Match Suggestion Refusal, Cancellation, Rejection and Acknowledgement documents will be globally unique IDs (EIC Codes) or Legal Entity Identifiers (LEI codes); if EIC codes are used then they must be used consistently throughout the document(s) and it LEI codes are used then they must be used consistently throughout the document(s), it is not permitted to identify Parties within a single document using both EIC and LEI codes.

6.1.2 Document IDs

Often, documents are listed in reporting tools, as XSL stylesheets, etc. To provide a common syntax that is comprehensible and maintains uniqueness, a rule for creating unique Document IDs is defined as follows:

A composition of the following components NOT exceeding a total character length of more then 50 characters in all:

- Document type abbreviation (e.g. "CNF" for Trade Confirmation)

- DateCode (8 characters, in yyyymmdd format),
- Locally & daily unique TradeID (or Strategy ID) (min. 10 characters) of the sender side
- "@"
- Sender identification, i.e. domain name or EIC Code of the sender.

Examples:

- CNF_20040610_1234567890@electrabel.com
- MSA_20040610_1234567890@11XELECTRABEL--Z

This document ID shall correspond with the MessageID of the ebXML Message Service and should be comprehensible for human users.

Note: *This is a convention but it is mandated for compliancy with the eCM Standard and must be used for document types as it is believed that it makes document tracking easier.*

6.1.3 Document Types

There is no DocumentType field any more since document types can be derived from the XML Schema reference in a document instance. Moreover, the root element can be used to derive the document type.

6.1.4 Rules for triggering Trader/Bilateral vs. Broker-only matches

The following field rules must be observed within the CNF document to ensure consistent handeling of bilateral and broker only matching:

(a) If 'ReceiverRole' identifies an entity in the 'Trader' role within the eCM process, then 'ReceiverID' MUST be one of 'BuyerID' or 'SellerID'

(b) If 'ReceiverRole' identifies an entity in the 'Broker' role within the eCM process, then an 'Agent' Section must exist and 'ReceiverID' must contain the same value as the 'BrokerID' field.

6.2 Trade Confirmation

6.2.1 Overview

Each field in a Trade Confirmation document is either a key or an informational field.

- Key fields are those fields that play a role in the definition of a match between two trade confirmation documents.
- Information fields are for information only and not used in matching.

All key fields used in matching are either mandatory or conditional, informational fields are optional

- Mandatory fields must always be included in a compliant document
- Conditional fields are mandatory only under certain circumstances which depend on the values of other data elements within an XML schema. Rules either within the following table or in a separate business rules section after the table are used to express the conditions.

6.2.2 Trade Confirmation – Document Root

Table 2: Specification of Trade Confirmation Elements

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Section: Document Header				
DocumentID	Mandatory	Identification-Type	Information	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1, "Naming and Typing Conventions". When a party receives a trade confirmation with an ID unknown to the receiver then the receiver must treat this document as the initial version of a new trade confirmation document. Otherwise the receiver must treat this document as an amendment of an already sent Trade Confirmation document (see field "Document Version").
Documents-Usage	Mandatory	UsageType	Information	"Test" or "Live"
SenderID	Mandatory	PartyType	Information	EIC Code of Sender
ReceiverID	Mandatory	PartyType	Information	EIC Code of Receiver, brokerID in case only Broker is involved.
ReceiverRole	Mandatory	RoleType	Information	Trader role applies if the document is being sent to the other party involved in the trade Agent role applies if the document is in effect a carbon copy of the main confirmation document.
Document-Version	Mandatory	VersionType	Information	The version number is always associated the Document ID. It is used to distinguish and order the initial Trade Confirmation document and all its amendments over time. A fixed first version number for the initial Trade Confirmation document is not defined (see field "Document ID"). When a party receives a Trade Confirmation document with an ID already used by the same sender (either a counterparty or its own ETRM) in a previous Trade Confirmation document then the receiver must first check if there exists a Trade Confirmation document from this sender with this ID and a lower version number and in an 'amendable' state. If this is not the case then the receiver must send a rejection document. Otherwise the Trade Confirmation document gets the new status "Amended" and the just received Trade Confirmation document gets status "Pending". All state processing is described in detail in Chapter 7, "State Processing".

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Market	Conditional	CountryCodeType	Key	If 'TransactionType' is a 'Financial Transaction[1]' Or if 'Commodity' is an 'Emissions Commodity' or "Coal" then this field: a) must be omitted; else this field is b) Mandatory and Key
Commodity	Conditional	Energy-ProductType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) must be omitted; else this field is b) Mandatory and Key
Transaction-Type	Mandatory	Transaction-Type	Key	
DeliveryPoint-Area	Conditional	AreaType	Key	If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key
BuyerParty	Mandatory	PartyType	Key	The EIC code of the party that initiates the eCM process and issues a Match Suggestion document. If 'TransactionType' = "FOR" or "PHYS_INX" then this field must be the EIC code of the buyer of the deal; If 'TransactionType' = "FXD_SWP" then this field must be the EIC code of the 'Fixed Price Payer' in the 'Fixed Price Information' section; If 'TransactionType' = "FLT_SWP" then then this field must be the greater (using ascending alphanumeric sorting) EIC code of the two parties to the deal e.g. "23X----------2" is greater than "23X----------1"; If 'TransactionType' = "OPT" or "OPT_PHYS_INX" or "OPT_FIN_INX" or "OPT_FXD_SWP" or "OPT_FLT_SWP" then this field must be the EIC code for the 'Option Holder'.

1 'Financial Transaction' is a collective term defined for some values of 'TransactionType' See Appendix A, "Definition of eCM Types and Codes".

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
SellerParty	Mandatory	PartyType	Key	The EIC code of the party that receives a Match Suggestion document. If 'TransactionType' = "FOR" or "PHYS_INX" then this field must be the EIC code of the seller of the deal; If 'TransactionType' = "FXD_SWP" then this field must be the EIC code of the 'Float Price Payer' in the 'Float Price Information' section; If 'TransactionType' = "FLT_SWP" then this field must be the lesser (using ascending alphanumeric sorting) EIC code of the two parties to the deal e.g. "23X----------1" is less than "23X----------2"; If 'TransactionType' = "OPT" or "OPT_PHYS_INX" or "OPT_FIN_INX" or "OPT_FXD_SWP" or "OPT_FLT_SWP" then this field must be the EIC code for the 'Option Writer'.
LoadType	Conditional	ContractType	Key	See TRC010 below for business rule details. If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' or "Coal" then this field: a) must be omitted; else this field is b) Mandatory and Key
Agreement	Mandatory	AgreementType	Key	Reference to Master Agreement Model Contract Any valid value as defined in appendix A.3, "eCM Field Types", may be used.
Currency	Mandatory	CurrencyCodeType	Key	With boolean Attribute "UseFractionUnit" to indicate that "Pence" is used instead of "GBP". This attribute becomes mandatory when issuing CNF documents for the networks that utilize pence. (i.e. UK NBP and Belgium) Note: For Financial Transactions this is the "Settlement Currency"
TotalVolume	Mandatory	QuantityType	Key	If 'Commodity' 'is an 'Emissions Commodity' then the value of this field must be Integer; between 1 and 8 significant figures. Note: For Financial Transactions this is the "Total Notional Quantity" Note: For Financial Transactions this field shall be rounded to 2 decimal places.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
TotalVolume-Unit	Mandatory	UnitOf-MeasureType	Key	If 'Commodity' 'is an 'Emissions Commodity' then the value of this field must be "EUA" thus with "Total Volume" expressing the total number of EUA certificates in the underlying transaction. Note: For Financial Transactions this is the "Notional Capacity Unit"
TradeDate	Mandatory	DateType	Key	This date is based on clock time, not a specific time zone. See Business Rule TRC021 for UK Gas Day rule.
TradeTime	Optional	TimeType	Information	This time is expressed as clock time.
TraderName	Optional	NameType	Information	
CapacityUnit	Conditional	UnitOf-MeasureType	Key	If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key
PriceUnit/-Currency	Conditional	CurrencyCode Type	Key	The currency unit used to express this price unit must fit to the currency given in field "Currency". With Boolean Attribute "UseFractionUnit" = 'TRUE' to indicate for example, that "Pence" is used instead of "GBP". This attribute must be set = "TRUE" when issuing CNF documents for the networks that utilize pence or other fractional units. (i.e. UK NBP and Belgium). If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
PriceUnit/-CapacityUnit	Conditional	UnitOf-MeasureType	Key	Shall be expressed in units of rate of flow (power) rather than energy, for example, a gas deal on the UK network will be expressed as: p/ThermPerDay; or for a power deal EUR/MW 2. If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key.
Total-ContractValue	Conditional	PriceType	Information	An XML choice below TradeConfirmation. If 'TransactionType' = " FOR" or "OPT" then this field: a) is Mandatory and Key otherwise b) must be omitted Note: this is an absolute value and must be represented as an unsigned value regardless of wether thia is the 'Buyer's' or the 'Seller's' document or if the 'Price' is a positive or negative amount.
Rounding	Conditional	RoundingType	Key	If 'TransactionType' is a 'Financial Transaction' or "PHYS_INX" or "OPT_PHYS_INX" then this field: a) is Mandatory and Key otherwise b) must be omitted For the transaction types "PHYS_INX" and "OPT_PHYS_INX". types, see TRC023.
Common-Pricing	Conditional	CommonPricingType	key	If 'TransactionType' is a 'Financial Transaction', or "PHYS_INX" or "OPT_PHYS_INX" then this field: a) is Mandatory and Key otherwise b) must be omitted If present and if all holiday calendars happen to be the same then Common Pricing must, by default, be set to 'True' If present and if there is only one Commodity Reference section in the document then this value must be set to

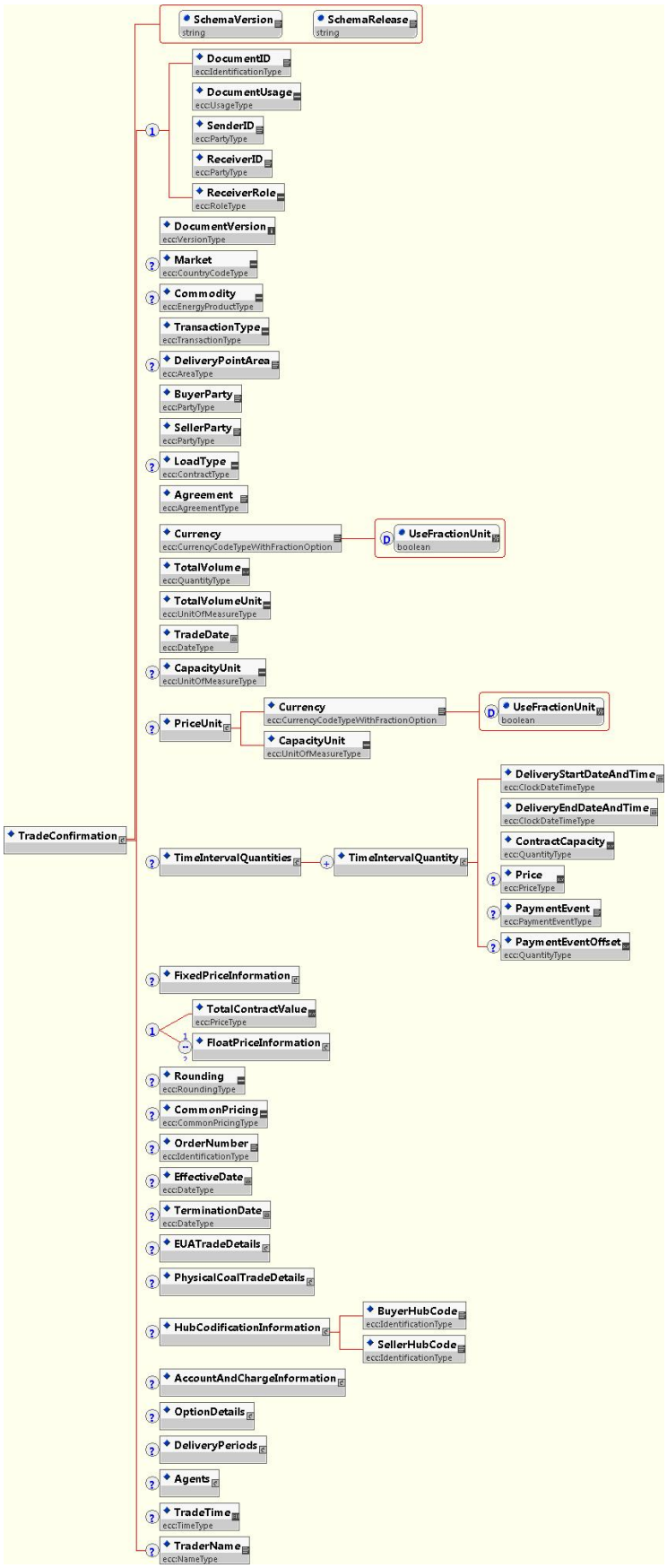
2 It is a known issue that in implementation energy units have been used e.g. EUR/MWh, p/Therm

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
				'False' since Common Pricing is not relevant if there is only one price source.
OrderNumber	Conditional	IdentificationType	Key	If 'TransactionType' is a 'Financial Transaction', or "PHYS_INX" or "OPT_PHYS_INX" then this field: a) is Mandatory and Key if the deal has an Order Number otherwise b) must be omitted
EffectiveDate	Conditional	DateType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key otherwise b) must be omitted "Effective Date" is ISDA terminology, means Start Date
Termination-Date	Conditional	DateType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key otherwise b) must be omitted "Termination Date" is ISDA terminology, means End Date
Conditional Ordered Repeatable Section below TradeConfirmation: TIME INTERVAL QUANTITIES (1-N) Ordered by adjacent intervals. This section must be used when TransactionType is: "FOR", "OPT", "PHYS_INX", "OPT_PHYS_INX". This section must not be used when TransactionType is a 'Financial Transaction' This section must not be used when 'Commodity' 'is an 'Emissions Commodity'.				
DeliveryStart-DateAndTime	Mandatory	ClockDate-TimeType	Key	Format: As defined in the XML Schema Standard. This date and time are expressed in clock time. Within this ordered repeatable section this date and time must either be the same as or be after the date and time given in the previous Delivery End Date and Time field (if it exists). If 'Commodity' is a 'Coal' then the Time part of this field must be set to "00:00:00"

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
DeliveryEnd-DateAndTime	Mandatory	ClockDate-TimeType	Key	Format: As defined in the XML Schema Standard. This date and time are expressed in clock time. This point in time is exclusive with respect to the specified delivery period, i.e. this point in time is the first second after the specified delivery period ended. Hence this delivery end date and time must be after the associated delivery start date and time. If 'Commodity' is a 'Coal' then the Time part of this field must be set to "00:00:00"
Contract-capacity	Mandatory	QuantityType	Key	See appendix A.1, "Core Components".
Price	Conditional	PriceType	Key	If the element "TotalContractValue" is used then this field must be present. Otherwise it must not be present.
Payment-Event	Conditional	PaymentEvent Type	Key	If 'Commodity' is NOT "Gas" OR "Power" then this field: a) is Optional and Key matching if present otherwise b) must be omitted
Payment-EventOffset	Conditional	QuantityType	Key	If 'Commodity' is NOT "Gas" OR "Power" then this field: a) is Optional and Key matching if present otherwise b) must be omitted Positive offsets indicate a date after the Payment Event and negative offsets indicate a date prior to the Payment Event, a zero indicates the date of the Payment Event. Offsets are in Calendar days (holiday calendards are ignored).
Conditional Unordered Repeatable Section below TradeConfirmation: Agents (0-N) For each agent specified in a Trade Confirmation document the following fields must be present.				
AgentType	Mandatory	AgentType	Key	
AgentName	Optional	NameType	Information	
Details for 'AgentType' = "ECVNA" as XML choice below Agent This agent must appear if and only if the market has been defined as GB and the commodity has been defined as a power commodity				
BSCPartyID	Mandatory	BSCPartyIDTy pe	Key	
BuyerEnergy-Account	Mandatory	Energy-AccountType	Key	

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
SellerEnergy-Account	Mandatory	Energy-AccountType	Key	
BuyerID	Mandatory	BSCPartyIDType	Key	
SellerID	Mandatory	BSCPartyIDType	Key	
Details for AgentType = ”Broker”, as XML choice below Agent				
BrokerID	Mandatory	BrokerIDType	Key	
Conditional Section: HUB CODIFICATION INFORMATION – This section must be present if and only if the value of field “Commodity” is equal to “Gas” otherwise it must not be present.				
BuyerHub-Code	Mandatory	IdentificationType	Key	Identifying the Buyer with the hub network. For the UK market, this is the “Buyer AT Link Reference”.
SellerHub-Code	Mandatory	IdentificationType	Key	Identifying the Seller with the hub network. For the UK market, this is the “Seller AT Link Reference”.
Conditional Section below TradeConfirmation: ACCOUNT AND CHARGE INFORMATION This section must be present if and only if the value of field “Commodity” is equal to “Power” and the market has been defined as GB.				
SellerEnergy-Account-Identification	Mandatory	IdentificationType	Key	Consumption or production account.
BuyerEnergy-Account-Identification	Mandatory	IdentificationType	Key	Consumption or production account.
Notification-Agent	Optional	PartyType	Key	Party responsible for notifying the transaction to the Energy Contract Volume Aggregation Agent (ECVAA).
Transmission-charge-Identification	Mandatory	IdentificationType	Key	Indicates how transmission charges are allocated. The requirements are either Schedule 5 on or Schedule 5 off.

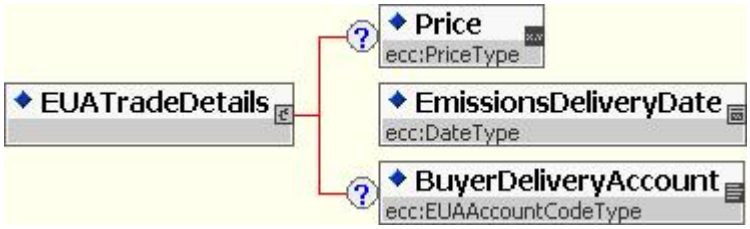
6.2.3 Trade Confirmation Section XML Schema



6.2.4 Trade Confirmation – EUA Trade Details

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below TradeConfirmation: EUA Trade Details This section must be present if and only if 'Commodity' 'is an 'Emissions Commodity'.				
Price	Conditional	PriceType	Key	If the element "TotalContractValue" is used then this field must be present. Otherwise it must not be present.
Emissions-DeliveryDate	Mandatory	DateType	Key	e.g. 1st December 2005 This will be the contractual delivery date. Note that in some cases the contractual delivery date may differ from the actual delivery date due to the contractual delivery date falling on a non business day in one or both registry countries.
Buyer-Delivery-Account	Optional	EUAAccountCodeType	Infomation	

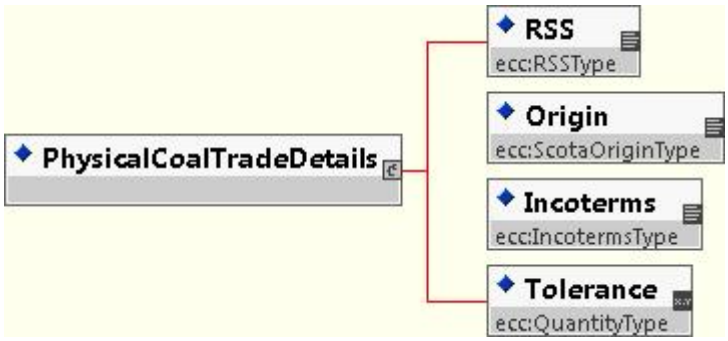
6.2.5 EUA Trade Details Section XML Schema



6.2.6 Trade Confirmation – Physical Coal Trade Details

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below TradeConfirmation: Physical Coal Trade Details This section must be present if and only if 'Commodity' 'is "Coal" and 'TransactionType' is "FOR", "PHYS_INX", "OPT_PHYS_INX" or "OPT".				
RSS	Mandatory	RSSType	Key	
Origin	Mandatory	ScotaOriginType	Key	
Incoterms	Mandatory	IncotermsType	Key	
Tolerance	Mandatory	QuantityType	Key	The percentage tolerance.

6.2.7 Physical Coal Trade Details Section XML Schema



6.2.8 Trade Confirmation – Option Details

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional section below TradeConfirmation: OPTION DETAILS This section must be present if and only if the value of field "Transaction Type" = "OPT" or "OPT_PHYS_INX" or "OPT_FXD_SWP" or "OPT_FLT_SWP" or "OPT_FIN_INX".				
OptionsType	Mandatory	OptionType	Key	
OptionWriter	Mandatory	PartyType	Key	The EIC code of the "Seller Party"
OptionHolder	Mandatory	PartyType	Key	The EIC code of the "Buyer Party"
OptionStyle	Mandatory	OptionStyle-Type	Key	If 'TransactionType' = "OPT" then the value for this field must be only "European" or "American" to maintain backwards compatibility with earlier versions of the eCM Standard.
StrikePrice	Mandatory	PriceType	Key	See business rules TRC013 and TRC016
IndexStrike-PriceStyle	Conditional	IndexStrikePriceStyleType	Key	If 'TransactionType' = "OPT_PHYS_INX" or "OPT_FIN_INX" and 'Strike Price' = "0" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule TRC013
SecondStrike-Price	Conditional	PriceType	Key	If 'OptionStyle' = "Collar" and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule TRC016

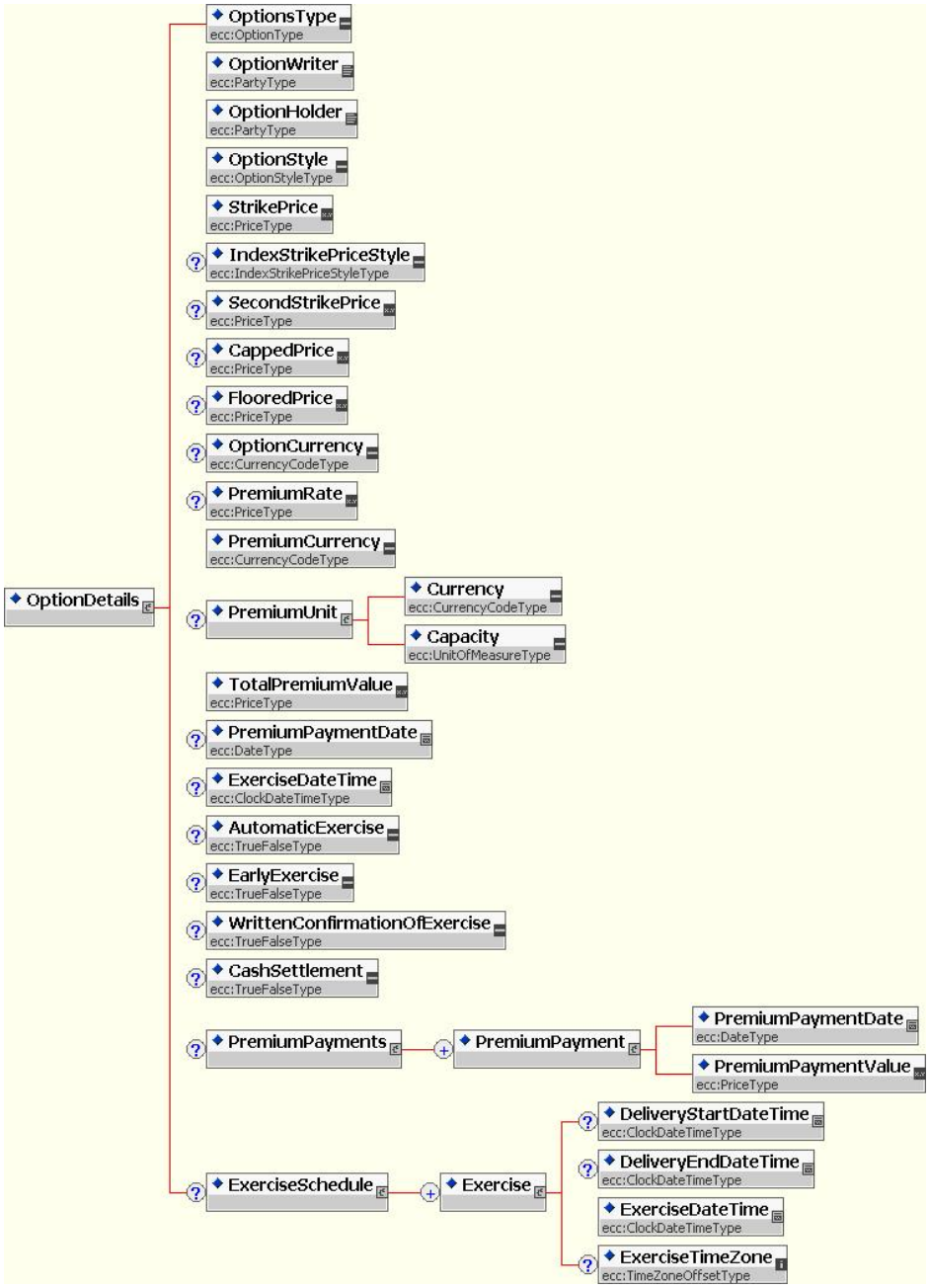
Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
CappedPrice	Conditional	PriceType	Key	If 'OptionType' = "Capped_Call" and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule TRC015
FlooredPrice	Conditional	PriceType	Key	If 'OptionType' = "Floored_Put" and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule TRC015
Option-Currency	Conditional	CurrencyCode Type	Key	The currency of the Strike Price, Second Strike Price, Capped Price, and the Floored Price. If any of these fields are present and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted Note: If the currency is not known use the currency of the underlying product.
PremiumRate	Conditional	PriceType	Key	If 'Transaction Type' = OPT_FIX_SWP, OPT_FLT_SWP or OPT_FIN_INX then this field: a) must be omitted; else this field is b) Mandatory and Key
Premium-Currency	Mandatory	CurrencyCode Type	Key	
Premium-Unit/Currency	Conditional	CurrencyCode Type	Key	If 'Commodity' 'is an 'Emissions Commodity' or 'Transaction Type' = OPT_FIX_SWP, OPT_FLT_SWP or OPT_FIN_INX then this field: a) must be omitted; else this field is b) Mandatory and Key

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Premium-Unit/Capacity	Conditional	UnitOfMeasure Type	Key	If 'Commodity' 'is an 'Emissions Commodity' or 'Transaction Type' = OPT_FIX_SWP, OPT_FLT_SWP or OPT_FIN_INX then this field: a) must be omitted; else this field is b) Mandatory and Key
Total-Premium-Value	Mandatory	PriceType	Key	Must equal the sum of each of the Premium Values in all the Premium Payments. Note: For Financial Transactions this field shall be rounded to 2 decimal places.
Premium-PaymentDate	Conditional	DateType	Key	If 'TransactionType is a NOT a 'Financial Transaction' or "OPT_PHYS_INX" then this field: a) is Mandatory and Key otherwise b) must be omitted Note: Not used for new TransactionTypes introduced in v3.3 where it has been replaced by the repeated section Premium Payments.
ExerciseDate-Time	Conditional	ClockDate-TimeType	Key	If 'Commodity' 'is an 'Emissions Commodity' then this field is: a)Mandatory and Key; else this field b) must be omitted Note: this is the opposite of the rule used elsewhere. Note: All times must be in CET
Automatic-Exercise	Conditional	TrueFalseType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key else this field is b) must be omitted
EarlyExercise	Conditional	TrueFalseType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key else this field is b) must be omitted
Written-Confirmation-OfExercise	Conditional	TrueFalseType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key else this field is b) must be omitted

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Cash-Settlement	Conditional	TrueFalseType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key else this field is b) must be omitted
Conditional Ordered Repeatable Section below OptionDetails: Premium Payments (1-N) Ordered by "Premium payment date" Must only be used if 'TransactionType is a 'Financial Transaction' or "OPT_PHYS_INX". Note: Only used for new TransactionTypes introduced in v3.3 where it has replaced the field 'Premium Payment'.				
Premium-PaymentDate	Mandatory	DateType	Key	
Premium-Payment-Value	Mandatory	PriceType	Key	The sum of the Premium Payment Values must equal the Total Premium Value
Conditional Ordered Repeatable Section below OptionDetails: EXERCISE SCHEDULE (0-N) This section must not be used if 'Commodity' is an 'Emissions Commodity' or if 'Option Style' = "Cap" or "Floor" or "Collar" otherwise this section must be present. This section is ordered by 'DeliveryStartDateTime', if present (see TRC012).				
DeliveryStart-DateTime	Conditional	ClockDate-TimeType	Key	If 'TransactionType' = "OPT" or 'OPT_PHYS_INX' then this field: a) is mandatory and key, else this field b) must be omitted This date and time must be after the date and time specified in the previous 'Delivery-StartDateTime' field. Time zone of delivery point
DeliveryEnd-DateTime	Conditional	ClockDate-TimeType	Key	If 'TransactionType' = "OPT" or 'OPT_PHYS_INX' then this field: a) is mandatory and key, else this field b) must be omitted Time zone of delivery point
ExerciseDate-Time	Mandatory	ClockDate-TimeType	Key	If 'TransactionType' = "OPT" or 'OPT_PHYS_INX' then this field: a) must be in the time zone of delivery point, else this field b) must be expressed in UTC

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
ExerciseTime-Zone	Optional	TimeZoneOffsetType	Information	If 'TransactionType' = "OPT" then this field: a) must be omitted, else this field b) Optional and Information Must be an offset to UTC

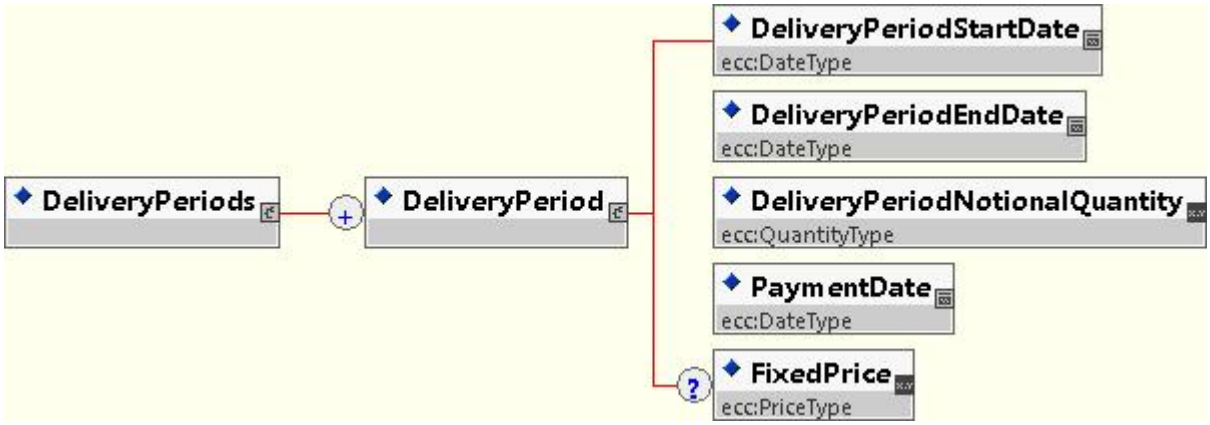
6.2.9 Options Details Section XML Schema



6.2.10 Trade Confirmation – Delivery Periods Details

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Ordered Repeatable Sub-Section below TradeConfirmation: Delivery Periods (0-N) Must be present if 'TransactionType' is a 'Financial Transaction', otherwise must not be present. Ordered by adjacent intervals				
Delivery-PeriodStart-Date	Mandatory	DateType	Key	The first start date must be equal to the Effective Date. Every start date except the first one must be the following date of the preceding Delivery Period End Date (start date > previous end date).
Delivery-PeriodEnd-Date	Mandatory	DateType	Key	The last end date must be equal to the Termination Date. This date is inclusive with respect to the specified period, i.e. this date is the last day on which the specified period ended. Hence this period end date must be on or after the associated period start date. In the case of a 1-day swap the Delivery Period Start Date = Delivery Period End Date.
Delivery-Period-Notional-Quantity	Mandatory	QuantityType	Key	This uses the UoM defined for "Notional Capacity Unit" which is contained in the 'Total Volume Unit' field in the Trade Confirmation section
PaymentDate	Mandatory	DateType	Key	Explicit date.
FixedPrice	Conditional	PriceType	Key	If 'TransactionType' = "FXD_SWP" or "OPT_FXD_SWP" this field: 1) must be Mandatory and Key else it 2) must be omitted This is the percentage scaling factor of the 'World Scale Rate' for a wet freight swap.

6.2.11 Delivery Periods Section XML Schema

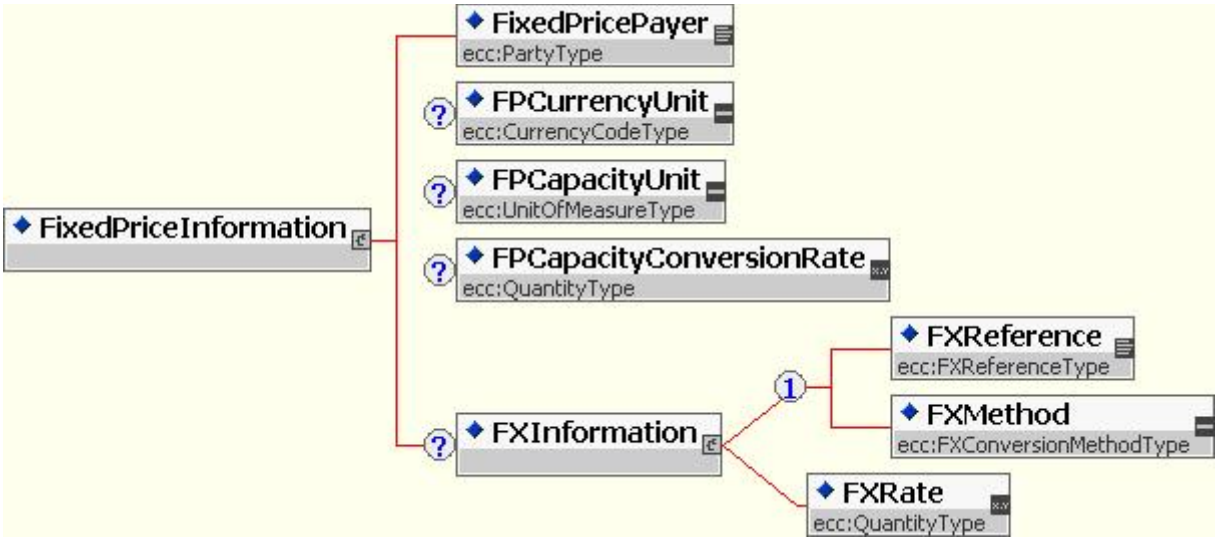


6.2.12 Trade Confirmation – Fixed Price Information

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below TradeConfirmation: Fixed Price Information (0-1) Must be present if Transaction Type = "FXD_SWP" or "OPT_FXD_SWP" otherwise must not be present				
FixedPrice-Payer	Mandatory	PartyType	Key	If 'TransactionType' = "FXD_SWP" then this field = "Buyer Party" Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Type' = "Call" or "Capped_Call" then this field = "Option Holder" Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Type' = "Put" or "Floored_Put" then this field = "Option Writer"
FPCurrency-Unit	Conditional	CurrencyCode Type	Key	If 'FP Currency Unit' <> 'Settlement Currency' which is contained in the 'Currency' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted.
FPCapacity-Unit	Conditional	UnitOfMeasure Type	Key	If 'FP Capacity Unit' <> 'Notional Capacity Unit' which is contained in the 'Total Volume Unit' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted. Shall be expressed in energy units of the underlying commodity. (Metric tons, gallons).
FPCapacity-Conversion-Rate	Conditional	QuantityType	Key	If 'FP Capacity Unit' is present then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted Conversion rate from the FP Capacity Unit to the Notional Capacity Unit for the deal.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below FixedPriceInformation: FX Information (0-1) Must be presented if 'FP Currency Unit' is present otherwise it must not be present				
FXReference	Conditional	FXReferenceType	Key	Conversion rate from the 'FP Currency Unit' to the 'Settlement Currency' unit for the deal which is contained in the 'Currency' field in the Trade Confirmation section. Must NOT be present if FX Rate is present
FXMethod	Conditional	FXConversionMethodType	key	Must be present if FX Reference is present.
FXRate	Conditional	QuantityType	Key	Conversion rate from the 'FP Currency Unit' to the 'Settlement Currency' unit for the deal which is contained in the 'Currency' field in the Trade Confirmation section. Must NOT be present if FX Reference is present

6.2.13 Fixed Price Information Section XML Schema



6.2.14 Trade Confirmation – Float Price Information

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Ordered Repeatable Section below TradeConfirmation and as Choice next to TotalContractValue: Float Price Information (1-2) Must be presented if 'TransactionType' is a 'Financial Transaction' or "PHYS_INX" or "OPT_PHYS_INX" otherwise it must not be present. If 'TransactionType' = "FXD_SWP" or "OPT_FXD_SWP" or "OPT_FIN_INX" or "PHYS_INX" or "OPT_PHYS_INX" only one section must be filled. If TransactionType = "FLT_SWP" or "OPT_FLT_SWP" two sections must be filled. Ordered by ascending value of the EIC Code for Float Price Payer				

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
FloatPrice-Payer	Mandatory	PartyType	Key	If 'TransactionType' = "FXD_SWP" then this field = 'Seller Party' Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Style' = "Call" then this field = 'Option Writer' Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Style' = "Put" then this field = 'Option Holder' Else if 'TransactionType' = "PHYS_INX" then this field = 'Buyer Party' Else if 'TransactionType' = "OPT_ PHYS_INX" and 'Option Style' = "Call" then this field = 'Option Holder' Else if 'TransactionType' = "OPT_ PHYS_INX" and 'Option Style' = "Put" then this field = 'Option Writer' Else if 'TransactionType' = "FLT_SWP" then this field is the payer of this leg and is the Spread Payer is a spread exists for non-basket deals. The purpose of this rule is to ensure that the spread is applied consistently to the same leg and spread payer. This constraint must not apply if there is more than one 'Commodity Refefrence' section in 'float Price Information'
FormulaID	Conditional	IdentificationType	Key	If this transaction uses a Formula ID then this field: 1) is Mandatory and Key Otherwise 2) it must be omitted. Values are defined on a bilateral basis or are taken from Static Data at www.efet.org All 'Financial Transactions' or "PHYS_INX" or "OPT_PHYS_INX" are permitted to use "Formula ID" as an alternative to the 'CommodityReference' Section within the 'FloatingPriceInformation' section. If 'TransactionType' = "FLT_SWP" or "OPT_FLT_SWP", then if the 'FloatPrice-Information' section [1] (leg 1) uses "FormulaID", then 'FloatPriceInformation' section [2] (leg 2) MAY also use "FormulaID" (Note: The values for 'Fomula-ID' can be the same in each leg). A leg using the 'FormulaID' section may be mixed with a leg using the 'CommodityReference' section. Also see Business Rule TRC014.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below Float Price Information: Formula Spread Information (0-1) Must NOT be present if 'Formula ID' is Not present. If 'Formula ID' is present then must be present if 'Spread Amount' is a +ve amount, a –ve amount otherwise it must be omitted.				
SpreadPayer	Mandatory	PartyType	Key	Must be the "Float Price Payer"
Spread-Amount	Mandatory	PriceType	Key	If 'Spread Rate' is present then this field Must be omitted Else Must be present. Can be a positive or negative value signifying the amount in the 'Currency' or 'Spread Currency Unit'
SpreadRate	Conditional	QuantityType	Key	If 'Spread Amount' is present then this field Must be omitted Else Must be present. Can be a positive or negative value.
Spread-CurrencyUnit	Conditional	CurrencyCode Type	Key	If 'SpreadRate' is present then this field Must be omitted Else Must be present. If 'Spread Currency Unit' <> 'Settlement Currency' which is contained in the 'Currency' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted. Note: The spread must always be in the Notional Capacity Unit
Conditional Section below Formula Spread Information: FX Information (0-1) Must be present if 'Spread Currency Unit' is present otherwise must not be present.				
FXReference	Conditional	FXReferenceType	Key	Conversion rate from the Spread Currency Unit to the Settlement Currency Unit for the deal. Note: this is NOT the conversion to the Index Currency Unit for the Commodity Reference but to the Settlement Currency Unit. Must be present if Spread Information FX Rate is NOT present.
FXMethod	Conditional	FXConversion MethodType	Key	Must be present if Spread Information FX Reference is present.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
FXRate	Conditional	QuantityType	Key	Conversion rate from the Spread Currency Unit to the Settlement Currency Unit for the deal. Must NOT be present if Spread Information FX Reference is present
Ordered Repeatable Sub-Section below FloatPriceInformation: Commodity References (0-N) Ordered by ascending value of Commodity Reference Price Must Not be present if 'Formula ID' is present.				
Commodity-Reference-Price	Mandatory	ISDACommo-dityDefinit-ionsType	Key	Each value appearing in this section must be unique. Refer to www.EFET.org Static Data section for a list of valid values. If Transaction Type = "PHYS_INX" or "OPT_PHYS_INX" then the referenced commodity index must be treated as referring to the actual volume weighted prices collected on the Pricing Date otherwise it must be treated as an average of the price as defined in the Specified Price Note: Only long names for ISDA defined Commodity References are permitted. Note: If a Commodity Reference has been defined for a basket of other Commodity References then use the basket reference rather than constructing the basket from the individual Commodity Refernces.
Index-Commodity	Mandatory	IndexCom-modityType	Key	
Index-CurrencyUnit	Mandatory	Currency-CodeType	Key	
Index-CapacityUnit	Mandatory	UnitOf-MeasureType	Key	
SpecifiedPrice	Mandatory	SpecifiedPrice-Type	Key	
Factor	Mandatory	QuantityType	Key	
DeliveryDate	Mandatory	Delivery-DateType	Key	
Multiplier	Conditional	QuantityType	Key	If 'IndexCommodity' = "Time_Charter" then this field 1) is Mandatory and Key Otherwise 2) it must be omitted Default value = "1"

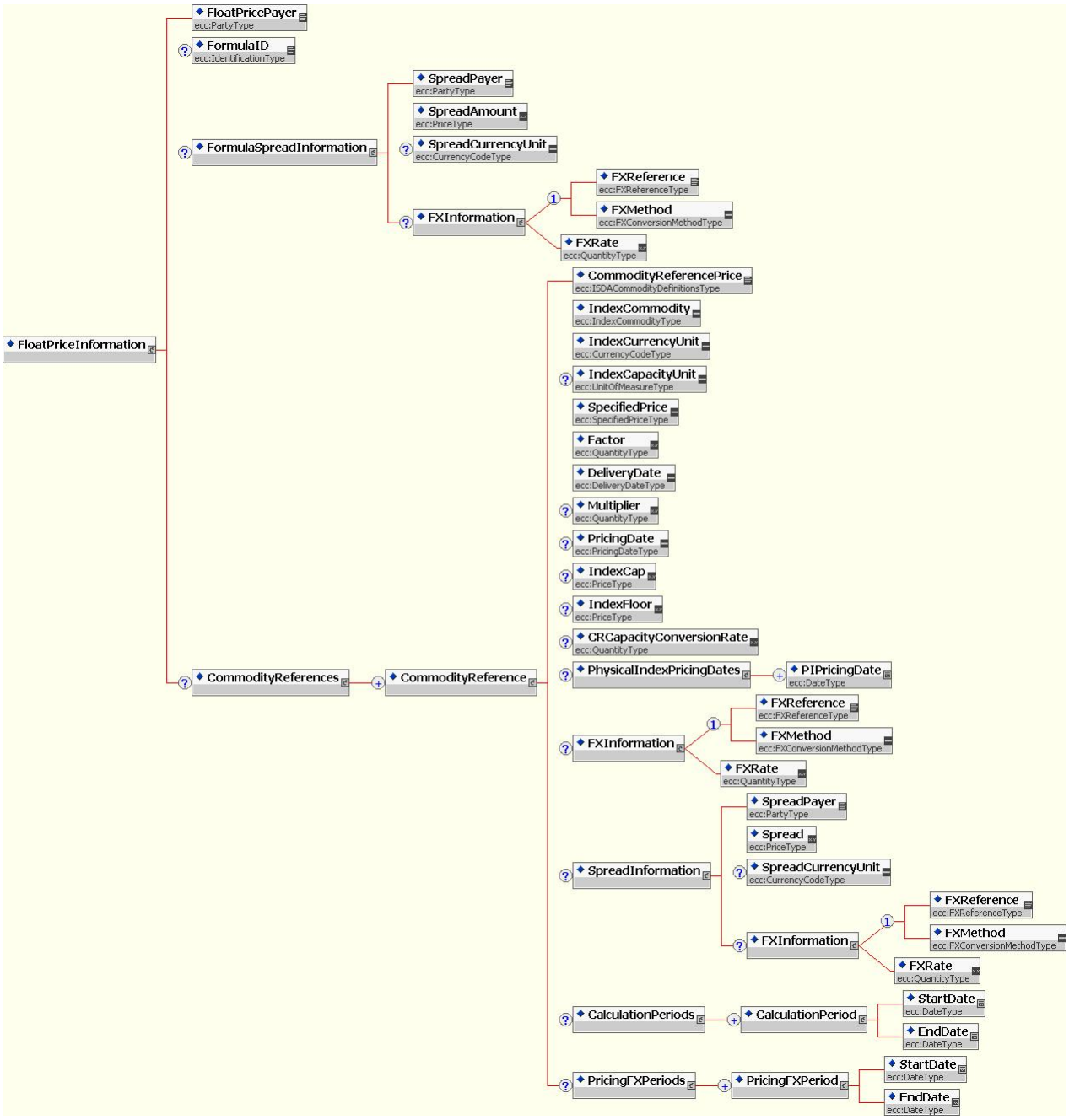
Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
PricingDate	Conditional	PricingDate-Type	Key	If 'TransactionType' = "PHYS_INX" or "OPT_PHYS_INX" then this field must be omitted and replaced by use of the Physical Index Pricing Dates section. The date on which a prices are taken for the underlying index.
IndexCap	Optional	PriceType	Key	This field must be present if and only if the specified index has a cap or collar. If present then it is matched.
IndexFloor	Optional	PriceType	Key	This field must be present if and only if the specified index has a floor or collar. If present then it is matched.
CRCapacity-Conversion-Rate	Conditional	QuantityType	Key	If 'Index Capacity Unit' <> 'Notional Capacity Unit' which is contained in the 'Total Volume Unit' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted. Conversion rate from the CR Capacity Unit to the Notional Capacity Unit for the deal. For some basket deals the 'Index Capacity Unit' may be different to the 'Notional Capacity Unit' and yet there is no conversion rate since the price will be used at 'face value' with out conversion, examples of such deals are 'Dark Spreads' where an 'Emissions' index is combined with a 'Coal' index both may use Tonnes or Tons but the Notional Capacity Unit is MWh. In such cases the CR Capacity Conversion Rate will be set to "1".
Optional Section below CommodityReference: FX Information (0-1) Must be present if 'Index Currency Unit' in section Commodity Reference <> 'Settlement Currency' which is contained in the 'Currency' field in the Trade Confirmation section otherwise must not be present.				
FXReference	Conditional	FXReference-Type	Key	Conversion rate from the CR Currency Unit to the Settlement Currency Unit for the deal. Must be present if FX Fixed Rate is NOT present.
FXMethod	Conditional	FXConversion MethodType	key	Must be present if FX Reference is present.
FXRate	Conditional	QuantityType	Key	Conversion rate from the CR Currency Unit to the Settlement Currency Unit for the deal. Must be present if FX Reference is NOT present.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Repeating Section below CommodityReference: Physical Index Pricing Dates (1-n) Must be present if TransactionType = "PHYS_INX" or "OPT_PHYS_INX", otherwise must not be present. It is a mandatory requirement that a single section be present within each 'CalculationPeriod' upon which a price is collected. Note: If present, this section replaces the 'PricingDate' field for the specified transaction types Note: Refer to TRC020 and TRC024 for guidance on completing this section for daily volume weighted price deals and daily average price deals.				
PIPricingDate	Mandatory	DateType	Key	The date on which a specific contract is priced.
Conditional Section below CommodityReference: Spread Information (0-1) Must be present if 'Spread Amount' is a +ve amount, a –ve amount otherwise it must be omitted.				
SpreadPayer	Mandatory	PartyType	Key	
Spread-Amount	Mandatory	PriceType	Key	If 'Spread Rate' is present then this field Must be omitted Else Must be present. Can be a positive or negative value signifying the amount in the 'Currency' or 'Spread Currency Unit'
SpreadRate	Conditional	QuantityType	Key	If 'Spread Amount' is present then this field Must be omitted Else Must be present. Can be a positive or negative value.
Spread-CurrencyUnit	Conditional	CurrencyCode Type	Key	If 'SpreadRate' is present then this field Must be omitted Else Must be present. If 'Spread Currency Unit' <> 'Settlement Currency' which is contained in the 'Currency' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted. Note: The spread must always be in the Notional Capacity Unit

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Optional Section below Spread Information: FX Information (0-1) Must be present if 'Spread Currency Unit' is present otherwise must not be present.				
FXReference	Conditional	FXReference-Type	Key	Conversion rate from the Spread Currency Unit to the Settlement Currency Unit for the deal. Note: this is NOT the conversion to the Index Currency Unit for the Commodity Reference but to the Settlement Currency Unit. Must be present if Spread Information FX Rate is NOT present.
FXMethod	Conditional	FXConversion MethodType	Key	Must be present if Spread Information FX Reference is present.
FXRate	Conditional	QuantityType	Key	Conversion rate from the Spread Currency Unit to the Settlement Currency Unit for the deal.Must NOT be present if Spread Information FX Reference is present
Ordered Repeatable Sub-Section below Commodity Reference: Calculation Periods (1-N) Must appear in same number and order as the related delivery periods, that is, 'CalculationPeriod' [n] specifies the calculation start and end date for 'DeliveryPeriod' [n]). For the transaction types "PHYS_INX" and "OPT_PHYS_INX", see TRC022.				
StartDate	Mandatory	DateType	Key	
EndDate	Mandatory	DateType	Key	This End Date must be on or after the associated Start Date. This date is inclusive with respect to the specified period, i.e. this date is the last day on which the specified period ended. Hence this date must be on or after the associated period start date. In the case of a 1-day period the Calculation Period Start Date = Calculation Period End Date.
Ordered Repeatable Sub-Section: PricingFXPeriods (0-N). Ordered by Start Date				
StartDate	Mandatory	DateType	Key	Every start date except the first one must be following the date of the Start Date of the preceding PricingFXPeriods section but can be before or after the End Date of the preceding PricingFXPeriods section i.e. the PricingFXPeriods sections need not be contiguous and can overlap but must be ordered by Start Date.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
EndDate	Mandatory	DateType	Key	This End Date must be on or after the associated Start Date. This date is inclusive with respect to the specified period, i.e. this date is the last day on which the specified period ended. Hence this date must be on or after the associated period start date. In the case of a 1-day period the PricingFXPeriod Start Date = PricingFXPeriod End Date

6.2.15 Float Price Section XML Schema



6.2.16 Document specific Business Rules – Trade Confirmation

These business rules apply generally to the document or to specific sections. In addition to the field specific rules defined in the table above these rules provide guidance on the composition and completion of a standard compliant CNF document for the various products and instruments supported.

Table 3: Business Rules for Trade Confirmation Documents

ID	BUSINESS RULE
TRC001	A Trade Confirmation document is composed of a single trade that the sender wishes to confirm.
TRC002	Each document has a unique identification. The sender assigns the unique identification to each trade confirmation. Note: it is recommended not to use the TradeDate (or any other information that relates to the content of the CNF) as a component of the Document ID, unless the value used can be maintained independently from the Trade Confirmation. This is to ensure that the Document ID is invariant under amendment of the CNF and can be used to identify pervious versions of an amended CNF even if, for example, the Trade Date is amended.
TRC003	If it is necessary to retransmit the document (i.e. because of a modification to correct something), the document identification shall not be changed. Instead the document version shall be increased by at least 1.
TRC004	The receiver shall ensure that all document identifications with its associated version number for a given sender shall be unique. A document that is received with the same identification and version number, or the same identification and a version number inferior to the current version, shall be rejected as a duplicate.
TRC005	If a trade confirmation is to be cancelled a cancellation document shall be used.
TRC006	A trade confirmation for a physical forward trade (excluding EUA) has as many occurrences of time interval quantities that can cover the whole trade being confirmed.
TRC007	Negative values are not allowed in the deal confirmation quantities.
TRC008	The Trade Confirmation document is composed of several structures some mandatory for all uses of the confirmation document and other sections and fields that are optional the use of which depends on the 'Transaction Type' and the 'Commodity' which are defined terms within this standard: Mandatory Sections/Fields are: The Document Header providing all the information that is necessary to uniquely identify a trade, along with the identification of involved parties, and the date of the creation of the document. The top level Trade Confirmation fields which provides some general information common to all trade confirmations including some information about the Master Agreement under which the trade was enacted. Optional sections/fields include: Top level Trade Confirmation fields which are relevant to physical forward and physical option deals and include information on commodity and physical delivery. EUA Details which is used when the Commodity is EUA certificates unlike continuously delivered energy trades EUA trades have no Time Interval Quantity sub structure. Instead there is a DeliveryDate by which the EUA or other emission product account transfers must be complete. Options Details relevant to options on physical and financial instruments Delivery Periods which define the settlement dates and related data Fixed Price Information which contains details specific to the fixed leg of a fixed/float swap

ID	BUSINESS RULE
	Float Price Information relevant to the floating legs of swaps and index deals and which support baskets of indexes and formula swaps. Agents – relating to third parties related in some way to the confirmation process for the deal, these can vary by transaction type, commodity and market, ECVNA data, for instance, being specific to the UK electricity market. A block describing hub codification information that is specific to gas trades. A block describing account and charge information which is here retained for reasons of backward compatibility, much of the information corresponds with information held in the section Details for AgentType = ECVNA, however the Transmission Charge Identification field which only appears in this section shall have the default value of "Schedule 5 off". N.B EUA Trade Confirmation documents do not require sections for Hub based information or for Account and Charge Information
TRC009	A counterparty is involved, if the receiver of a CNF document is configured as partner. In case the receiver is not known, the CNF is rejected. A broker is involved additionally to a counterparty, if the broker referenced in the field 'Broker ID' is configured as partner and - additionally - if the CNF matches to the restrictions, which can be defined per broker. The following criteria should be offered: Broker, Commodity, Index Commodity, Market, Transaction Type and Agreement e.g., Broker BRSPT is applicable for CNFs with Commodity = Power, Market <> UK, Transaction Type = FOR and all Agreements. A broker is involved without a counterparty, if the receiver of a CNF document is configured as partner and is equal to the 'Broker ID'. If the receiver is not known, the CNF is rejected.
TRC010	LoadType field is likely to be removed from the matching process in future versions of the standard since the actual profile will be matched at the interval level ensuring that any market based variations of well known products (for instance, Peak) are validated at that level. For this release of the standard the following rules will therefore be applied: For gas deals the value must be "Base". For all other deals the value must be "Custom", however in future versions of the standard it is the intention either to relax the constraints on this field to allow it to serve as a non-key informational field, thus removing in from the matching algorithm or to remove it from the CNF document entirely. N.B EUA Trade Confirmation documents do not contain the LoadType field
TRC011	EUA Trade Confirmation document does not support multiple AgentTypes as the only agent in the trade is the Broker.
TRC012	For option styles and their exercise/expiry date times: For European include the Exercise Schedule For American include a single final Exercise Date Time in the Exercise Schedule For Asian include one Exercise Date Time in the Exercise Schedule per delivery period of the underlying transaction as this is taken to be equal to the averaging period For Caps, Floors and Collars there will be no Exercise Schedule because they are triggered by price movements rather than a schedule

ID	BUSINESS RULE
TRC013	For options on physical forwards ("OPT") and fixed/floating swaptions (OPT_FXD_SWP and OPT_FLT_SWP) the strike price is entered in the Strike Price field of the Option Details section. For options on a financial index (OPT_FIN) and on physical index (OPT_PHYS_INX) deals there are three possibilities depending on the purpose of the option: The 'Strike Price' may be an absolute value or a fixed differential in the case of an option on a basket index 'Strike Price' = "0" and 'Index Strike Price Style' = "Index_Following", in which case they are always at the money and can be exercised at the market price if more capacity is required i.e. physical risk management 'Strike Price' = "0" and 'Index Strike Price Style' = "Index_Dated" which means that the strike price of the option is the state of the index on the Trade Date.
TRC014	If a Formula ID has been agreed between the parties for a certain deal (or type of complex deal) then the Formula ID MUST be filled in by both counterparties and therefore the basket details must be omitted with the exception of the Spread Information. The same Formula can be reused with different spreads without the need to define an additional formula between parties just to account for the new spread.
TRC015	An Option Type of 'Capped_Call' or 'Floored_Put' will comprise a Strike Price and a Cap Price or a Floor Price which must be used to define the upper and lower limit to the pay-off of the option.
TRC016	An Option Style of : 'Cap' will comprise a Strike Price only (the option will automatically exercise at the Strike Price), 'Second Strike Price' must be ommitted. 'Floor' will comprise a Strike Price only (the option will automatically exercise at the Strike Price), 'Second Strike Price' must be ommitted. 'Collar' will comprise a Strike Price which must contain the value of the cap price of the collar and a Second Strike Price which must contain the floor price of the collar, 'Second Strike Price' must be specified.
TRC017	For the purposes of rounding the fields for 'Financial Transactions': "Total Volume" and "Total Premium Value", the rounding mechanism to be used must be 'Rounding to Even' such that: 3.016 rounded to hundredths is 3.02 (because the next digit (6) is 6 or more) 3.013 rounded to hundredths is 3.01 (because the next digit (3) is 4 or less) 3.015 rounded to hundredths is 3.02 (because the next digit is 5, and the hundredths digit (1) is odd) 3.045 rounded to hundredths is 3.04 (because the next digit is 5, and the hundredths digit (4) is even) 3.04501 rounded to hundredths is 3.05 (because the next digit is 5, but it is followed by non-zero digits)
TRC018	Basis swaps can be booked as Float/Float deals or as Fixed/Float deals, with the differential price of the two commodity underliers forming the floating part of the deal (e.g. CR1 – CR2). Within eCM such swaps MUST be confirmed as Float/Float deals according to this standard. Deals booked as Fixed/FLoat must therefore be mapped to the Float/Float CNF structure and assigned a Transaction Type = "FLT_SWP". The mapping is as follows: CR1 (the prime index) is assigned to one floating leg in the CNF "FLT_SWP" structure CR2 (the subtracted index) is assigned to the other floating leg in the CNF "FLT-SWP" structure The Fixed Price Payer from the booked deal is assigned to the Spread Information.Spread Payer field in the floating leg to which CR2 has been assigned and such that the Spread Information.Spread Amount will be a positive amount

ID	BUSINESS RULE
	The Fixed Price from the booked deal is assigned to the Spread Information.Spread Amount field in the floating leg to which CR2 has been assigned such that it is a positive amount An example: Trader A (Buyer) and Trader B (Seller) have entered into a basis swap for GAS OIL-IPE/ OIL-BRENT-IPE at USD17.20. The deal has been booked as a Fixed/Float swap with a fixed leg of USD17.20 and a floating leg as the differential price: GAS OIL-IPE minus OIL-BRENT-IPE. This deal would be mapped to the Float/Float CNF structure as follows: Float Price Information[1].Float Price Payer = "Trader A" Float Price Information[1].Commodity Reference[1].Commodity Reference Price = "OIL-BRENT-IPE" Float Price Information[1]. Commodity Reference[1].Index Commodity = "Oil" Float Price Information[1]. Commodity Reference[1].Index Currency Unit = "USD" Float Price Information[1]. Commodity Reference[1].Index Capacity Unit = "BBL" Float Price Information[1]. Commodity Reference[1].Specified Price = "Settlement" Float Price Information[1]. Commodity Reference[1].Factor = "1" Float Price Information[1]. Commodity Reference[1].Delivery Date = "First_Nearby_Excluding" Float Price Information[1]. Commodity Reference[1].Pricing Date = "CBD" Float Price Information[1]. Commodity Reference[1].Spread Information.Spread Payer = "Trader A" Float Price Information[1]. Commodity Reference[1].Spread Information.Spread Amount = "17.2" Float Price Information[2]. Commodity Reference[1].Commodity Reference Price = "GAS OIL-IPE" Float Price Information[2]. Commodity Reference[1].Index Commodity = "Oil" Float Price Information[2]. Commodity Reference[1].Index Currency Unit = "USD" Float Price Information[2]. Commodity Reference[1].Index Capacity Unit = "MT" Float Price Information[2]. Commodity Reference[1].Specified Price = "Settlement" Float Price Information[2]. Commodity Reference[1].Factor = "1" Float Price Information[2]. Commodity Reference[1].Delivery Date = "First_Nearby_Excluding" Float Price Information[2]. Commodity Reference[1].Pricing Date = "CBD" Float Price Information[2]. Commodity Reference[1].CR Capacity Conversion Rate = "7.45"
TRC019	The "PricingFXPeriods" section is required ONLY if Pricing FX Periods are not the same as the Calculation Periods i.e. if the FX prices for the deal are not collected according to the same dates as the underlying prices for this Commodity Reference.
TRC020	Physical index daily volume weighted priced deals are deals for which the calculation period for a settlement event is contemporaneous with the period of delivery of the physical commodity. For such deals the 'PIPricingDate' fields within the 'CalculationPeriod' section must specify a pricing date for each day upon which physical delivery takes place. At settlement the volume delivered on each day of the current settlement period is multiplied by the price collected on the corresponding 'PIPricingDate' during the calculation period for the settlement to generate a volume weighted price for the day. These daily volume weighted prices are added together to calculate the total settlement amount in that settlement period. The following example shows how the 'CalculationPeriod', 'TimeIntervalQuantity' and 'PIPricingDate' sections must be completed in this case with a pricing day identified for each delivery day. "PIPricingDate" example sections: For a deal that starts delivery the 21st of October and ends on the 27th of October: <TimeIntervalQuantities> <TimeIntervalQuantity>

ID	BUSINESS RULE
	<DeliveryStartDateAndTime>2011-10-21T05:00:00</DeliveryStartDateAndTime> <DeliveryEndDateAndTime>2011-10-28T05:00:00</DeliveryEndDateAndTime> <ContractCapacity>10416.666667</ContractCapacity> </TimeIntervalQuantity> </TimeIntervalQuantities> with the pricing date referring to all delivery dates, starting with the first date, second entry being the next date and so on: <PhysicalIndexPricingDates> <PIPricingDate>2011-10-20</PIPricingDate> (refering to delivery date 21rd of October) <PIPricingDate>2011-10-21</PIPricingDate> (refering to delivery date 22rd of October) <PIPricingDate>2011-10-21</PIPricingDate> (refering to delivery date 23rd of October) <PIPricingDate>2011-10-21</PIPricingDate> (refering to delivery date 24th of October) <PIPricingDate>2011-10-24</PIPricingDate> (refering to delivery date 25th of October) <PIPricingDate>2011-10-25</PIPricingDate> (refering to delivery date 26th of October) <PIPricingDate>2011-10-26</PIPricingDate> (refering to delivery date 27th of October) </PhysicalIndexPricingDates> <CalculationPeriods> <CalculationPeriod> <StartDate>2015-10-29</StartDate> <EndDate>2015-11-28</EndDate> </CalculationPeriod> </CalculationPeriods> Each entry in the pricing date section refers to one delivery date.
TRC021	UK Gas Day 'Trade Date' rule: This rule resolves a procedural discrepancy relating to the value of 'Trade Date' for a physical forward UK Gas market trade, that is a trade for which 'Transaction Type' = "FOR", 'Market' = "UK" and 'Commodity' = "Gas". Since the 'UK Gas Day' runs from 05:00 to 05:00 (the next day) a potential discrepancy exists between the date of the 'gas day' and the calendar date since the 'gas day' spans two calendar dates. The Standard compliant value for the trade date MUST be the calendar date, not the gas date. So a trade struck at 0100hrs on Sept 11th MUST have a trade date of Sept 11th even though the 'UK Gas Day' began on Sept 10th.
TRC022	For the transaction types "PHYS_INX" and "OPT_PHYS_INX", 'daily pricing' is the implied and confirmed settlement method when 'CalculationPeriod' is contemporaneous with 'TimeIntervalQuantities'. For cases where the 'CalculationPeriod' is offset to the 'TimeIntervalQuantities', average pricing is the implied and confirmed method.
TRC023	For the transction types "PHYS_INX" and "OPT_PHYS_INX", if 'Commodity' = "Power" then 'Rounding' is recommended to be "2"; if 'Commodity' = "Gas" then 'Rounding' is recommended to be "5".
TRC024	Physical index daily average priced deals are deals for which the Calculation Period is independent of the period of physical delivery of the commodity (similarly to non-vanilla swaps). For such deals the date upon which each price must be collected is given by the 'PIPricingDate' fields within the 'CalculationPeriod' section for each settlement event. At settlement the total volume delivered during the current settlement period is multiplied by the daily average price collected on the PIPricingDates during the calculation period for that settlement. The daily average price is calculated by collecting the price on each 'PIPricingDate', then dividing the sum of all these prices by the number of days upon which a price was collected to calculate the daily average price. The following example shows how the 'CalculationPeriod', 'TimeIntervalQuantity'

ID	BUSINESS RULE
	and 'PIPricingDate' sections must be completed in this case with a pricing day identified for each delivery day. "PIPricingDate" example sections: For a deal that starts delivery the 1st of December and ends on the 31st of December: <TimeIntervalQuantities> <TimeIntervalQuantity> <DeliveryStartDateAndTime>2011-10-21T05:00:00</DeliveryStartDateAndTime> <DeliveryEndDateAndTime>2011-10-28T05:00:00</DeliveryEndDateAndTime> <ContractCapacity>10416.666667</ContractCapacity> </TimeIntervalQuantity> </TimeIntervalQuantities> With the pricing date referring to an independent set fo dates within a calculation period offset to the period of physical delivery: <PhysicalIndexPricingDates> <PIPricingDate>2015-10-29</PIPricingDate> <PIPricingDate>2015-10-30</PIPricingDate> <PIPricingDate>2015-10-31</PIPricingDate> <PIPricingDate>2015-11-01</PIPricingDate> <PIPricingDate>2015-11-02</PIPricingDate> <PIPricingDate>2015-11-01</PIPricingDate> <PIPricingDate>2015-11-05</PIPricingDate> <PIPricingDate>2015-11-06</PIPricingDate> <PIPricingDate>2015-11-07</PIPricingDate> <PIPricingDate>2015-11-08</PIPricingDate> <PIPricingDate>2015-11-09</PIPricingDate> <PIPricingDate>2015-11-12</PIPricingDate> <PIPricingDate>2015-11-13</PIPricingDate> <PIPricingDate>2015-11-14</PIPricingDate> <PIPricingDate>2015-11-15</PIPricingDate> <PIPricingDate>2015-11-16</PIPricingDate> <PIPricingDate>2015-11-19</PIPricingDate> <PIPricingDate>2015-11-20</PIPricingDate> <PIPricingDate>2015-11-21</PIPricingDate> <PIPricingDate>2015-11-22</PIPricingDate> <PIPricingDate>2015-11-23</PIPricingDate> <PIPricingDate>2015-11-26</PIPricingDate> <PIPricingDate>2015-11-27</PIPricingDate> <PIPricingDate>2015-11-28</PIPricingDate> </PhysicalIndexPricingDates> <CalculationPeriods> <CalculationPeriod> <StartDate>2015-10-29</StartDate> <EndDate>2015-11-28</EndDate>

ID	BUSINESS RULE
	</CalculationPeriod> </CalculationPeriods> Each entry in the pricing date section refers to one delivery date.

6.2.17 Trade Confirmation document Field Specifications

The date and time information is to be stated in clock time (the local time at the Delivery Point Area for the transaction). This means that no compensation needs to be made for daylight saving regimes. For example 13:00 (clock time) on January 1st at the UK NBP would be 13:00 GMT and 13:00 (clock time) on June 1st at the UK NBP would be 14:00 GMT/13:00 BST.

6.2.18 Section Time Interval Quantities

Delivery Start dates are beginning of energy flow

Delivery End Date are the exclusive end of energy flow

One entry is entered for each change in price or capacity during the trade. Missing date and time periods are assumed to be at a 0 capacity rate.

6.2.18.1 Example: Baseload for Jan 05 for the German market

Start	End
2005-01-01T00:00:00	2005-02-01T00:00:00

6.2.18.2 Example: Baseload for Jan 05 for the UK market

Start	End
2004-12-26T23:00:00	2004-01-29T23:00:00

These anomalies are due to the fact that the Monthly calendar follows the EFA rules – as a rule that it means that the month typically starts on the last Sunday in previous month and finishes on the last Sunday in the current month. This repeats throughout the year. Also, the traded day is known as an EFA day and starts at 23:00

Peak Jan 05 for the German market would be

Start	End
2005-01-03T08:00:00	2004-01-03T20:00:00
2005-01-04T08:00:00	2004-01-04T20:00:00
2005-01-05T08:00:00	2004-01-05T20:00:00
2005-01-06T08:00:00	2004-01-06T20:00:00
2005-01-07T08:00:00	2004-01-07T20:00:00
2005-01-10T08:00:00	2004-01-10T20:00:00

etc

6.2.19 Calculation and Delivery Periods

The EFET eCM 3.3 Standard extends the scope of the eCM process to incorporate 'vanilla' and 'complex' swaps. The trade confirmation (CNF) document has therefore been extended to accommodate these new requirements.

The resulting CNF document is capable of expressing both vanilla and complex swaps within the same document structure. To achieve this, a new 'Delivery Period' section has been introduced in addition to the familiar 'Calculation Period' section which is commonly used in confirmation of vanilla ISDA swaps.

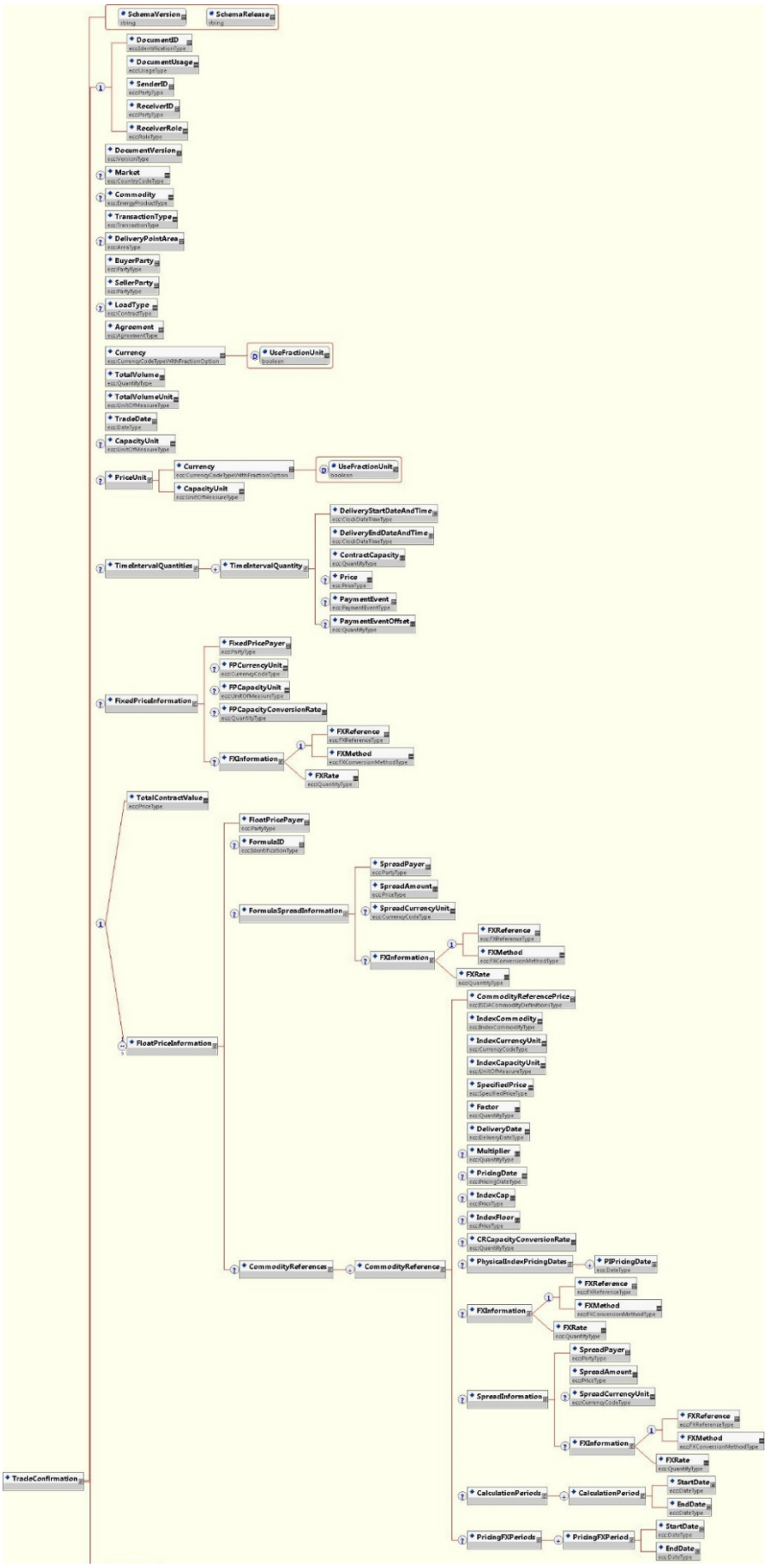
With vanilla swaps the pricing data is collected in the 'Calculation Period' which also is the period for which the swap typically settles i.e. the current month.

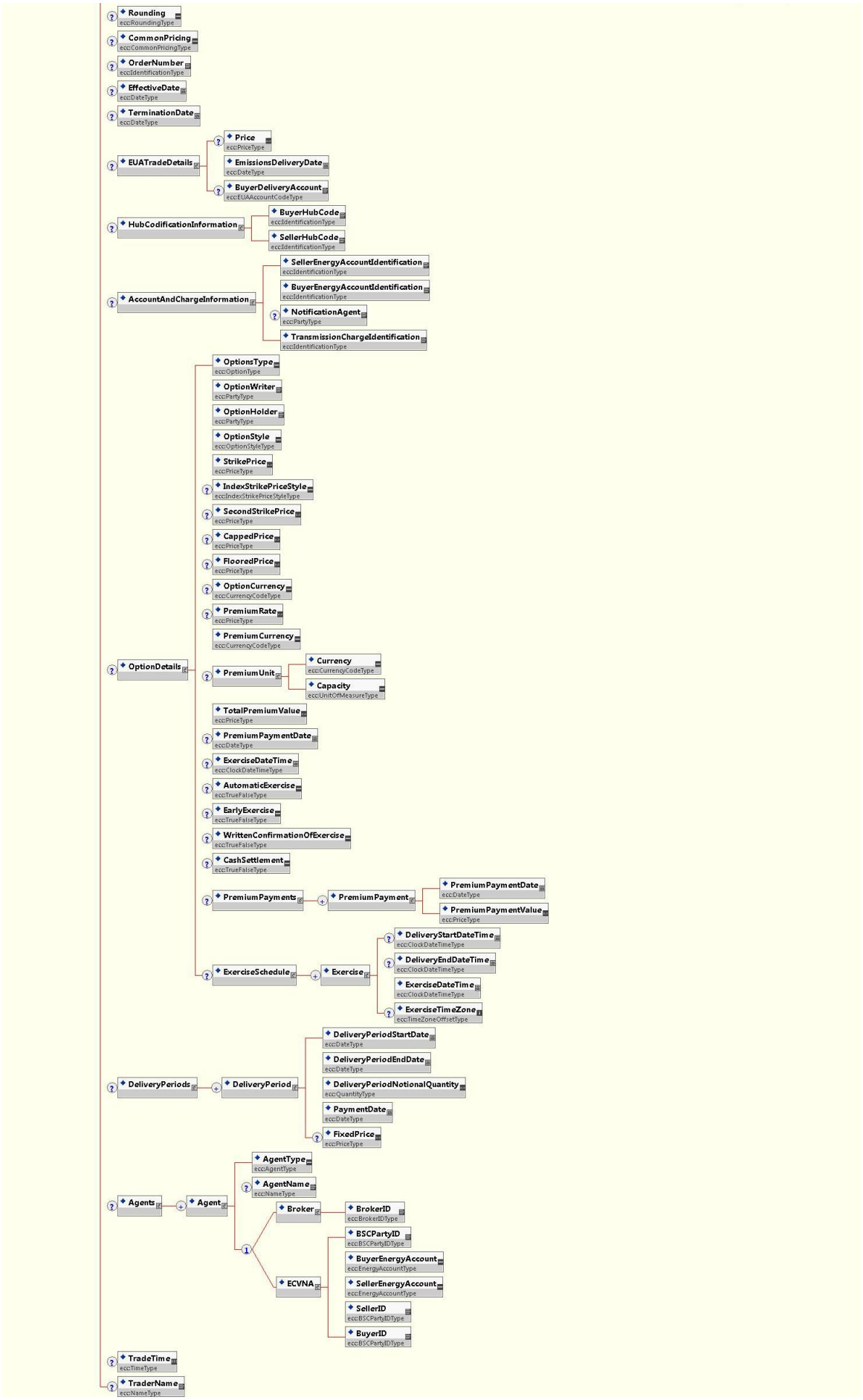
For complex swaps the pricing data is also collected during the 'Calculation Period' but the 'Calculation Period' does not need to be the period for which the swap settles – it can be different.

The 'Delivery Period' section has therefore been introduced to contain the information used in (typical) monthly settlement, such as the payment date and the notional quantity 'delivered' in that period (i.e. month). The range of dates contained in the 'Calculation Period' can then be defined separately allowing for pricing data to be collected over other timescales. This is often necessary in complex swaps which may price on, say, an average of prices over the previous 3 month period, but which still settles on a rolling monthly basis.

For vanilla swaps the 'Delivery Period' and 'Calculation Period' contain the same set of dates but for complex swaps the two sets of dates can be separately specified and confirmed. The introduction of 'Delivery Period' therefore allows more complex swaps to be confirmed using the same CNF document as is used for vanilla swaps.

6.2.20 Trade Confirmation document XML Schema




Rounding
eccRoundingType
CommonPricing
eccCommonPricingType
OrderNumber
eccIdentificationType
EffectiveDate
eccDateType
TerminationDate
eccDateType
EUATradeDetails
Price
eccPriceType
EmissionsDeliveryDate
eccDateType
BuyerDeliveryAccount
eccEUAAccountCodeType
HubCodificationInformation
BuyerHubCode
eccIdentificationType
SellerHubCode
eccIdentificationType
AccountAndChargeInformation
SellerEnergyAccountIdentification
eccIdentificationType
BuyerEnergyAccountIdentification
eccIdentificationType
NotificationAgent
eccPartyType
TransmissionChargeIdentification
eccIdentificationType
OptionDetails
OptionsType
eccOptionType
OptionWriter
eccPartyType
OptionHolder
eccPartyType
OptionStyle
eccOptionStyleType
StrikePrice
eccPriceType
IndexStrikePriceStyle
eccIndexStrikePriceStyleType
SecondStrikePrice
eccPriceType
CappedPrice
eccPriceType
FlooredPrice
eccPriceType
OptionCurrency
eccCurrencyCodeType
PremiumRate
eccPriceType
PremiumCurrency
eccCurrencyCodeType
PremiumUnit
Currency
eccCurrencyCodeType
Capacity
eccUnitOfMeasureType
TotalPremiumValue
eccPriceType
PremiumPaymentDate
eccDateType
ExerciseDateTime
eccClockDateTimeType
AutomaticExercise
eccTrueFalseType
EarlyExercise
eccTrueFalseType
WrittenConfirmationOfExercise
eccTrueFalseType
CashSettlement
eccTrueFalseType
PremiumPayments
PremiumPayment
PremiumPaymentDate
eccDateType
PremiumPaymentValue
eccPriceType
ExerciseSchedule
Exercise
DeliveryStartDateTime
eccClockDateTimeType
DeliveryEndDateTime
eccClockDateTimeType
ExerciseDateTime
eccClockDateTimeType
ExerciseTimeZone
eccTimeZoneOffsetType
DeliveryPeriods
DeliveryPeriod
DeliveryPeriodStartDate
eccDateType
DeliveryPeriodEndDate
eccDateType
DeliveryPeriodNotionalQuantity
eccQuantityType
PaymentDate
eccDateType
FixedPrice
eccPriceType
Agents
Agent
AgentType
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AgentName
eccNameType
Broker
BrokerID
eccBrokerIDType
ECVNA
BSCPartyID
eccBSCPartyIDType
BuyerEnergyAccount
eccEnergyAccountType
SellerEnergyAccount
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BuyerID
eccBSCPartyIDType
TradeTime
eccTimeType
TraderName
eccNameType

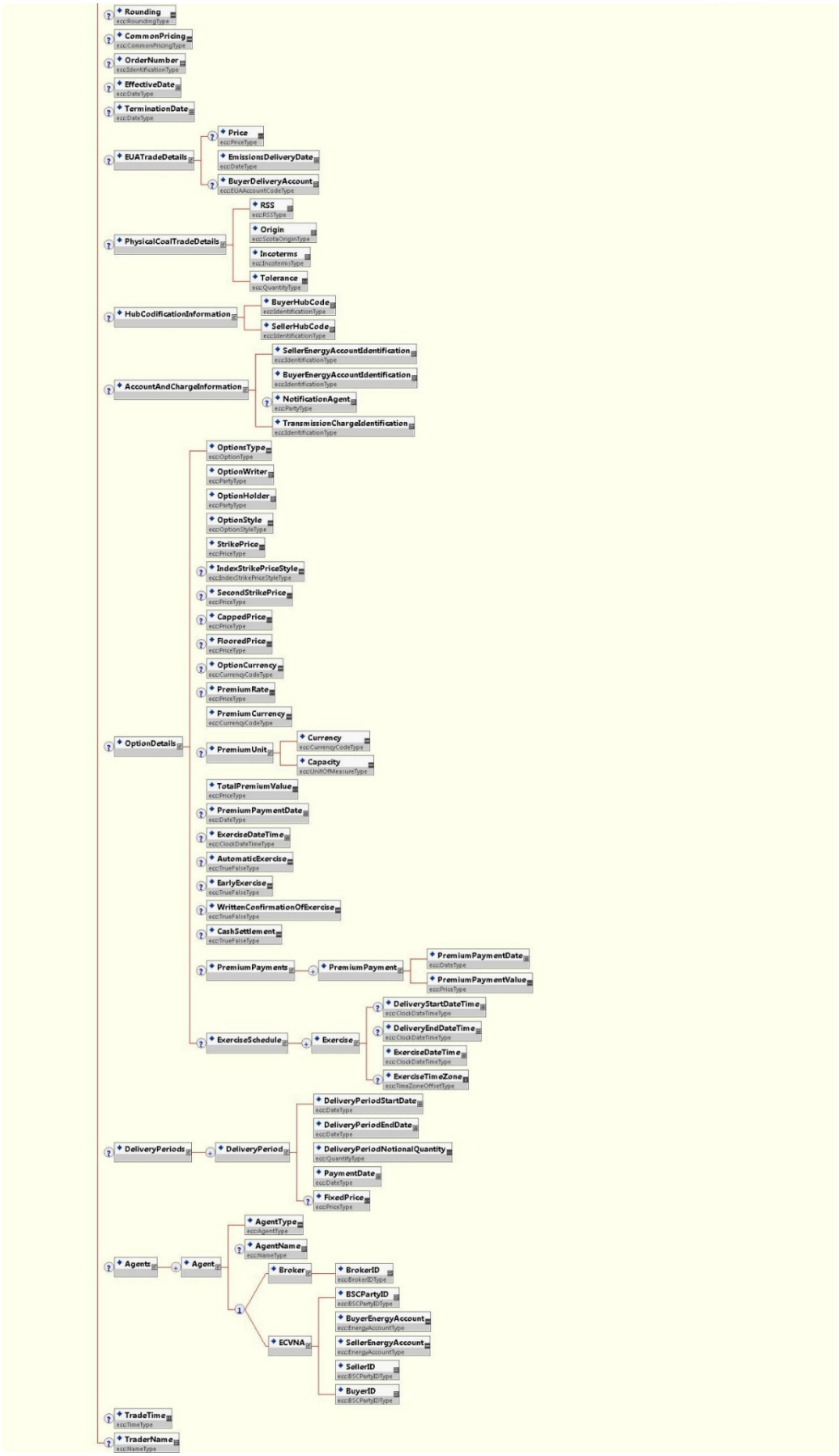


Figure 26 XML Schema for the TradeConfirmation Document

6.3 Match Suggestion Document

6.3.1 Overview

The Match Suggestion Document forms a proposal from the Buyer to the Seller as to the similarity between the two Trade Confirmation documents that it references. The similarities between the two documents is based on the Buyer's belief that all key field values with the two documents are identical and therefore constitute a match under the definition defined with these standards.

The document is signed and therefore provides an auditable record.

Table 4: Element Specification for Match Suggestion

Name	Mandatory/ Optional/ Conditional	Type	Business Rule
Document Header			
DocumentID	Mandatory	Identification-Type	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
DocumentUsage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	
ReceiverID	Mandatory	PartyType	
ReceiverRole	Mandatory	RoleType	
Reference Trade Confirmation Identifier			
ReferencedBuyer-DocumentID	Mandatory	Identification-Type	
ReferencedBuyer-DocumentVersion	Mandatory	VersionType	
ReferencedSeller-DocumentID	Mandatory	Identification-Type	
ReferencedSeller-DocumentVersion	Mandatory	VersionType	

A reference to the counterparty ID is not needed since this can be derived from the referenced trade confirmations.

6.3.2 Match Suggestion Document XML Schema

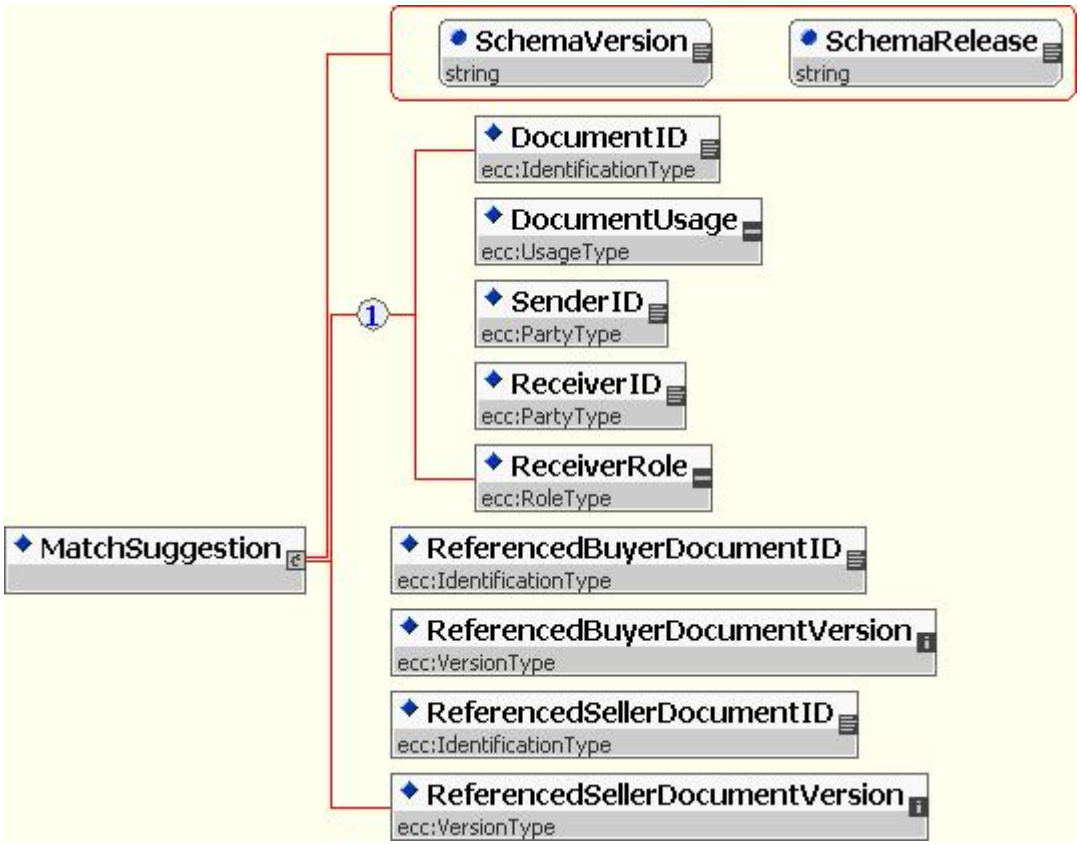


Figure 27 XML Schema for the MatchSuggestion Document

6.4 Match Suggestion Acceptance Document

The Match Suggestion Acceptance document forms the acceptance by the Seller of the proposal of a match between two Trade Confirmation documents made by the Buyer through issue to the Seller of the Match Suggestion document.

The document is signed and therefore provides an auditable record.

A DocumentVersion reference is not needed since the referenced document type does not require a version.

Table 5: Element Specification for Match Suggestion Acceptance

Name	Mandatory/ Optional/ Conditional	Type	Description
Document Header			
DocumentID	Mandatory	Identification-Type	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
DocumentUsage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	
ReceiverID	Mandatory	PartyType	
ReceiverRole	Mandatory	RoleType	

Name	Mandatory/ Optional/ Conditional	Type	Description
Reference Match Suggestion Identifier			
MatchSuggestion-DocumentID	Mandatory	Identification-Type	The document ID refers to the MatchSuggestion document.

6.4.1 Match Suggestion Acceptance Document XML Schema

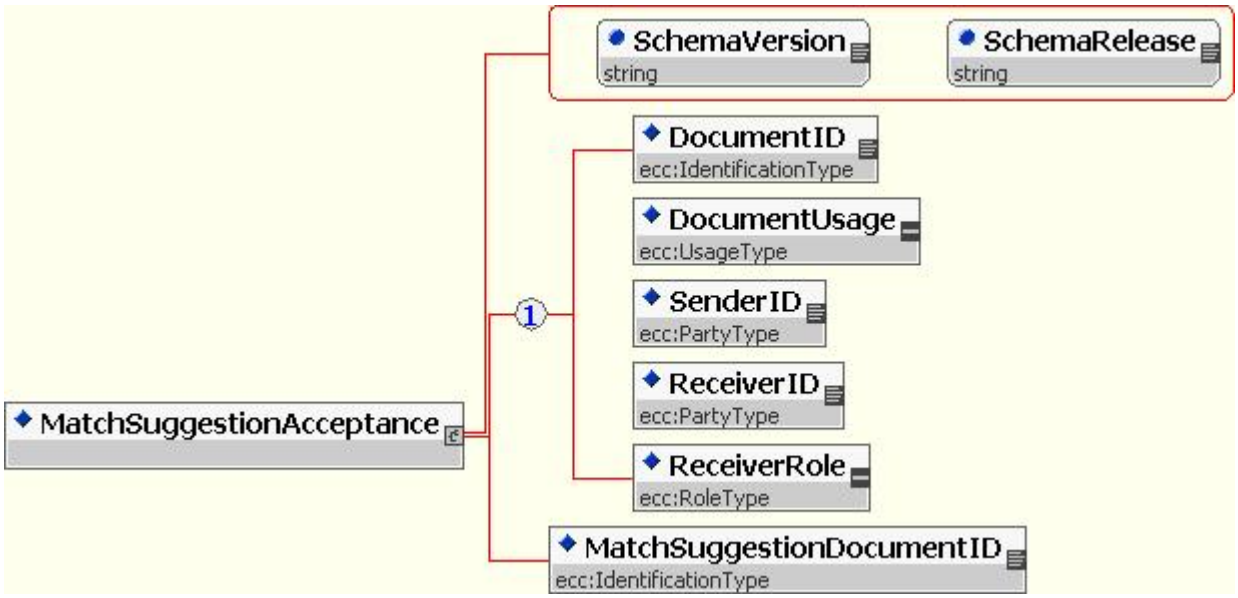


Figure 28 XML Schema for the MatchSuggestionAcceptance Document

6.5 Match Suggestion Refusal Document

The Match Suggestion Rejection document forms the rejection by the Seller of the proposal of a match between two Trade Confirmation documents made by the Buyer through issue to the Seller of the Match Suggestion document.

The document is signed and therefore provides an auditable record.

A DocumentVersion reference is not needed since the referenced document type does not require a version.

Table 6: Element Specification for Match Suggestion Refusal

Name	Mandatory/ Optional/ Conditional	Type	Description
Document Header			
DocumentID	Mandatory	Identification-Type	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
Document-Usage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	

Name	Mandatory/ Optional/ Conditional	Type	Description
ReceiverID	Mandatory	PartyType	
ReceiverRole	Mandatory	RoleType	
Reference Match Suggestion Identifier			
Match-Suggestion-DocumentID	Mandatory	Identification-Type	The document ID refers to the MatchSuggestion document.
REASON (1…N)			
ReasonCode	Mandatory	ReasonCode-Type	Code giving the reason for refusal. See details on ReasonCodes further down.
ErrorSource	Optional	String(255)	
Originator	Optional	String	
ErrorText	Optional	ReasonText-Type	

6.5.1 Match Suggestion Refusal Document XML Schema

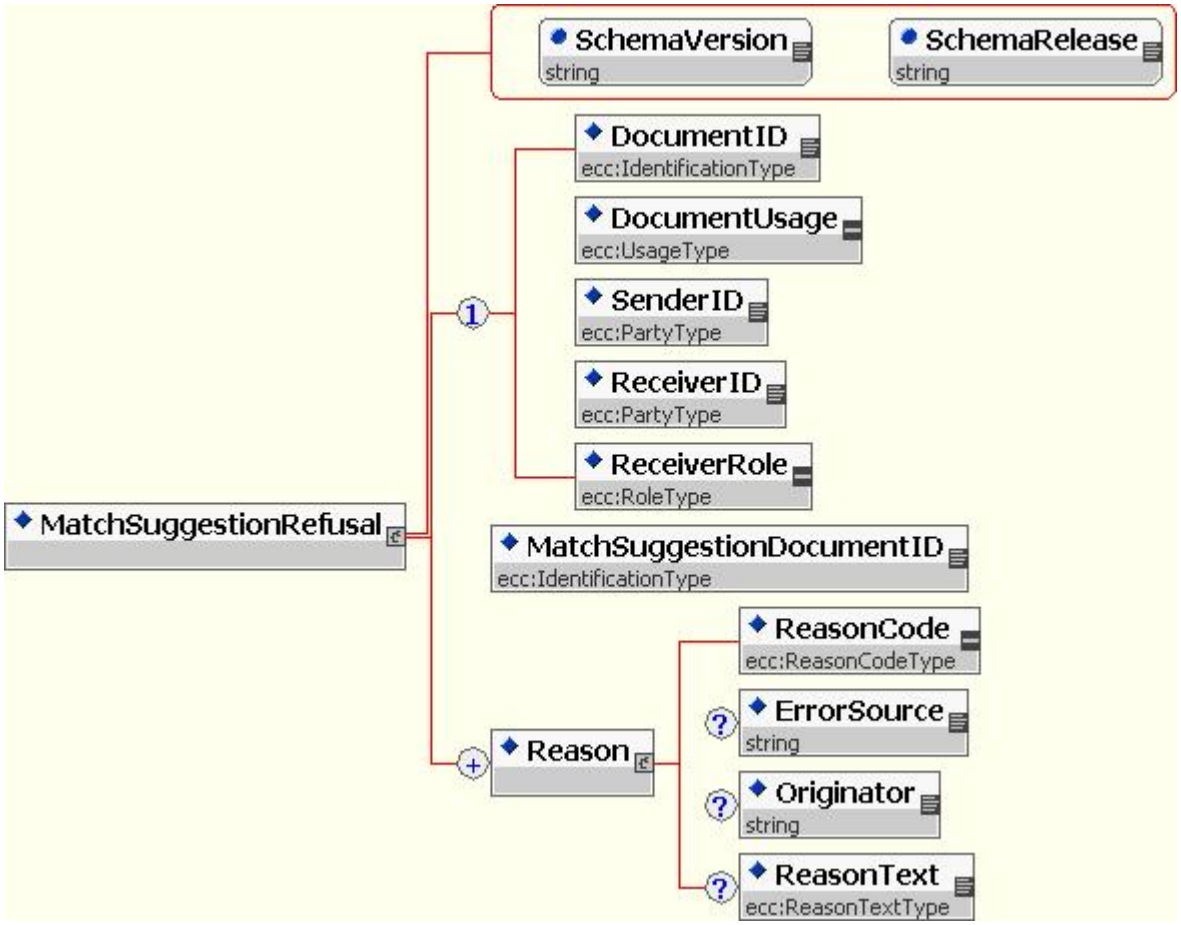


Figure 29 XML Schema for the MatchSuggestionRefusal Document

6.6 Cancellation Document

A Cancellation Document refers to a Trade or a Broker Confirmation document and is used to inform the receiver of the sender's desire to remove the Trade or Broker Confirmation document from their system.

Table 7: Element Specification for Cancellation

Name	Mandatory/ Optional/ Conditional	Type	Description
Document Header			
DocumentID	Mandatory	IdentificationType	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
Document-Usage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	
ReceiverID	Mandatory	PartyType	EIC Code of Receiver If the document to be cancelled is a Trade Confirmation then this field can contain the brokerID in case the Trade Confirmation is to be cancelled out of the Broker dialogue only.
ReceiverRole	Mandatory	RoleType	
Reference Trade or Broker Confirmation Identifier			
Referenced-DocumentID	Mandatory	IdentificationType	Document ID of the cancelled trade or broker confirmation or Tear-Up Request
Referenced-Document-Version	Conditional	VersionType	Version number of the cancelled trade or broker confirmation. Must be present if referenced document is a trade confirmation or broker confirmation. Otherwise must be omitted.

6.6.1 Document specific Business Rules

Business rules AUT001 through AUT012 concern document construction.

ID	BUSINESS RULE
CAN001	A Cancellation document references a single trade or broker confirmation document or Tear-Up Request.
CAN002	A document that is received with the same identification shall be rejected as a duplicate.
CAN003	A cancellation document transmission shall always be answered with an acknowledgement/rejection document depending on the status of the original document.

6.6.2 Cancellation Document XML Schema

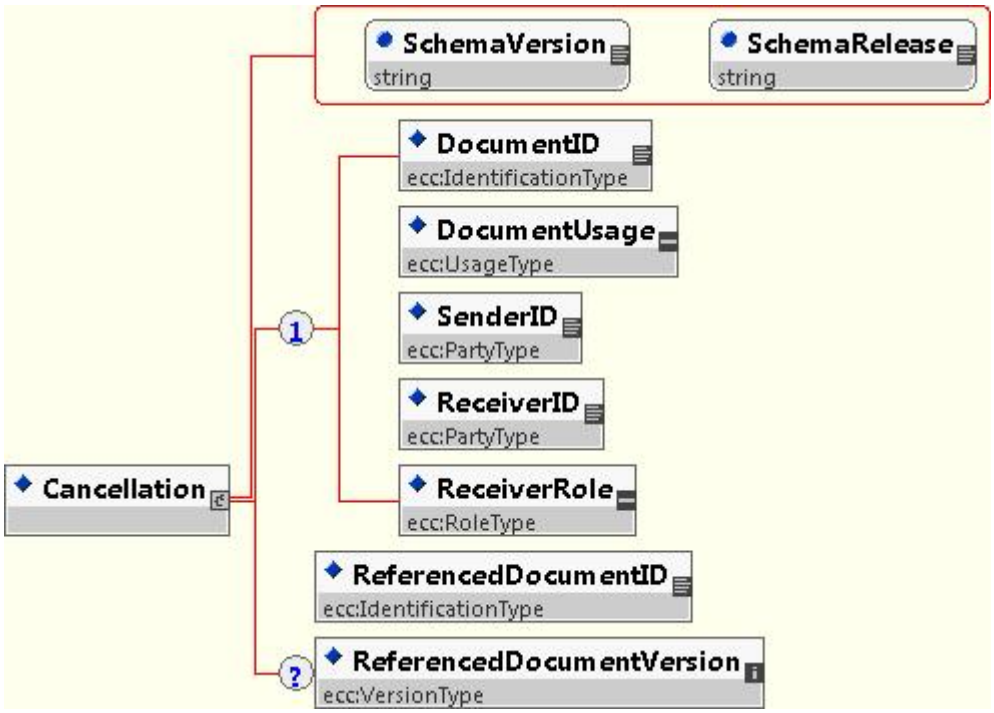


Figure 30 XML Schema for the Cancellation Document

6.7 Acknowledgement Document

An Acknowledgement document is sent when an eCM document (except Acknowledgement and Rejection documents) are well-processed.

Name	Mandatory/ Optional/ Conditional	Type	Description
Document Header			
DocumentID	Mandatory	IdentificationType	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
Document-Usage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	
ReceiverID	Mandatory	PartyType	
ReceiverRole	Mandatory	RoleType	
REFERENCE Document Identifier			
Referenced-Document-Type	Mandatory	Document-Type	Used to identify the document type of the referenced document.
Reference-DocumentID	Mandatory	IdentificationType	The ID of the document that is being acknowledged.

Name	Mandatory/ Optional/ Conditional	Type	Description
Referenced-Document-Version	Conditional	VersionType	Only in case of trade confirmations: The version of the trade confirmation that is being rejected. Otherwise, this element is not used.

6.7.1 Acknowledgement Document XML Schema

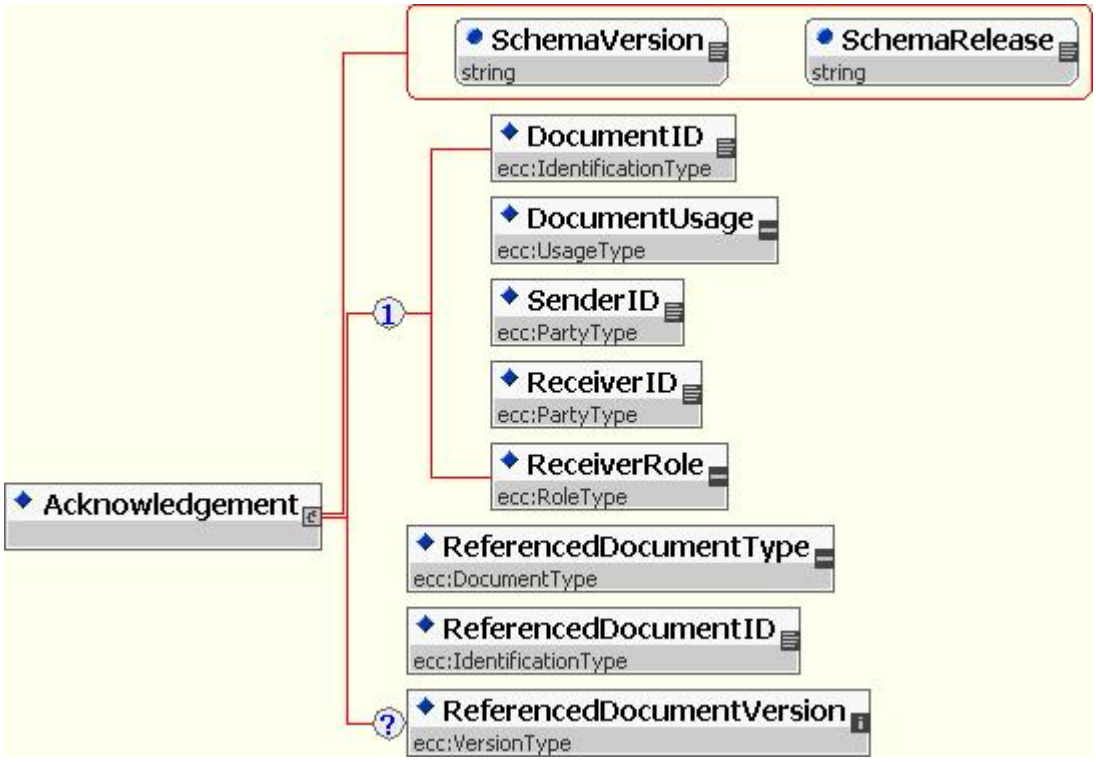


Figure 31 XML Schema for the Acknowledgement Document

6.8 Rejection Document

A Rejection document is sent when an eCM document (except Acknowledgement and Rejection documents) could not be well-processed. The reasons for the rejection are listed in the definition of ReasonCodes further down.

Name	Mandatory/ Optional/ Conditional	Type	Description
Document Header			
DocumentID	Mandatory	IdentificationType	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
Document-Usage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	

Name	Mandatory/ Optional/ Conditional	Type	Description
ReceiverID	Mandatory	PartyType	
ReceiverRole	Mandatory	RoleType	
REFERENCE Document Identifier			
Referenced-Document-Type	Mandatory	Document-Type	Used to identify the document type of the referenced document.
Reference-DocumentID	Mandatory	IdentificationType	The ID of the document that is being rejected.
Referenced-Document-Version	Conditional	VersionType	Only in case of trade or broker confirmations: The version of the trade confirmation that is being rejected. Otherwise, this element is not used.
REASON (1…N)			
ReasonCode	Mandatory	Reason-CodeType	A code indicating the motivation for the rejection. See ReasonCodeType definitions further down in this document.
ErrorSource	Conditional	String(255)	In case of XML error, this element indicates where the error occurred in the document
Originator	Optional	String	Explains which software component raised this error
ReasonText	Optional	Reason-TextType	Additional informal information

6.8.1 Rejection Document XML Schema

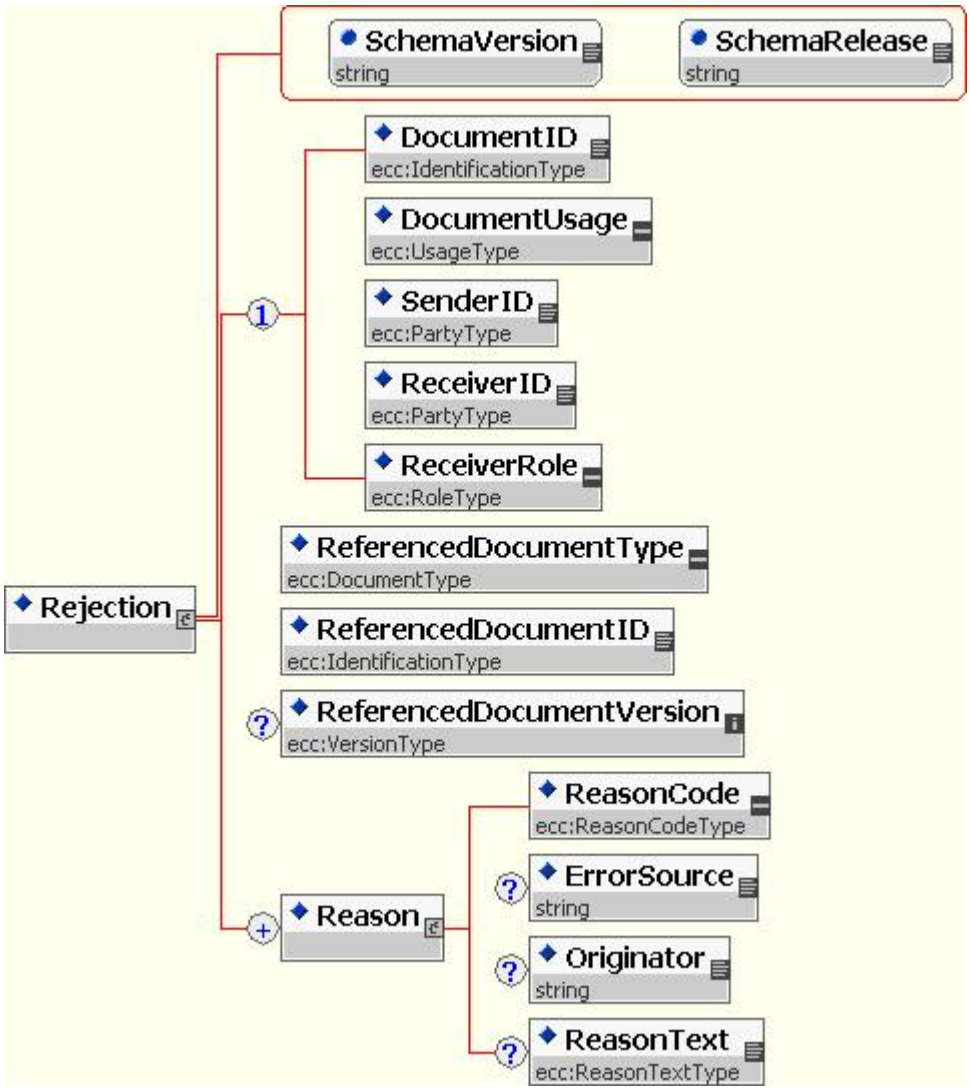


Figure 32 XML Schema for the Rejection Document

6.8.2 Document specific Business Rules for Rejections

ID	BUSINESS RULE
REJ001	Each rejection document must provide a supporting reason code and eventual text.

6.9 Broker Confirmation

6.9.1 Overview

The Broker Confirmation combines the information of the Trade Confirmation and the Broker Fee Information document. As not all information can be provided by brokers, several fields are defined as optional rather than mandatory, as in the Trade Confirmation Document. Additionally, the Broker Confirmation Document provides broker specific data fields. Each field in a Broker Confirmation document is either a key or an information field.

Key fields are those fields that play a role in the definition of a match between broker confirmation and trade confirmation documents. Key fields are either mandatory or conditional. Information fields are not considered in a match.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Section: Document Header				
DocumentID	Mandatory	Identification-Type	Information	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions. When a party receives a broker confirmation with an ID unknown to the receiver then the receiver must treat this document as the initial version of a new broker confirmation document. Otherwise the receiver must treat this document as an amendment of an already sent Broker Confirmation document (see field "Document Version").
Document-Usage	Mandatory	UsageType	Information	"Test" or "Live"
SenderID	Mandatory	PartyType	Information	BrokerID of sender
ReceiverID	Mandatory	PartyType	Information	EIC Code of Receiver.
ReceiverRole	Mandatory	RoleType	Information	Trader role applies if the document is being received from a broker of the trade Agent role applies if the document is in effect a carbon copy of the main confirmation document.
Document-Version	Mandatory	VersionType	Information	The version number is always associated the Document ID. It is used to distinguish and order the initial Broker Confirmation document and all its amendments over time. A fixed first version number for the initial Broker Confirmation document is not defined (see field "Document ID"). When a party receives a Broker Confirmation document with an ID already used by the same sender (either a trader or its own Broker Back Office System) in a previous Broker Confirmation document then the receiver must first check if there exists a Broker Confirmation document from this sender with this ID and a lower version number and in an 'amendable' state. If this is not the case then the receiver must send a rejection document. Other wise the Broker Confirmation document gets the new status "Amended" and the just received Broker Confirmation document gets status "Pending".

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Market	Conditional	CountryCodeType	Key	If 'TransactionType' is a 'Financial Transaction[3]' Or if 'Commodity' 'is an 'Emissions Commodity' or "Coal" then this field is: a) must be omitted; else this field is b) Mandatory and Key
Commodity	Conditional	Energy-ProductType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) must be omitted; else this field is b) Mandatory and Key
Transaction-Type	Mandatory	Transaction-Type	Key	
Delivery-PointArea	Conditional	AreaType	Key	If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key
BuyerParty	Mandatory	PartyType	Key	The EIC code of the party that initiates the eCM process and issues a Match Suggestion document. If 'TransactionType' = "FOR" or "PHYS_INX" then this field must be the EIC code of the buyer of the deal; If 'TransactionType' = "FXD_SWP" then this field must be the EIC code of the 'Fixed Price Payer' in the 'Fixed Price Information' section; If 'TransactionType' = "FLT_SWP" then this field must be the greater (using ascending alphanumeric sorting) EIC code of the two parties to the deal e.g. "23X----------2" is greater than "23X----------1"; If 'TransactionType' = "OPT" or "OPT_PHYS_INX" or "OPT_FIN_INX" or "OPT_FXD_SWP" or "OPT_FLT_SWP" then this field must be the EIC code for the 'Option Holder'.

3 'Financial Transaction' is a collective term defined for some values of 'TransactionType' See Appendix A Definition of eCM Types and Codes

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
SellerParty	Mandatory	PartyType	Key	The EIC code of the party that receives a Match Suggestion document. If 'TransactionType' = "FOR" or "PHYS_INX" then this field must be the EIC code of the seller of the deal; If 'TransactionType' = "FXD_SWP" then this field must be the EIC code of the 'Float Price Payer' in the 'Float Price Information' section; If 'TransactionType' = "FLT_SWP" then this field must be the lesser (using ascending alphanumeric sorting) EIC code of the two parties to the deal e.g. "23X----------1" is less than "23X----------2"; If 'TransactionType' = "OPT" or "OPT_PHYS_INX" or "OPT_FIN_INX" or "OPT_FXD_SWP" or "OPT_FLT_SWP" then this field must be the EIC code for the 'Option Writer'.
LoadType	Conditional	ContractType	Key	See BCN009 below for business rule details. If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' or "Coal" then this field: a) must be omitted; else this field is b) Mandatory and Key
Agreement	Optional	AgreementType	Information	Reference to Master Agreement Model Contract Any valid value as defined in appendix A.3, "eCM Field Types", may be used.
Currency	Mandatory	CurrencyCodeType	Key	With boolean Attribute "UseFractionUnit" to indicate that "Pence" is used instead of "GBP". This attribute becomes mandatory when issuing CNF documents for the networks that utilize pence. (i.e. UK NBP and Belgium) Note: For Financial Transactions this is the "Settlement Currency"
TotalVolume	Mandatory	QuantityType	Key	If 'Commodity' 'is an 'Emissions Commodity' then the value of this field must be Integer; between 1 and 8 significant figures. Note: For Financial Transactions this is the "Total Notional Quantity" Note: For Financial Transactions this field shall be rounded to 2 decimal places.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
TotalVolume-Unit	Mandatory	UnitOf-MeasureType	Key	If 'Commodity' 'is an 'Emissions Commodity' then the value of this field must be "EUA" thus with "Total Volume" expressing the total number of EUA certificates in the underlying transaction. Note: For Financial Transactions this is the "Notional Capacity Unit"
TradeDate	Mandatory	DateType	Key	This date is based on clock time, not a specific time zone.
TradeTime	Optional	TimeType	Information	This time is expressed as clock time. This field is Optional in the CNF therefore it is Informational
TraderName	Optional	NameType	Information	This field is Optional in the CNF therefore it is Informational
CapacityUnit	Conditional	UnitOf-MeasureType	Key	If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key
PriceUnit/-Currency	Conditional	CurrencyCode Type	Key	The currency unit used to express this price unit must fit to the currency given in field "Currency". With boolean Attribute "UseFractionUnit" to indicate that "Pence" is used instead of "GBP". This attribute becomes mandatory when issuing CNF documents for the networks that utilize pence. (i.e. UK NBP and Belgium) If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
PriceUnit/-CapacityUnit	Conditional	UnitOf-MeasureType	Key	Shall be expressed in units of rate of flow (power) rather than energy, for example, a gas deal on the UK network will be expressed as: p/ Therm; or a for a power deal EUR/MW 4 If 'TransactionType' is a 'Financial Transaction' Or if 'Commodity' 'is an 'Emissions Commodity' then this field is: a) must be omitted; else this field is b) Mandatory and Key
Total-ContractValue	Conditional	PriceType	Information	An XML choice below TradeConfirmation. If 'TransactionType' = "FOR" or "OPT" then this field: a) is Mandatory and Key otherwise b) must be omitted Note: this is an absolute value and must be represented as an unsigned value regardless of wether this is the buy or sell side document or if the 'Price' is a positive or negative amount.
Common-Pricing	Conditional	CommonPricingType	key	If 'TransactionType' is a 'Financial Transaction', or "PHYS_INX" or "OPT_PHYS_INX" then this field: a) is Mandatory and Key otherwise b) must be omitted If present and if all holiday calendars happen to be the same then Common Pricing must, by default, be set to 'True' If present and if there is only one Commodity Reference section in the document then this value must be set to 'False' since Common Pricing is not relevant if there is only one price source.

4 It is a known implementation issue that energy units have been used e.g. EUR/MWh, p/Therm

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
EffectiveDate	Conditional	DateType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key otherwise b) must be omitted "Effective Date" is ISDA terminology, means Start Date
Termination-Date	Conditional	DateType	Key	If 'TransactionType' is a 'Financial Transaction' then this field: a) is Mandatory and Key otherwise b) must be omitted "Termination Date" is ISDA terminology, means End Date
Conditional Ordered Repeatable Section below TradeConfirmation: TIME INTERVAL QUANTITIES (1-N) Ordered by adjacent intervals This section must be used when TransactionType is: "FOR", "OPT", "PHYS_INX", "OPT_PHYS_INX". This section must not be used when TransactionType is a 'Financial Transaction' This section must not be used when 'Commodity' 'is an 'Emissions Commodity'.				
Delivery-StartDate-AndTime	Mandatory	ClockDate-TimeType	Key	Format: As defined in the XML Schema Standard. This date and time are expressed in clock time. Within this ordered repeatable section this date and time must either be the same as or be after the date and time given in the previous Delivery End Date and Time field (if it exists). If 'Commodity' is a 'Coal' then the Time part of this field must be set to "00:00:00"
DeliveryEnd-DateAndTime	Mandatory	ClockDate-TimeType	Key	Format: As defined in the XML Schema Standard. This date and time are expressed in clock time. This point in time is exclusive with respect to the specified delivery period, i.e. this point in time is the first second after the specified delivery period ended. Hence this delivery end date and time must be after the associated delivery start date and time. If 'Commodity' is a 'Coal' then the Time part of this field must be set to "00:00:00"
Contract-capacity	Mandatory	QuantityType	Key	See appendix A.1, "Core Components".
Price	Conditional	PriceType	Key	If the element "TotalContractValue" is used then this field must be present. Otherwise it must not be present.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Unordered Repeatable Section: Agents (1-N) For each agent specified in a Broker Confirmation document the following fields must be present. The Agent Type BROKER must be present once.				
AgentType	Mandatory	AgentType	Key	
AgentName	Optional	NameType	Information	
Details for 'AgentType' = "ECVNA" as XML choice below Agent This agent must appear if and only if the market has been defined as GB and the commodity has been defined as a power commodity				
BSCPartyID	Optional	BSCPartyID-Type	Information	
BuyerEnergy-Account	Optional	Energy-AccountType	Information	
SellerEnergy-Account	Optional	Energy-AccountType	Information	
BuyerID	Optional	BSCPartyID-Type	Information	
SellerID	Optional	BSCPartyID-Type	Information	
Details for 'AgentType' = "BROKER"				
BrokerID	Mandatory	BrokerIDType	Key	
TotalFee	Mandatory	QuantityType	Key	In case the fee amount is 0, this information needs to be provided as well. Note: For Financial Transactions this field shall be rounded to 2 decimal places.
FeeCurrency	Mandatory	CurrencyCode Type	Key	In case the fee amount is 0, this information needs to be provided as well.
Sleeve	Optional	TrueFalseType	Information	
Voice	Optional	TrueFalseType	Information	
Initiate	Optional	TrueFalseType	Information	
Spread	Optional	TrueFalseType	Information	
Broker-SpreadID	Optional	Identification-Type	Information	
BrokerTrade-ID	Optional	Identification-Type	Information	
Conditional Section: HUB CODIFICATION INFORMATION – needs to be completed for gas confirms only This section must be present if and only if the value of field "Commodity" is equal to "Gas".				

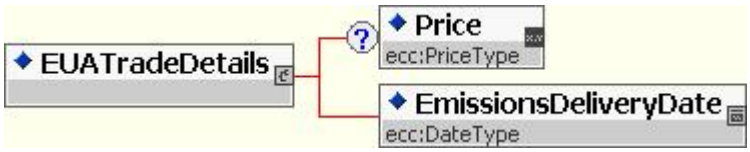
Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
BuyerHub-Code	Optional	Identification-Type	Information	Identifying the Buyer with the hub network. For the UK market, this is the "Buyer AT Link Reference".
SellerHub-Code	Optional	Identification-Type	Information	Identifying the Seller with the hub network. For the UK market, this is the "Seller AT Link Reference".

6.9.2 Broker Confirmation Section XML Schema

6.9.3 Broker Confirmation – EUA Trade Details

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below TradeConfirmation: EUA Trade Details This section must be present if and only if 'Commodity' 'is an 'Emissions Commodity'.				
Price	Conditional	PriceType	Key	If the element "TotalContractValue" is used then this field must be present. Otherwise it must not be present.
Emissions-DeliveryDate	Optional	DateType	Information	e.g. 1st December 2005 This will be the contractual delivery date. Note that in some cases the contractual delivery date may differ from the actual delivery date due to the contractual delivery date falling on a non business day in one or both registry countries.

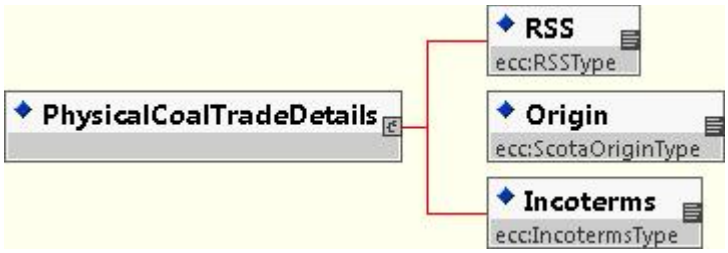
6.9.4 EUA Trade Details Section XML Schema



6.9.5 Broker Confirmation – Physical Coal Trade Details

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below TradeConfirmation: Physical Coal Trade Details This section must be present if and only if 'Commodity' 'is "Coal" and 'TransactionType' is "FOR", "PHYS_INX", "OPT_PHYS_INX" or "OPT".				
RSS	Mandatory	RSSType	Key	
Origin	Mandatory	ScotaOrigin-Type	Key	
Incoterms	Mandatory	IncotermsType	Key	

6.9.6 Physical Coal Trade Details Section XML Schema



6.9.7 Broker Confirmation – Option Details

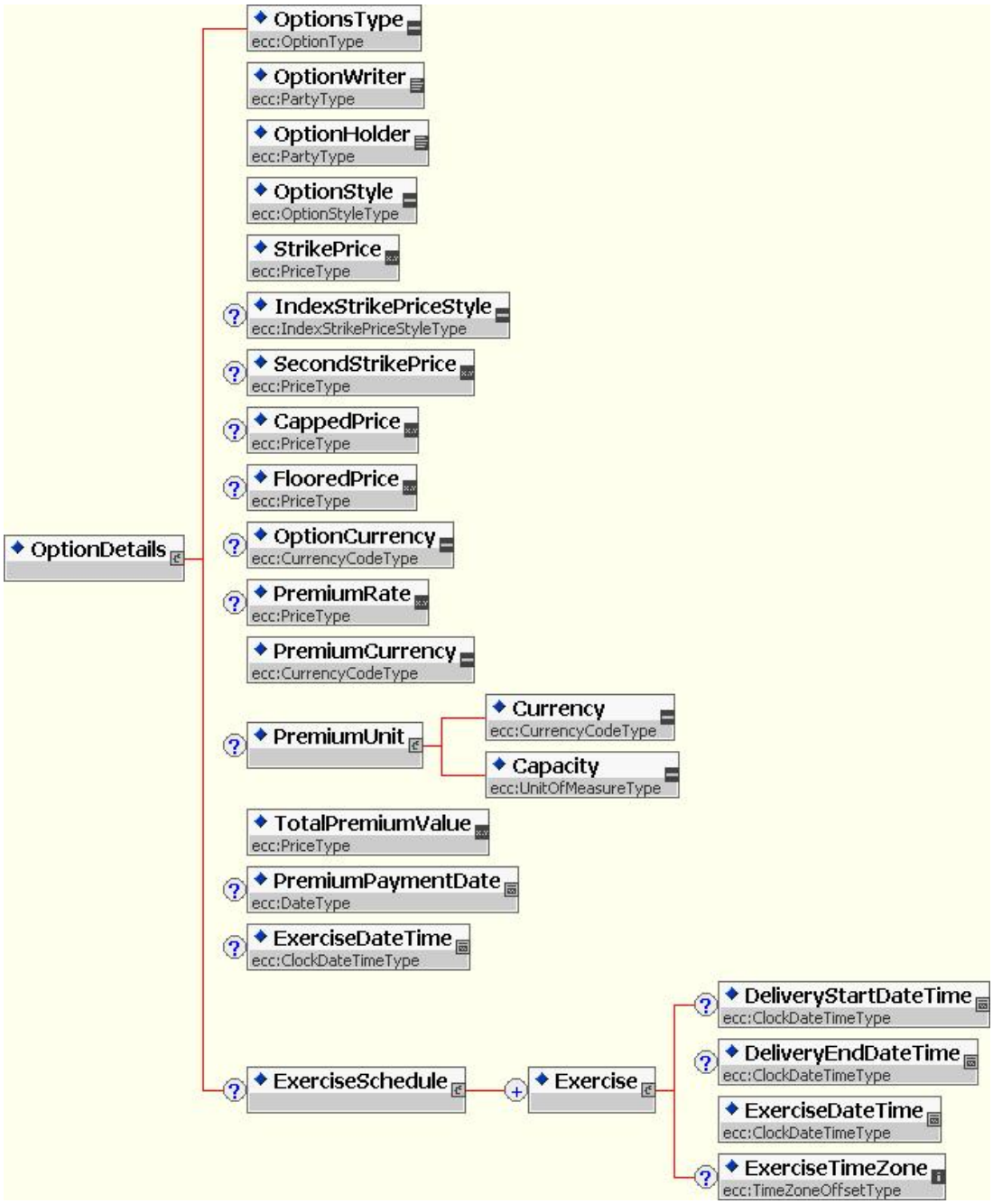
Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional section below TradeConfirmation: OPTION DETAILS This section must be present if and only if the value of field "Transaction Type" = "OPT" or "OPT_PHYS_INX" or "OPT_FXD_SWP" or "OPT_FLT_SWP" or "OPT_FIN_INX".				
OptionsType	Mandatory	OptionType	Key	
OptionWriter	Mandatory	PartyType	Key	The EIC code of the "Seller Party"
OptionHolder	Mandatory	PartyType	Key	The EIC code of the "Buyer Party"
OptionStyle	Mandatory	OptionStyle-Type	Key	If 'TransactionType' = "OPT" then the value for this field must be only "European" or "American" to maintain backwards compatibility with earlier versions of the eCM Standard.
StrikePrice	Mandatory	PriceType	Key	See business rules BCN012 and BCN015
IndexStrike-PriceStyle	Conditional	IndexStrike-PriceStyleType	Key	If 'TransactionType' = "OPT_PHYS_INX" or "OPT_FIN_INX" and 'Strike Price' = "0" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule BCN012

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Second-StrikePrice	Conditional	PriceType	Key	If 'OptionStyle' = "Collar" and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule BCN015
CappedPrice	Conditional	PriceType	Key	If 'OptionType' = "Capped_Call" and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule BCN014
FlooredPrice	Conditional	PriceType	Key	If 'OptionType' = "Floored_Put" and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted See business rule BCN014
Option-Currency	Conditional	CurrencyCode-Type	Key	The currency of the Strike Price, Second Strike Price, Capped Price, and the Floored Price. If any of these fields are present and the transaction type is not "OPT" then this field is: 1) is Mandatory and Key Otherwise 2) it must be omitted
PremiumRate	Mandatory	PriceType	Key	If 'Transaction Type' = OPT_FIX_SWP, OPT_FLT_SWP or OPT_FIN_INX then this field: a) must be omitted; else this field is b) Mandatory and Key
Premium-Currency	Mandatory	CurrencyCode-Type	Key	

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Premium-Unit/Currency	Conditional	CurrencyCode-Type	Key	If 'Commodity' 'is an 'Emissions Commodity' or 'Transaction Type' = OPT_FIX_SWP, OPT_FLT_SWP or OPT_FIN_INX then this field: a) must be omitted; else this field is b) Mandatory and Key
Premium-Unit/Capacity	Conditional	UnitOf-MeasureType	Key	If 'Commodity' 'is an 'Emissions Commodity' or 'Transaction Type' = OPT_FIX_SWP, OPT_FLT_SWP or OPT_FIN_INX then this field: a) must be omitted; else this field is b) Mandatory and Key
Total-Premium-Value	Mandatory	PriceType	Key	Note: For Financial Transactions this field shall be rounded to 2 decimal places.
Premium-PaymentDate	Conditional	DateType	Information	If 'TransactionType is a NOT a 'Financial Transaction' or "OPT_PHYS_INX" then this field: a) is Optional and Information otherwise b) must be omitted Note: Not used for new TransactionTypes introduced in v3.3.
ExerciseDate-Time	Conditional	ClockDate-TimeType	Key	If 'Commodity' 'is an 'Emissions Commodity' then this field is: a)Mandatory and Key; else this field b) must be omitted. Note: this is the opposite of the rule used elsewhere. Note: All times must be in CET

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Ordered Repeatable Section below OptionDetails: EXERCISE SCHEDULE (0-N) This section must not be used if 'Commodity' is an 'Emissions Commodity' or if 'Option Style' = "Cap" or "Floor" or "Collar" otherwise this section must be present. This section is ordered by 'DeliveryStartDateTime', if present (see BCN011).				
DeliveryStart-DateTime	Conditional	ClockDate-TimeType	Key	If 'TransactionType' = "OPT" or 'OPT_PHYS_INX' then this field: a) is mandatory and key, else this field b) must be omitted This date and time must be after the date and time specified in the previous 'DeliveryStartDateTime' field. Time zone of delivery point
DeliveryEnd-DateTime	Conditional	ClockDate-TimeType	Key	If 'TransactionType' = "OPT" or 'OPT_PHYS_INX' then this field: a) is mandatory and key, else this field b) must be omitted Time zone of delivery point
ExerciseDate-Time	Mandatory	ClockDate-TimeType	Key	If 'TransactionType' = "OPT" or 'OPT_PHYS_INX' then this field: a) must be in the time zone of delivery point, else this field b) must be expressed in UTC
ExerciseTime-Zone	Optional	TimeZone-OffsetType	Information	If 'TransactionType' = "OPT" then this field: a) must be omitted, else this field b) Optional and Information Must be an offset to UTC

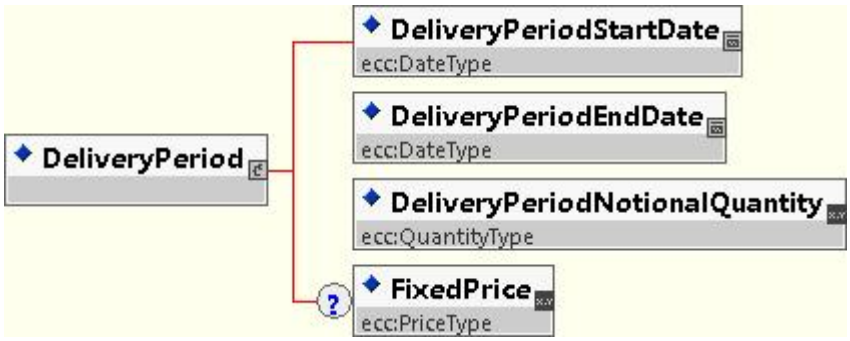
6.9.8 Options Details (Broker) Section XML Schema



6.9.9 Broker Confirmation – Delivery Periods Details

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Ordered Repeatable Sub-Section below TradeConfirmation: Delivery Periods (0-N) Must be present if 'TransactionType' is a 'Financial Transaction', otherwise must not be present. Ordered by adjacent intervals				
Delivery-PeriodStart-Date	Mandatory	DateType	Key	The first start date must be equal to the Effective Date. Every start date except the first one must be the following date of the preceding Delivery Period End Date (start date > previous end date).
Delivery-PeriodEnd-Date	Mandatory	DateType	Key	The last end date must be equal to the Termination Date. This date is inclusive with respect to the specified period, i.e. this date is the last day on which the specified period ended. Hence this period end date must be on or after the associated period start date. In the case of a 1-day period the Delivery Period Start Date = Delivery Period End Date
Delivery-Period-Notional-Quantity	Mandatory	QuantityType	Key	This uses the UoM defined for "Notional Capacity Unit" which is contained in the 'Total Volume Unit' field in the Trade Confirmation section
FixedPrice	Conditional	PriceType	Key	If 'TransactionType' = "FXD_SWP" or "OPT_FXD_SWP" this field: 1) must be Mandatory and Key else it 2) must be omitted This is the percentage scaling factor of the 'World Scale Rate' for a wet freight swap.

6.9.10 Delivery Periods (Broker) Section XML Schema

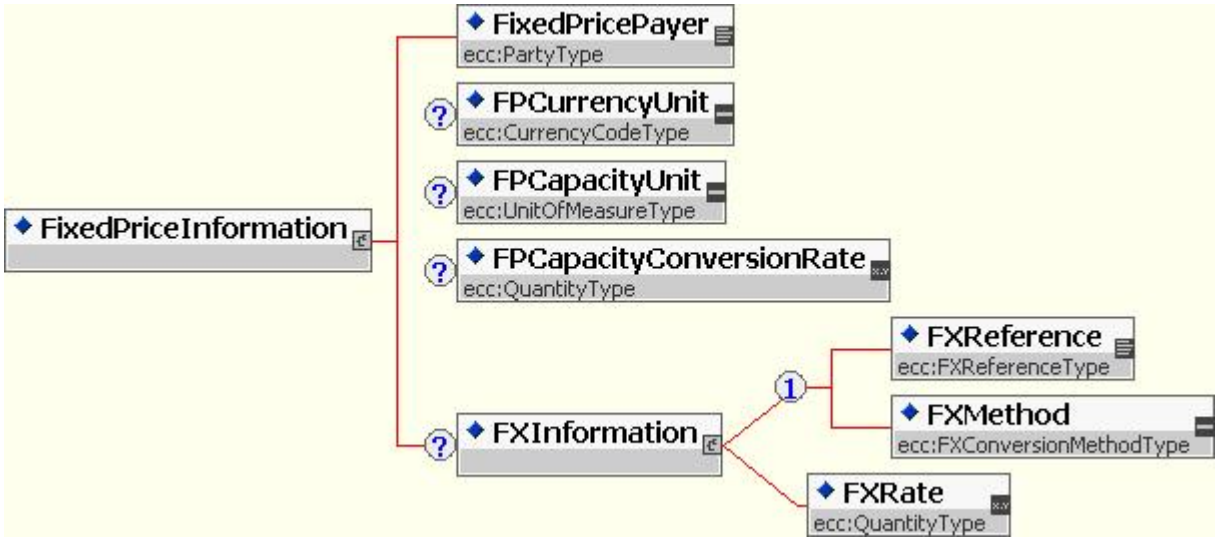


6.9.11 Broker Confirmation – Fixed Price Information

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below TradeConfirmation: Fixed Price Information (0-1) Must be present if Transaction Type = "FXD_SWP" or "OPT_FXD_SWP" otherwise must not be present.				
FixedPrice-Payer	Mandatory	PartyType	Key	If 'TransactionType' = "FXD_SWP" then this field = "Buyer Party" Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Type' = "Call" or "Capped_Call" then this field = "Option Holder" Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Type' = "Put" or "Floored_Put" then this field = "Option Writer"
FPCurrency-Unit	Conditional	CurrencyCode-Type	Key	If 'FP Currency Unit' <> 'Settlement Currency' which is contained in the 'Currency' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted.
FPCapacity-Unit	Conditional	UnitOf-MeasureType	Key	If 'FP Capacity Unit' <> 'Notional Capacity Unit' which is contained in the 'Total Volume Unit' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted. Shall be expressed in energy units of the underlying commodity. (Metric tons, gallons).

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
FPCapacity-Conversion-Rate	Conditional	QuantityType	Key	If 'FP Capacity Unit' is present then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted Conversion rate from the FP Capacity Unit to the Notional Capacity Unit for the deal.
Conditional Section below FixedPriceInformation: FX Information (0-1) Must be presented if 'FP Currency Unit' is present otherwise it must not be present.				
FXReference	Conditional	FXReference-Type	Key	Conversion rate from the 'FP Currency Unit' to the 'Settlement Currency' unit for the deal which is contained in the 'Currency' field in the Trade Confirmation section. Must NOT be present if FX Rate is present
FXMethod	Conditional	FXConversion-MethodType	key	Must be present if FX Reference is present.
FXRate	Conditional	QuantityType	Key	Conversion rate from the 'FP Currency Unit' to the 'Settlement Currency' unit for the deal which is contained in the 'Currency' field in the Trade Confirmation section. Must NOT be present if FX Reference is present

6.9.11.1 Fixed Price Information (Broker) Section XML Schema



6.9.12 Broker Confirmation – Float Price Information

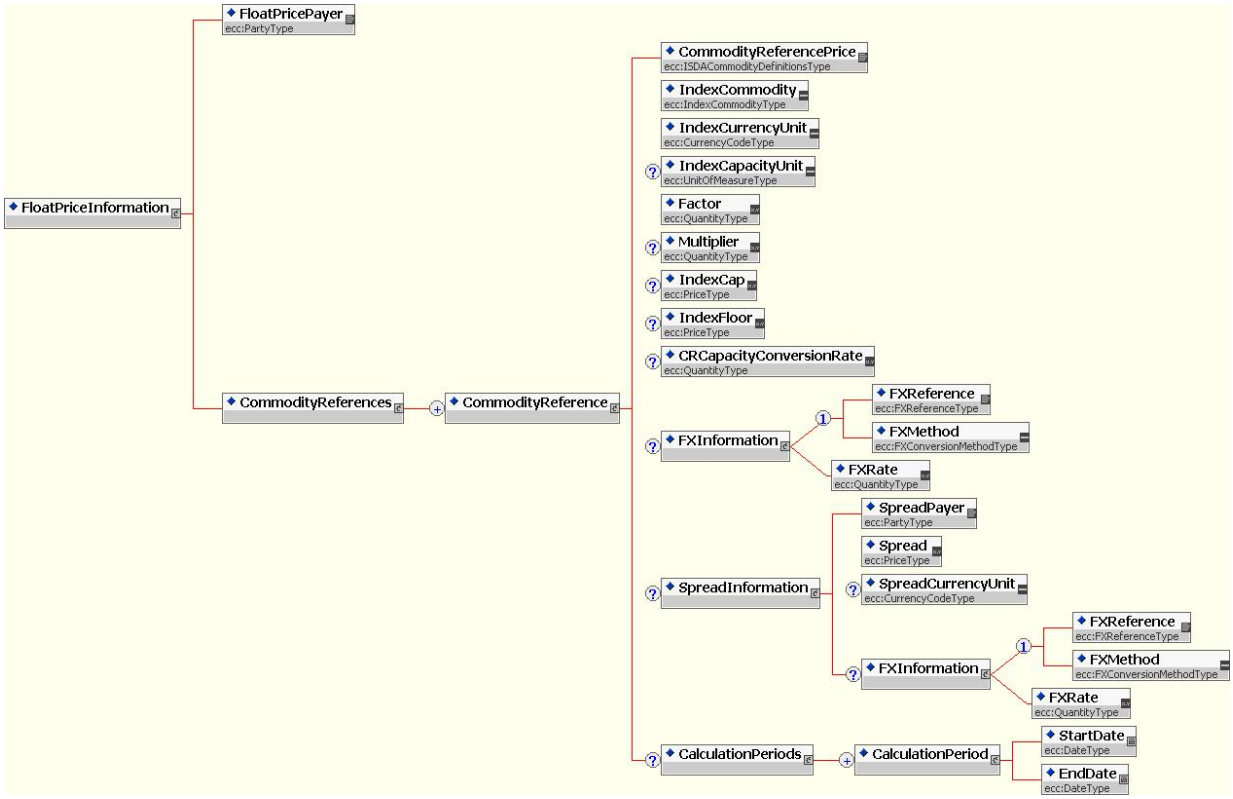
Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Ordered Repeatable Section below TradeConfirmation and as Choice next to TotalContractValue: Float Price Information (1-2) Must be presented if 'TransactionType' is a 'Financial Transaction' or "PHYS_INX" or "OPT_PHYS_INX" otherwise it must not be present. If 'TransactionType' = "FXD_SWP" or "OPT_FXD_SWP" or "OPT_FIN_INX" or "PHYS_INX" or "OPT_PHYS_INX" only one section must be filled. If TransactionType = "FLT_SWP" or "OPT_FLT_SWP" two sections must be filled. Ordered by ascending value of the EIC Code for Float Price Payer				
FloatPrice-Payer	Mandatory	PartyType	Key	If 'TransactionType' = "FXD_SWP" then this field = 'Seller Party' Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Style' = "Call" then this field = 'Option Writer' Else if 'TransactionType' = "OPT_FXD_SWP" and 'Option Style' = "Put" then this field = 'Option Holder' Else if 'TransactionType' = "PHYS_INX" then this field = 'Buyer Party' Else if 'TransactionType' = "OPT_ PHYS_INX" and 'Option Style' = "Call" then this field = 'Option Holder' Else if 'TransactionType' = "OPT_ PHYS_INX" and 'Option Style' = "Put" then this field = 'Option Writer' Else if 'TransactionType' = "FLT_SWP" then this field is the payer of this leg and is the Spread Payer is a spread exists.
Ordered Repeatable Sub-Section below FloatPriceInformation: Commodity References (1-N) Ordered by ascending value of Commodity Reference Price				
Commodity-Reference-Price	Mandatory	ISDA-Commodity-Definitions-Type	Key	Each value appearing in this section must be unique. Refer to www.EFET.org Static Data section for a list of valid values. If Transaction Type = "PHYS_INX" or "OPT_PHYS_INX" then the referenced commodity index must be treated as referring to the actual volume weighted prices collected on the Pricing Date otherwise it must be treated as an average of the price as defined in the Specified Price Note: Only long names for ISDA defined Commodity References are permitted. Note: If a Commodity Reference has been defined for a basket of other Commodity References then use the basket reference

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
				rather than constructing the basket from the individual Commodity Refernces.
Index-Commodity	Mandatory	Index-Commodity-Type	Key	
Index-CurrencyUnit	Mandatory	CurrencyCode-Type	Key	
Index-CapacityUnit	Mandatory	UnitOf-MeasureType	Key	
Factor	Mandatory	QuantityType	Key	
Multiplier	Conditional	QuantityType	Key	If 'IndexCommodity' = "Time_Charter" Then this field 1) is Mandatory and Key Otherwise 2) it must be omitted,
IndexCap	Optional	PriceType	Key	This field must be present if and only if the specified index has a cap or collar. If present then it is matched.
IndexFloor	Optional	PriceType	Key	This field must be present if and only if the specified index has a floor or collar. If present then it is matched.
CRCapacity-Conversion-Rate	Conditional	QuantityType	Key	If is 'Index Capacity Unit' is present and <> 'Notional Capacity Unit' which is contained in the 'Total Volume Unit' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted. Conversion rate from the CR Capacity Unit to the Notional Capacity Unit for the deal. For some basket deals the 'Index Capacity Unit' may be different to the 'Notional Capacity Unit' and yet there is no conversion rate since the price will be used at 'face value' with out conversion, examples of such deals are 'Dark Spreads' where an 'Emissions' index is combined with a 'Coal' index both may use Tonnes or Tons but the Notional Capacity Unit is MWh. In such cases the CR Capacity Conversion Rate will be set to "1".

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below CommodityReference: FX Information (0-1) Must be present if 'Index Currency Unit' in section Commodity Reference <> 'Settlement Currency' which is contained in the 'Currency' field in the Trade Confirmation section otherwise must not be present.				
FXReference	Conditional	FXReference-Type	Key	Conversion rate from the CR Currency Unit to the Settlement Currency Unit for the deal. Must be present if FX Fixed Rate is NOT present.
FXMethod	Conditional	FX-ConversionMethodType	key	Must be present if FX Reference is present.
FXRate	Conditional	QuantityType	Key	Conversion rate from the CR Currency Unit to the Settlement Currency Unit for the deal. Must be present if FX Reference is NOT present.
Optional Section below CommodityReference: Spread Information (0-1) Must be present if 'Spread Amount' is a +ve amount, a –ve amount otherwise it must be omittied.				
SpreadPayer	Mandatory	PartyType	Key	Must be the "Float Price Payer"
Spread-Amount	Mandatory	PriceType	Key	If 'Spread Rate' is present then this field Must be omitted Else Must be present. Can be a positive or negative value signifying the amount in the 'Currency' or 'Spread Currency Unit'
SpreadRate	Conditional	QuantityType	Key	If 'Spread Amount' is present then this field Must be omitted Else Must be present. Can be a positive or negative value.
Spread-CurrencyUnit	Conditional	CurrencyCode-Type	Key	If 'SpreadRate' is present then this field Must be omitted Else Must be present. If 'Spread Currency Unit' <> 'Settlement Currency' which is contained in the 'Currency' field in the Trade Confirmation section then this field: 1) must be Mandatory and Key Otherwise 2) it must be omitted. Note: The spread must always be in the Notional Capacity Unit

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Conditional Section below Spread Information: FX Information (0-1) Must be present if 'Spread Currency Unit' is present otherwise must not be present.				
FXReference	Conditional	FXReference-Type	Key	Conversion rate from the Spread Currency Unit to the Settlement Currency Unit for the deal. Note: this is NOT the conversion to the Index Currency Unit for the Commodity Reference but to the Settlement Currency Unit. Must be present if Spread Information FX Rate is NOT present.
FXMethod	Conditional	FXConversion-MethodType	Key	Must be present if Spread Information FX Reference is present.
FXRate	Conditional	QuantityType	Key	Conversion rate from the Spread Currency Unit to the Settlement Currency Unit for the deal. Must NOT be present if Spread Information FX Reference is present
Ordered Repeatable Sub-Section below Commodity Reference: Calculation Periods (1-N) Must appear in same number and order as the related delivery periods, that is, 'CalculationPeriod' [n] specifies the calculation start and end date for 'DeliveryPeriod' [n]). For the transaction types "PHYS_INX" and "OPT_PHYS_INX", see BCN 019.				
StartDate	Mandatory	DateType	Key	
EndDate	Mandatory	DateType	Key	This End Date must be on or after the associated Start Date and time. This date is inclusive with respect to the specified period, i.e. this date is the last day on which the specified period ended. Hence this date must be on or after the associated period start date. In the case of a 1-day period the Calculation Period Start Date = Calculation Period End Date.

6.9.12.1 Float Price Section XML Schema



6.9.13 Document specific Business Rules – Broker Confirmation

Business rules BCN001 through BCN007 concern document identification and version numbers, while the business rules BCN008 through BCN013 concern document acceptance and rejection criteria.

ID	BUSINESS RULE
BCN001	A Broker Confirmation document is composed of a single trade that the broker wishes to confirm including the fee-related information. It is always sent from the broker to the trader.
BCN002	Each document has a unique identification. The sender assigns the unique identification to each broker confirmation. Note: it is recommended not to use the TradeDate (or any other information that relates to the content of the BCN) as a component of the Document ID, unless the value used can be maintained independently from the Broker Confirmation. This is to ensure that the Document ID is invariant under amendment of the BCN and can be used to identify pervious versions of an amended BCN even if, for example, the Trade Date is amended.
BCN003	If it is necessary to retransmit the document (i.e. because of a modification to correct something), the document identification shall not be changed. Instead the document version shall be increased by at least 1.
BCN004	The receiver shall ensure that all document identifications with its associated version number for a given sender shall be unique. A document that is received with the same identification and version number, or the same identification and a version number inferior to the current version, shall be rejected as a duplicate.
BCN005	If a Broker Confirmation is to be cancelled an cancellation document shall be used.
BCN006	A Broker Confirmation for a physical forward trade (excluding EUA) has as many occurrences of time interval quantities that can cover the whole trade being confirmed.

ID	BUSINESS RULE
BCN007	Negative values are not allowed in the deal confirmation quantities.
BCN008	The Broker Confirmation document is composed of several structures some mandatory for all uses of the confirmation document and other sections and fields that are optional the use of which depends on the 'Transaction Type' and the 'Commodity' which are defined terms within this standard: Mandatory Sections/Fields are: The Document Header providing all the information that is necessary to uniquely identify a trade, along with the identification of involved parties, and the date of the creation of the document. The top level Broker Confirmation fields which provides some general information common to all trade confirmations including some information about the Master Agreement under which the trade was enacted. Optional sections/fields include: Top level Broker Confirmation fields which are relevant to physical forward and physical option deals and include information on commodity and physical delivery. EUA Details which is used when the Commodity is EUA certificates unlike continuously delivered energy trades EUA trades have no Time Interval Quantity sub structure. Instead there is a DeliveryDate by which the EUA account transfers must be complete. Options Details relevant to options on physical and financial instruments Delivery Periods which define the settlement dates and related data Fixed Price Information which contains details specific to the fixed leg of a fixed/float swap Float Price Information relevant to the floating legs of swaps and index deals and which support baskets of indexes and formula swaps. Agents – comprising mandatory broker details and option details related to UK power specific details of the third party "ECVNA" who is assigned the responsibility under the deal to notify volume to the market operator. A block describing hub codification information that is specific to gas trades. N.B EUA Trade Confirmation documents do not require sections for Hub based information or for Account and Charge Information
BCN009	LoadType field is likely to be removed from the matching process in future versions of the standard since the actual profile will be matched at the interval level ensuring that any market based variations of well known products (for instance, Peak) are validated at that level. For this release of the standard the following rules will therefore be applied: For gas deals the value must be "Base". For all other deals the value must be "Custom", however in future versions of the standard it is the intention either to relax the constraints on this field to allow it to serve as a non-key informational field, thus removing in from the matching algorithm or to remove it from the BCN document entirely. N.B EUA Broker Confirmation documents do not contain the LoadType field
BCN010	The EUA Broker Confirmation document does not support multiple AgentTypes as the only agent in the trade is the Broker and ECVNA agents are not relevant in the context of EUA Trades.
BCN011	For option styles and their exercise/expiry date times: For European include the Exercise Schedule For American include a single final Exercise Date Time in the Exercise Schedule For Asian include one Exercise Date Time in the Exercise Schedule per delivery period of the underlying transaction as this is taken to be equal to the averaging period For Caps Floors and Collars there will be no Exercise Schedule because they are triggered by price movements rather than a schedule

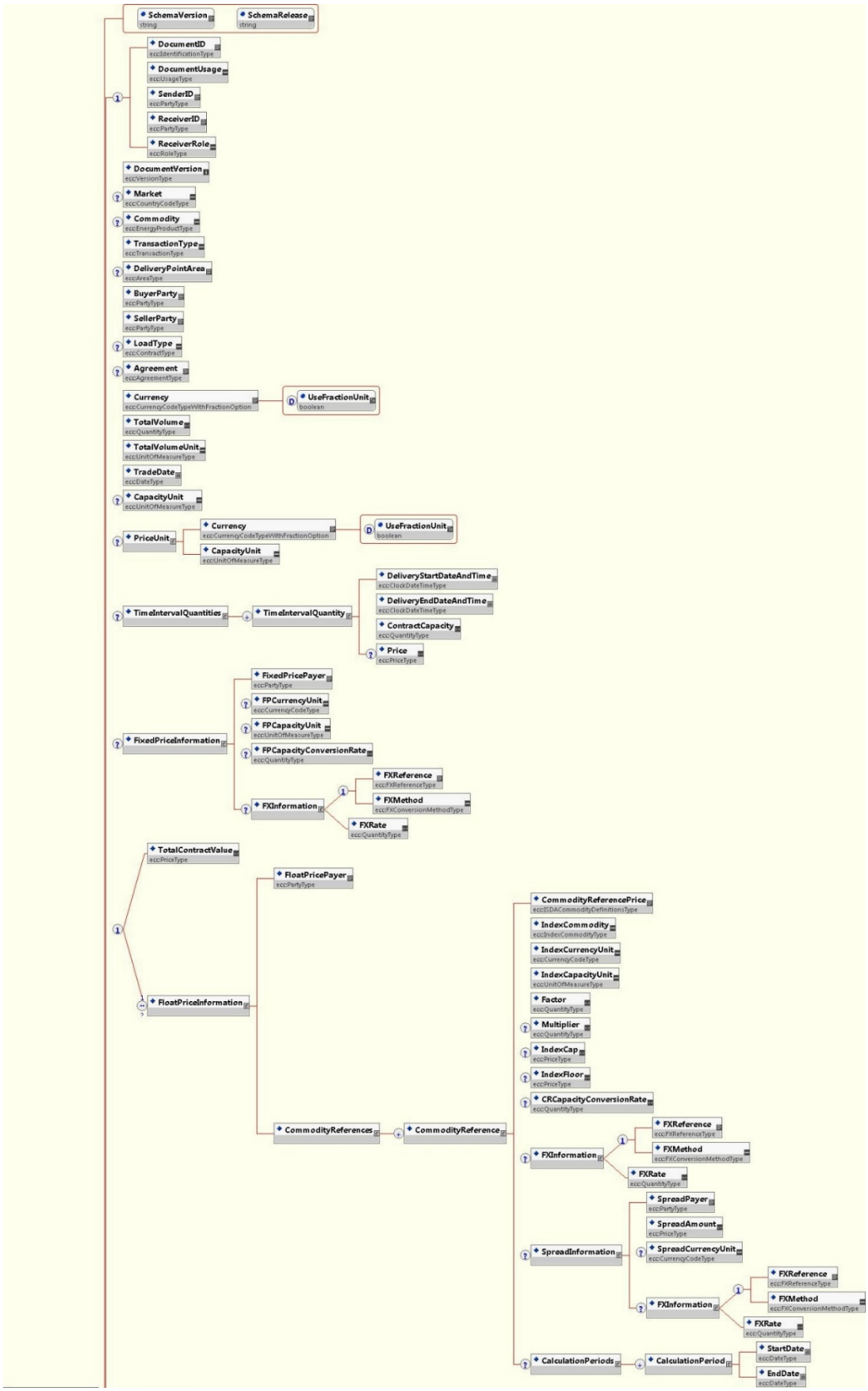
ID	BUSINESS RULE
BCN 012	For options on physical forwards ("OPT") and fixed/floating swaptions (OPT_FXD_SWP and OPT_FLT_SWP) the strike price is entered in the Strike Price field of the Option Details section. For options on a financial index (OPT_FIN) and on physical index (OPT_PHYS_INX) deals there are three possibilities depending on the purpose of the option: The 'Strike Price' may be an absolute value or a fixed differential in the case of an option on a basket index 'Strike Price' = "0" and 'Index Strike Price Style' = "Index_Following", in which case they are always at the money and can be exercised at the market price if more capacity is required i.e. physical risk management 'Strike Price' = "0" and 'Index Strike Price Style' = "Index_Dated" which means that the strike price of the option is the state of the index on the Trade Date.
BCN 013	If a Formula ID has been agreed between the parties for a certain deal (or type of complex deal) then the Formula ID MUST be filled in by both counterparties and therefore the basket details must be omitted with the exception of the Spread Information. The same Formula can be reused with different spreads without the need to define an additional formula between parties just to account for the new spread.
BCN 014	An Option Type of 'Capped_Call' or 'Floored_Put' will comprise a Strike Price and a Cap Price or a Floor Price which must be used to define the upper and lower limit to the pay-off of the option.
BCN 015	An Option Style of : 'Cap' will comprise a Strike Price only (the option will automatically exercise at the Strike Price), 'Second Strike Price' must be ommitted. 'Floor' will comprise a Strike Price only (the option will automatically exercise at the Strike Price), 'Second Strike Price' must be ommitted. 'Collar' will comprise a Strike Price which must contain the value of the cap price of the collar and a Second Strike Price which must contain the floor price of the collar, 'Second Strike Price' must be specified.
BCN 016	For the purposes of rounding the fields for 'Financial Transactions': "Total Volume" and "Total Premium Value", the rounding mechanism to be used must be 'Rounding to Even' such that: 3.016 rounded to hundredths is 3.02 (because the next digit (6) is 6 or more) 3.013 rounded to hundredths is 3.01 (because the next digit (3) is 4 or less) 3.015 rounded to hundredths is 3.02 (because the next digit is 5, and the hundredths digit (1) is odd) 3.045 rounded to hundredths is 3.04 (because the next digit is 5, and the hundredths digit (4) is even) 3.04501 rounded to hundredths is 3.05 (because the next digit is 5, but it is followed by non-zero digits)
BCN 017	Basis swaps can be booked as Float/Float deals or as Fixed/Float deals, with the differential price of the two commodity underliers forming the floating part of the deal (e.g. CR1 – CR2). Within eCM basis swaps MUST be confirmed as Float/Float deals according to this standard. Deals booked as Fixed/FLoat must therefore be mapped to the Float/Float CNF structure and assigned a Transaction Type = "FLT_SWP". The mapping is as follows: CR1 (the prime index) is assigned to one floating leg in the CNF "FLT_SWP" structure CR2 (the subtracted index) is assigned to the other floating leg in the CNF "FLT-SWP" structure

ID	BUSINESS RULE
	The Fixed Price Payer from the booked deal is assigned to the Spread Information.Spread Payer field in the floating leg to which CR2 has been assigned and such that the Spread Information.Spread Amount will be a positive amount The Fixed Price from the booked deal is assigned to the Spread Information.Spread Amount field in the floating leg to which CR2 has been assigned such that it is a positive amount An example: Trader A (Buyer) and Trader B (Seller) have entered into a basis swap for GAS OIL-IPE/ OIL-BRENT-IPE at USD17.20. The deal has been booked as a Fixed/Float swap with a fixed leg of USD17.20 and a floating leg as the differential price: GAS OIL-IPE minus OIL-BRENT-IPE. This deal would be mapped to the Float/Float CNF structure as follows: Float Price Information[1].Float Price Payer = "Trader A" Float Price Information[1].Commodity Reference[1].Commodity Reference Price = "OIL-BRENT-IPE" Float Price Information[1]. Commodity Reference[1].Index Commodity = "Oil" Float Price Information[1]. Commodity Reference[1].Index Currency Unit = "USD" Float Price Information[1]. Commodity Reference[1].Index Capacity Unit = "BBL" Float Price Information[1]. Commodity Reference[1].Specified Price = "Settlement" Float Price Information[1]. Commodity Reference[1].Factor = "1" Float Price Information[1]. Commodity Reference[1].Delivery Date = "First_Nearby_Excluding" Float Price Information[1]. Commodity Reference[1].Pricing Date = "CBD" Float Price Information[1]. Commodity Reference[1].Spread Information.Spread Payer = "Trader A" Float Price Information[1]. Commodity Reference[1].Spread Information.Spread Amount = "17.2" Float Price Information[2]. Commodity Reference[1].Commodity Reference Price = "GAS OIL-IPE" Float Price Information[2]. Commodity Reference[1].Index Commodity = "Oil" Float Price Information[2]. Commodity Reference[1].Index Currency Unit = "USD" Float Price Information[2]. Commodity Reference[1].Index Capacity Unit = "MT" Float Price Information[2]. Commodity Reference[1].Specified Price = "Settlement" Float Price Information[2]. Commodity Reference[1].Factor = "1" Float Price Information[2]. Commodity Reference[1].Delivery Date = "First_Nearby_Excluding" Float Price Information[2]. Commodity Reference[1].Pricing Date = "CBD" Float Price Information[2]. Commodity Reference[1].CR Capacity Conversion Rate = "7.45"
BCN 018	UK Gas Day 'Trade Date' rule: This rule resolves a procedural discrepancy relating to the value of 'Trade Date' for a physical forward UK Gas market trade, that is a trade for which 'Transaction Type' = "FOR", 'Market' = "UK" and 'Commodity' = "Gas". Since the 'UK Gas Day' runs from 05:00 to 05:00 (the next day) a potential discrepancy exists between the date of the 'gas day' and the calendar date since the 'gas day' spans two calendar dates. The Standard compliant value for the trade date MUST be the calendar date, not the gas date. So a trade struck at 0100hrs on Sept 11th MUST have a trade date of Sept 11th even though the 'UK Gas Day' began on Sept 10th.
BCN 019	For the transaction types "PHYS_INX" and "OPT_PHYS_INX", 'daily pricing' is the implied and confirmed settlement method when 'CalculationPeriod' is contemporaneous with 'TimeIntervalQuantities'. For cases where the 'CalculationPeriod' is offset to the 'TimeIntervalQuantities', average pricing is the implied and confirmed method.

6.9.14 Broker Confirmation document Field Specifications

The same document field specification as for the Trade Confirmation document apply. Please see section 6.2 , "Trade Confirmation.

6.9.15 Broker Confirmation document XML Schema



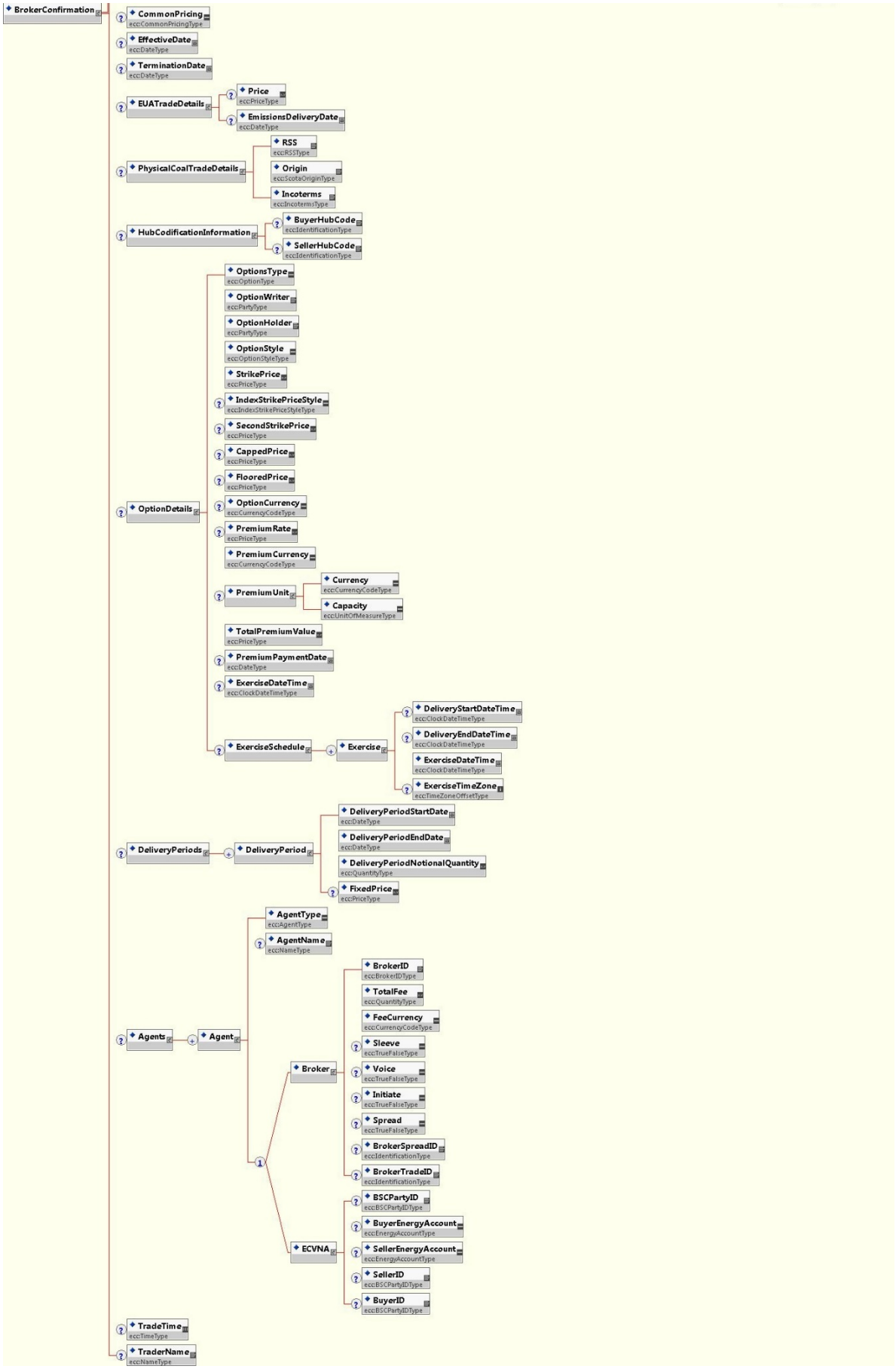


Figure 33 XML Schema for the BrokerConfirmation Document

6.10 Broker Fee Information Document

A Broker Fee Information document contains for one deal all fee-related information of the trader which is relevant only for the trader-broker match and which must not be disclosed to the counterparty. Hence a BFI document is not a standalone document but is always linked to a CNF. A BFI document references a DocumentID and is by definition linked to the CNF with this DocumentID and the highest version number. Hence when a BFI is linked to a CNF which is then amended the BFI is automatically linked to the new CNF. On the other hand a BFI document has its own version number so that it can be amended independently from the CNF it is linked to. This makes it possible to amend a BFI even after the linked CNF has been matched with a counterparty trade confirmation document and cannot itself be amended anymore. The fee-related information of the broker is provided in the BCN document.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
Section: Document Header				
DocumentID	Mandatory	Identification-Type	Information	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions. When a party receives a BFI with an ID unknown to the receiver then the receiver must treat this document as the initial version of a new BFI document. Otherwise the receiver must treat this document as an amendment of an already sent BFI document (see field "Document Version").
Document-Usage	Mandatory	UsageType		
Document-Version	Mandatory	VersionType	Information	The version number is always associated the Document ID. It is used to distinguish and order the initial BFI document and all its amendments over time. A fixed first version number for the initial BFI document is not defined (see field "Document ID").
LinkedTo	Mandatory	Identification-Type	Information	If the BFI is created by a trader it is linked to a trade confirmation document. The DocumentID of the confirmation (representing one deal) to which the included information about broker fees belongs. This information cannot be changed by amendments! Two different BFI documents from the same sender with different DocumentIDs must not link to the same confirmation DocumentID! The BFI document is always linked to the confirmation document with the given DocumentID and the highest version number.

Name	Mandatory/ Optional/ Conditional	Type	Key/ Information	Business Rule
SenderID	Mandatory	PartyType	Information	EIC Code of Sender
ReceiverID	Mandatory	PartyType	Information	Broker ID (although the BFI is not sent to the broker)
ReceiverRole	Mandatory	RoleType	Information	Broker role applies as the document is being sent by a trader.
Section: Broker Fee Details				
TotalFee	Mandatory	QuantityType	Key	Note: For Financial Transactions this field shall be rounded to 2 decimal places.
FeeCurrency	Mandatory	CurrencyCode Type	Key	

6.10.1 Broker Fee Information Document XML Schema

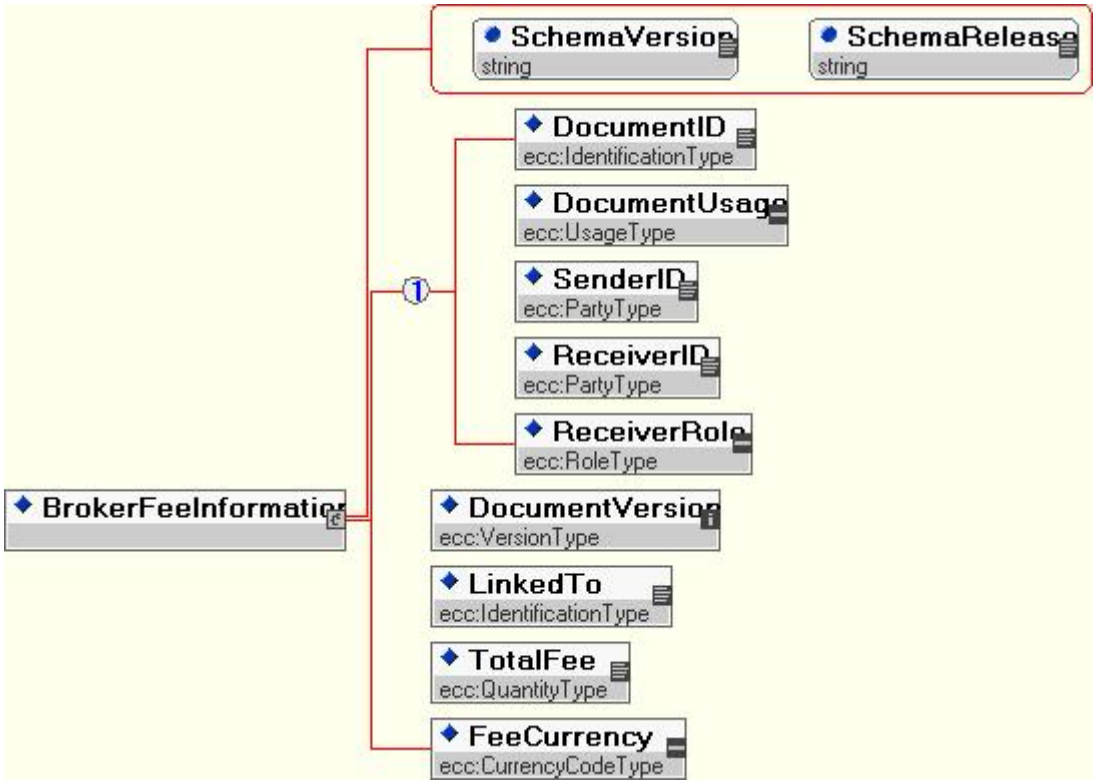


Figure 34 XML Schema for the Broker Fee Information Document

6.10.2 Document specific Business Rules for Broker Fee Information

Table 8: Business Rules for Rejections

ID	BUSINESS RULE
BFI001	A BFI from a trader is linked to a CNF with the referenced DocumentID and the highest version number.
BFI002	The referenced DocumentID cannot be changed by amendments.

ID	BUSINESS RULE
BFI003	Two different BFI documents from the same sender with different DocumentIDs must not link to the same confirmation DocumentID!
BFI004	A BFI does not specify a document usage but inherits the document usage from the CNF it is linked to.
BFI005	A BFI is rejected in case the defined receiver is not configured as partner.
BFI006	For the purposes of rounding the field "Total Fee", the rounding mechanism to be used must be 'Rounding to Even' such that: 3.016 rounded to hundredths is 3.02 (because the next digit (6) is 6 or more) 3.013 rounded to hundredths is 3.01 (because the next digit (3) is 4 or less) 3.015 rounded to hundredths is 3.02 (because the next digit is 5, and the hundredths digit (1) is odd) 3.045 rounded to hundredths is 3.04 (because the next digit is 5, and the hundredths digit (4) is even) 3.04501 rounded to hundredths is 3.05 (because the next digit is 5, but it is followed by non-zero digits) This rounding mechanism must be applied to "Total Fee" for all transaction types and is therefore a retrospective change affecting eCM v3.1 and v3.2.

6.11 Broker Match Notification Document

A Broker Match Notification document is sent from the trader to the broker in order to inform the Broker about a preliminary or final match or a reversal of a preliminary match.

Name	Mandatory/ Optional/ Conditional	Type	Business Rule
Document Header			
DocumentID	Mandatory	IdentificationType	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
DocumentUsage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	
ReceiverID	Mandatory	PartyType	
ReceiverRole	Mandatory	RoleType	
NotificationType	Mandatory	NotificationField-Type	Identifies, if the match was preliminary, final or reverse. One of the values: "preliminary", "final", "reverse".
ProcessType	Mandatory	ProcessFieldType	Indicates, if the counterparty was involved in the eCM matching at the trader's side. One of the values: "withCp" or "withoutCp".
Reference Trade Confirmation Identifier			
ReferencedCNF-DocumentID	Mandatory	IdentificationType	

Name	Mandatory/ Optional/ Conditional	Type	Business Rule
ReferencedCNF-DocumentVersion	Mandatory	VersionType	
ReferencedBCN-DocumentID	Mandatory	IdentificationType	
ReferencedBCN-DocumentVersion	Mandatory	VersionType	
ReferencedTrader-BFIDocumentID	Mandatory	IdentificationType	
ReferencedTrader-BFIDocument-Version	Mandatory	VersionType	

6.11.1 Broker Match Notification Document XML Schema

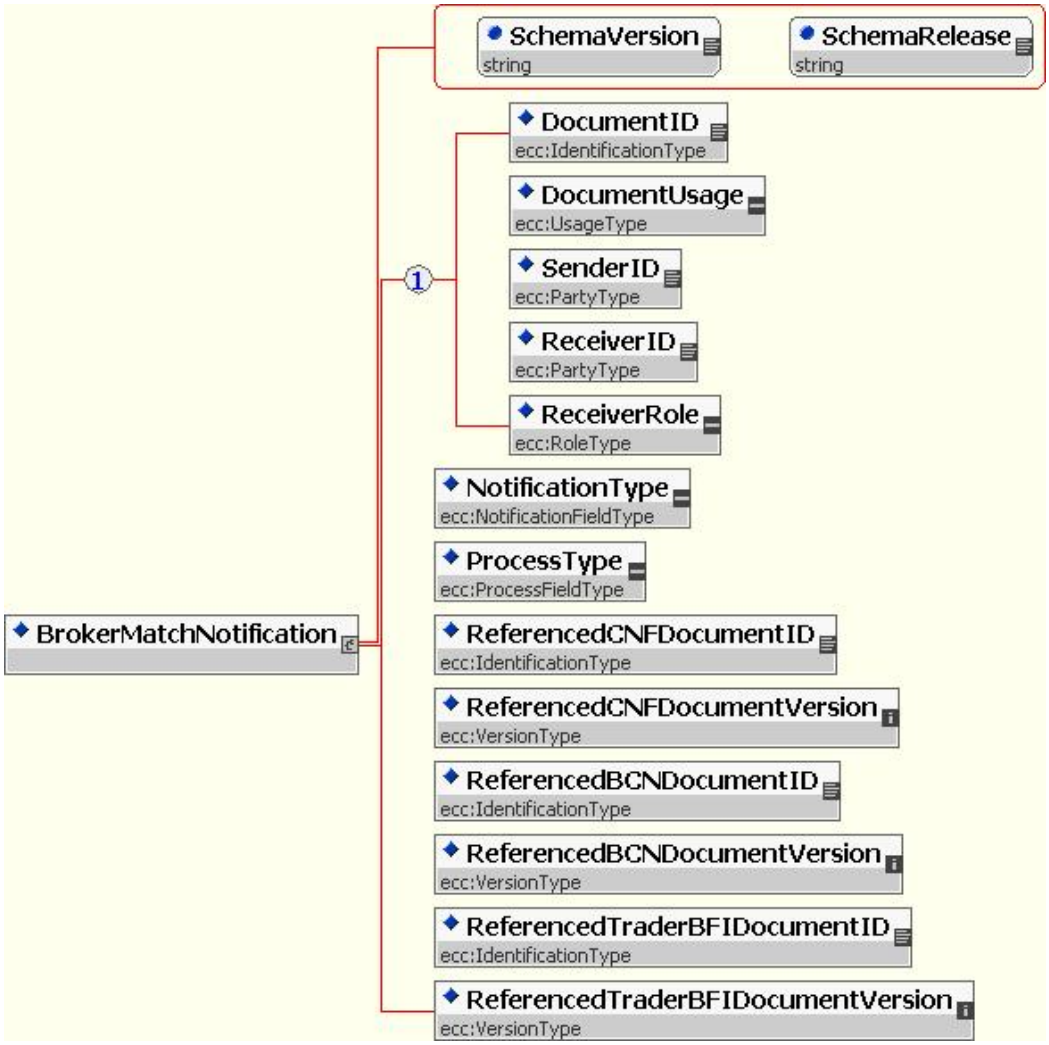


Figure 35 XML Schema for the Broker Match Notification Document

6.11.2 Document specific Business Rules for Broker Match Notification

ID	BUSINESS RULE
BMN001	A BMN refers to a match between a (trader's) CNF and BFI document and a broker's BCN document.
BMN002	A BMN of notification type "preliminary" is created, if a match between the trader and the counterparty did not yet occur, but the broker's document matches with the trader's document.
BMN003	A BMN of notification type "final" is created, if the broker's BCN matches with the trader's CNF and BFI documents and the trader's CNF has matched with the counterparty's CNF or in the case that no counterparty match process exists (see BMN005).
BMN004	A BMN of notification type "reverse" is created, if a preliminary match notification is reversed due to a trade amendment of the trader's CNF or BFI / broker's BCN or a cancellation of the trader's CNF / broker's BCN.
BMN005	A BMN of Process Type "withCp" is sent in case the counterparty is involved in eCM. If the counterparty is not involved, the Process Type "withoutCp" is used.

6.12 Tear-Up Request Document

A Tear-Up Request document is used to break an existing match between two business documents.

Name	Mandatory/ Optional/ Conditional	Type	Business Rule
Document Header			
DocumentID	Mandatory	IdentificationType	The sender generates this ID that must be a unique reference compliant with naming standard defined in 6.1 Naming and Typing Conventions.
DocumentUsage	Mandatory	UsageType	
SenderID	Mandatory	PartyType	
ReceiverID	Mandatory	PartyType	
ReceiverRole	Mandatory	RoleType	
Reference Document Identifier			
Referenced-DocumentType	Mandatory	DocumentType	Used to identify the document type of the referenced document.
Referenced-DocumentID	Mandatory	IdentificationType	Document ID of the cancelled trade or broker confirmation
Referenced-DocumentVersion	Conditional	VersionType	Version number of the cancelled trade or broker confirmation. Must be present if referenced document is a trade confirmation or broker confirmation. Otherwise must be omitted.
ReasonText	Optional	ReasonTextType	Additional informal information.

6.12.1 Tear-Up Request Document XML Schema

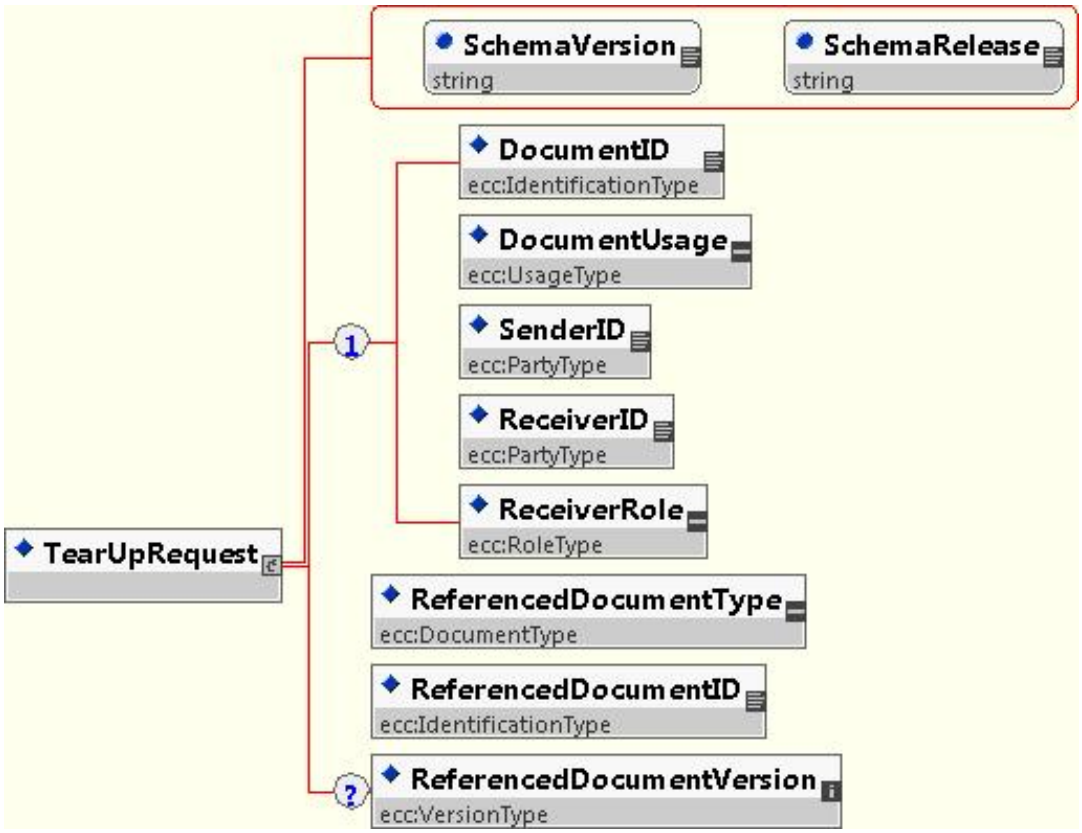


Figure 36 XML Schema for the Tear-Up Request Document

6.13 Box Results Document

A Box Results document is used to export status information from the process.

The structure of the BRS will depend on the information available from the service and therefore the details of the implementation and service level for any eCM service. EFET will work with suppliers to develop a minimal recommended document structure which will be published as a companion document to this document.

7 State Processing

The eCM process comprises two related sub processes or dialogues:

1. The Counterparty Dialogue
2. The Broker Dialogue

If the process is distributed, as in the case of the peer-to-peer approach with an instance of the process operating at each counterparty site and at the broker site, then the state changes of business documents, defined for each dialogue, must be synchronised between the instances of the process running at different sites to maintain the integrity of the overall process and to come to a consistent result regardless of location.

If the process is running as a service, as in the multi-tenancy approach with a single instance of the process shared between remote parties, then the need to exchange documents between distributed instances of the process is replaced by the exchange of documents between the parties and the service as described in section 5.4.5, "High-Level Business Document Submission and Result Process".

The state processing is therefore presented below at three levels:

1. business level – looking at the state transitions for the matching of the business documents: the Trade Confirmation, the Broker Confirmation and the Broker Fee Information documents
2. communication level – looking at the state transitions for the 'well processed' processing of all documents including the business documents and the other supporting documents that are exchanged both between the distributed instances of the process and between the parties and a shared instance of the process
3. synchronisation level – looking at the state changes for the 'well received' processing of business Acknowledgement or Rejection documents which regulate the state changes of the other documents.

Each of the diagrams and the processing they represent conforms to three fundamental premises:

1. state changes for documents are 'indivisible' and are at all times synchronised across distributed instances of the process
2. all documents must be unique within all states of the current instance of the process
3. only one version of a document is permitted to be active within the process at any time.

Notes: *Multiple versions may be queued until processing of the current version is complete.*

A general rule for any messages submitted to the process that are not in strict compliance with the order of the dialogue or semantically correct according to the business rules defined for the documents must be rejected using a Rejection Document and the received document set to the 'Failed' state within the communications process. Whereas defined semantic errors may result in referenced business documents (CNF, BCN, BFI or CAN) being set to the 'Error' state as specified in detailed processing, other essentially undefined situations must not be permitted to affect the normal processing of business documents (CNF, BCN, BFI or CAN) to which they might refer. The following list is not complete but gives an idea of the types of situation where unexpected documents with undefined errors arrive and where a Rejection must be issued but where the business document must not be set to the 'Error' state.

1. Receiving a BMN preliminary while in state "Preliminary Matched" (i.e. the unexpected arrival of a well received BMN)
2. Receiving an MSU sent by the Seller (i.e. arrival of a 'well received' MSU which makes no semantic sense within the context of the current version of the process)
3. Receiving an MSA referring to a CNF instead of the expected MSU (i.e. arrival of a 'well received' MSA which makes no semantic sense within the context of the current version of the process)

Documents which are syntactically incorrect will not be well received and must be dealt with at the communications protocol level with the issue of a technical rejection in accordance with the ebXML standard, and example would be: receipt of an MSU referring to one known CNF only which is syntactically incorrect.

7.1 Business Document State Processing

The state processing of both the Counterparty and the Broker Dialogues are described below. The Trade Confirmation document can participate in both dialogues as part of the Trilateral Matching dialogue and therefore has two state diagrams defined for it: one for the state changes defined for it in the Counterparty Dialogue and one for the state changes defined for it in the Broker Dialogue.

7.1.1 State Processing for the Trade Confirmation in the Counterparty Dialogue

Figure 37 Counterparty Process Trade Confirmation Document State Diagram shows the permitted state transitions for the Trade Confirmation document within the Counterparty Dialogue of the eCM Process. The diagram is valid for both the Buyer and Seller instance of the process in a peer-to-peer or multi-tenancy deployment.

Validated documents entering the business process from the communications process are assigned the Pending state signifying that they are available for matching. In the Buyer instance of the process the matching algorithm is applied as defined in section 5.6.1, "'Suggested Match' Processing".

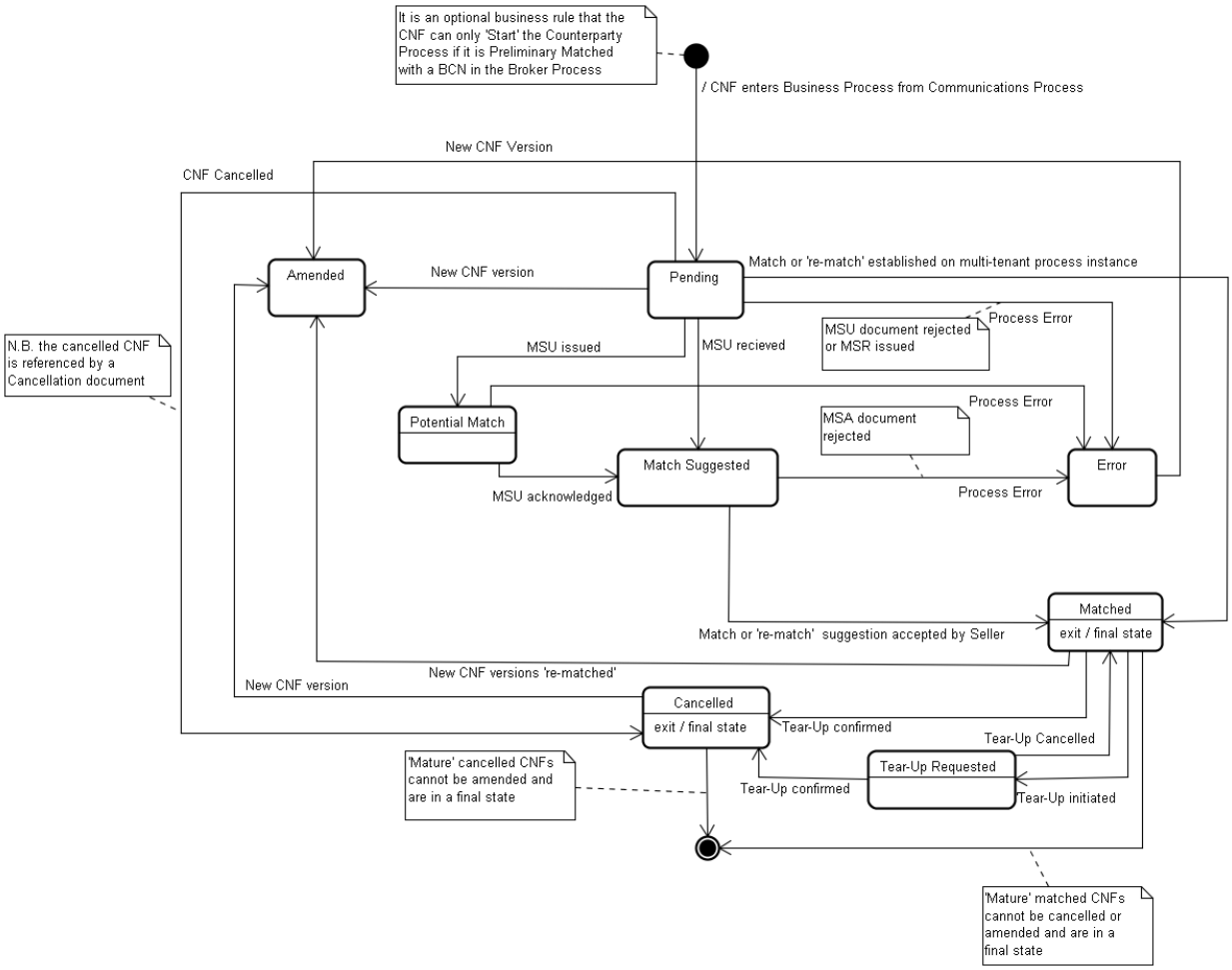


Figure 37 Counterparty Process Trade Confirmation Document State Diagram

Once a match is detected by the Buyer instance it is either verified by the Seller instance of the process in the peer-to-peer deployment or, in the multi-tenancy deployment directly results in the setting of the Buyer and Seller documents to the 'Matched' state.

In the peer-to-peer process variation the result established by the Buyer instance is suggested to the Seller instance of the process and the two instances progress to the 'Match Suggested' state via the interim state 'Potential Match' in the case of the Buyer instance of the process.

In the Match Suggested state the Seller instance of the process validates the match suggestion made by the Buyer instance using the algorithm defined in section 5.6.2, "'Suggested Match Acceptance/Refusal' Processing". If a different result is calculated then the Seller cannot accept the suggested match and must refuse; in this case the Trade Confirmation documents in both instances of the process are moved to the Error state. The failure to calculate a common result must be handled outside the process.

If there are problems progressing each instance of the process in a synchronized way then documents in both instances will be assigned to the Error state. Once the processing error has been corrected then the process can be restarted by submitting a new version of the relevant Trade Confirmation documents.

If the match suggestion can be accepted by the Seller instance of the process then the documents are moved to the Matched state and the process in both instances terminates.

Trade Confirmation documents in the Pending state may (if not progressing to 'Matched') be assigned to the Amended or Cancelled states based on external events: either the arrival of a higher version of the same Trade Confirmation document identified by the Document ID, or the issue of a Cancellation document.

Matched pairs of Trade Confirmation documents can be amended or torn-up. A tear-up is initiated by the submission of the 'Tear-Up Request' document by one Trader and confirmed by the submission of a 'Tear-Up Request' document from the counterparty. The document belonging to the initiator is set to the interim state 'Tear-Up Requested' awaiting the confirmation of the counterparty. Cancellation of the 'Tear-Up Request' document causes the Trade Confirmation document affected to return to the 'Matched' state. Torn-up Trade Confirmation documents are set to the Cancelled state.

The Amended state is a final state for the Trade Confirmation document.

7.1.2 State Processing for the Trade Confirmation in the Broker Dialogue

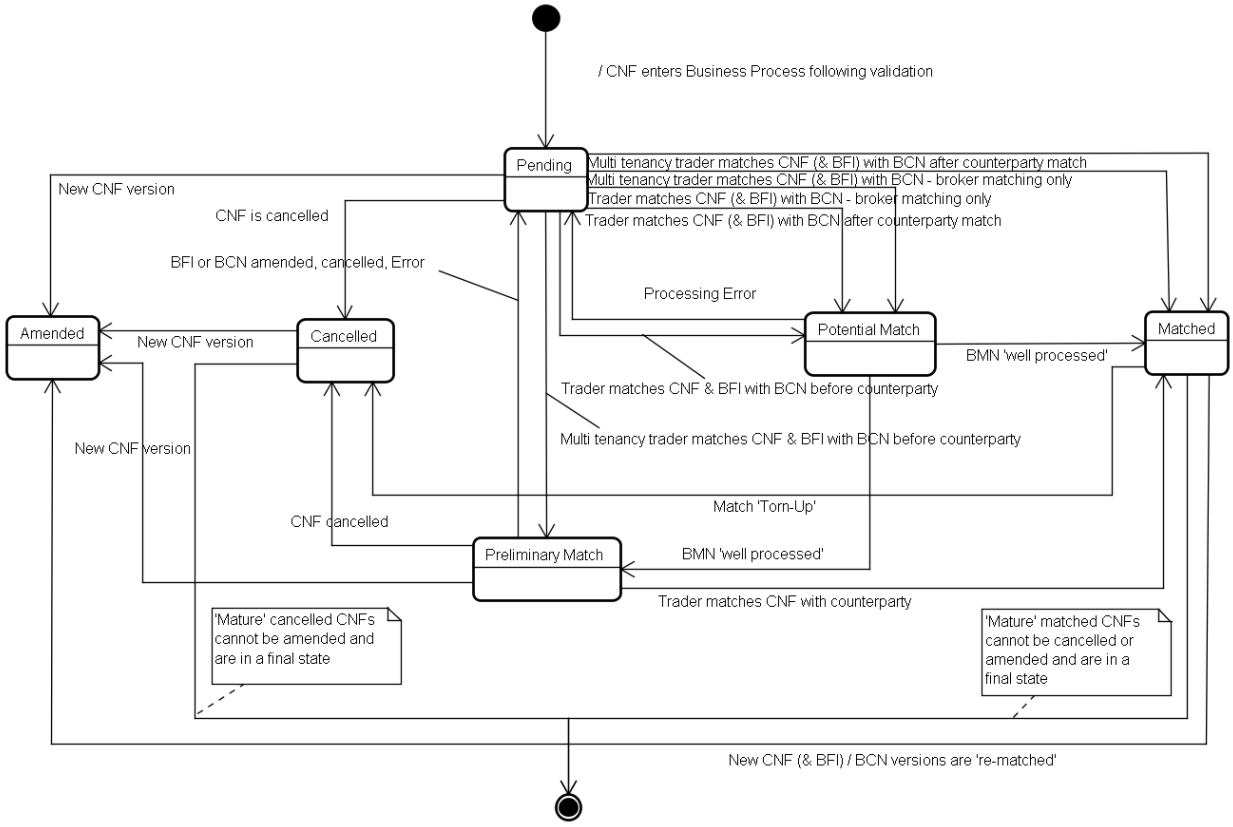


Figure 38 Trade Confirmation Document Broker Dialogue State Diagram

Figure 38 Trade Confirmation Document Broker Dialogue State Diagram shows the transitions for the Trade Confirmation document within the Broker Dialogue of the eCM Process.

The Trade Confirmation document entering the business process from the communications process is assigned to the 'Pending' state signifying that it is available for matching within the Broker Matching dialogue. In the Trader instance of the process the Trade Data matching algorithm is applied, as defined in section 5.6, "Business Document Processing", to establish a match between the Trade Confirmation and a Broker Confirmation document. Subsequently, if the Trader has opted to include brokerage in the Broker Matching dialogue,

the Broker Match is performed by the Trader instance of the process to validate the brokerage against the Broker Fee Information document.

The state of the Trade Confirmation is then progressed to the Preliminary Matched or fully Matched state either via the interim 'Potential Match' state in the peer-to-peer scenario or directly in the multi-tenancy case, depending on certain conditions in the related Counterparty Dialogue within the Trader instance of the eCM process.

If the Trade Confirmation document has not entered the Counterparty Dialogue, or is in the Pending, Match Suggested or Error (i.e. non final) state then the Trade Confirmation is progressed to the Preliminary Matched state in the Broker Dialogue. In the peer-to-peer scenario this is dependent on successful delivery of the Broker Match Notification document to the Broker instance of the process.

If the Trade Confirmation document within the Counterparty Dialogue is in the 'Matched' state then the Trade Confirmation is progressed to the 'Matched' state in the Broker Dialogue. In the peer-to-peer scenario this is dependent on successful delivery of the Broker Match Notification document to the Broker instance of the process.

If the Trade Confirmation is not participating in a Counterparty Dialogue then the Trade Confirmation is progressed to the 'Matched' state in the Broker Dialogue. In the peer-to-peer scenario this is dependent on successful delivery of the Broker Match Notification document to the Broker instance of the process.

If the Trade Confirmation document has been moved to the Preliminary Matched state then an amendment to the Trade Confirmation will cause the current version to be set to the final state of Amended.

If the Trade Confirmation document has been moved to the Preliminary Matched state it is reassigned to the Pending state if either the Broker Fee Information or Broker Confirmation documents are Amended, Cancelled or, in the peer-to-peer scenario, if a Rejection Document is received from the Broker instance of the process when issuing a BMN.

Trade Confirmation documents in the Pending or Preliminary Matched states may be assigned to the Amended or Cancelled states based on external events: either the arrival of a higher version of the same Trade Confirmation document identified by the Document ID or the issue of a Cancellation document.

A Trade Confirmation document matched with a Broker Confirmation documents can be amended or torn-up. A tear-up is initiated by the submission of the 'Tear-Up Request' document by the Trader. The torn-up Trade Confirmation document is set to the Cancelled state. If the Trade Confirmation is part of a Trilateral Match dialogue then the transition to the Cancelled state is dependent upon receipt of the confirmation of the tear-up from the counterparty in the Counterparty Matching dialogue, otherwise the transition to the Cancelled state will proceed immediately since the participation of the Broker in the Broker Matching Tear-Up dialogue is not required.

The Amended state is a final state for the Trade Confirmation document.

7.1.3 State Processing for the Broker Fee Information in the Broker Dialogue

Figure 39 Broker Fee Information Document StateDiagram shows the permitted state transitions for the Broker Fee Information document within the Broker Dialogue of the eCM Process.

The Broker Fee Information document, if included in matching, is an associated document of the Trade Confirmation and as such shares the same or similar state processing.

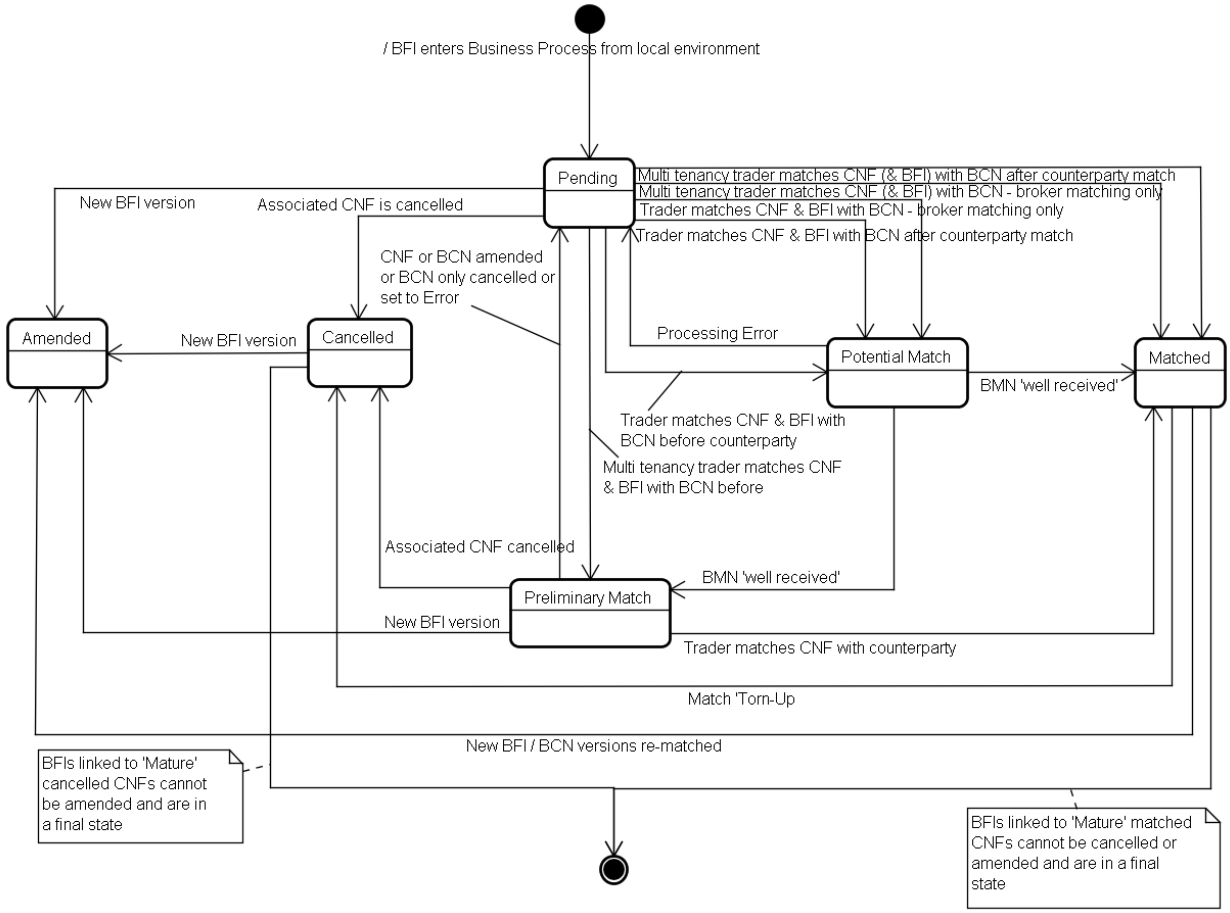


Figure 39 Broker Fee Information Document StateDiagram

Unlike the Trade Confirmation document the Broker Fee Information document does not participate in the Counterparty Dialogue and so is not subject to any cross dialogue constraints that apply to the Trade Confirmation Document

The Broker Fee Information document entering the business process is assigned the Pending state signifying that it is available for matching. In the Trader instance of the process once the Trade Data matching algorithm is applied, as defined in section 5.6, "Business Document Processing", to link the Trade Confirmation with a Broker Confirmation document the Broker Match is subsequently performed by the Trader instance of the process to validate the brokerage in the Broker Confirmation against the Broker Fee Information document associated with the linked Trade Confirmation document.

The state of the Broker Fee Information is then progressed to the Preliminary Matched or fully Matched state, either via the interim 'Potential Match' state in the peer-to-peer scenario or directly in the multi-tenancy case, in line with the state change of the associated Trade Confirmation document and, in the peer-to-peer scenario, on successful delivery of the Broker Match Notification document to the Broker instance of the process.

If the Broker Fee Information document has been moved to the Preliminary Matched state then an amendment to the Broker Fee Information will cause the current version to be set to the final state of Amended.

If the Broker Fee Information document has been moved to the Preliminary Matched state it must be re assigned to the Pending state if either the Trade Confirmation or Broker Confirmation documents are Amended, or if the Broker Confirmation is Cancelled or set to the Error state.

Broker Fee Information documents in the Pending or Preliminary Matched states may be assigned to the Amended or Cancelled states based on external events: either the arrival of a higher version of the same Broker Fee Information document identified by the Document ID or the issue of a Cancellation document for the associated Trade Confirmation.

A Broker Fee Information document matched with a Broker Confirmation documents can be amended and torn-up in conjunction with the associated Trade Confirmation document.

The Amended state is a final state for the Broker Fee Information document.

7.1.4 State Processing for the Broker Confirmation in the Broker Dialogue

Figure 40 Broker Confirmation State Diagram shows the permitted state transitions for the Broker Confirmation document within the Broker Dialogue of the eCM Process.

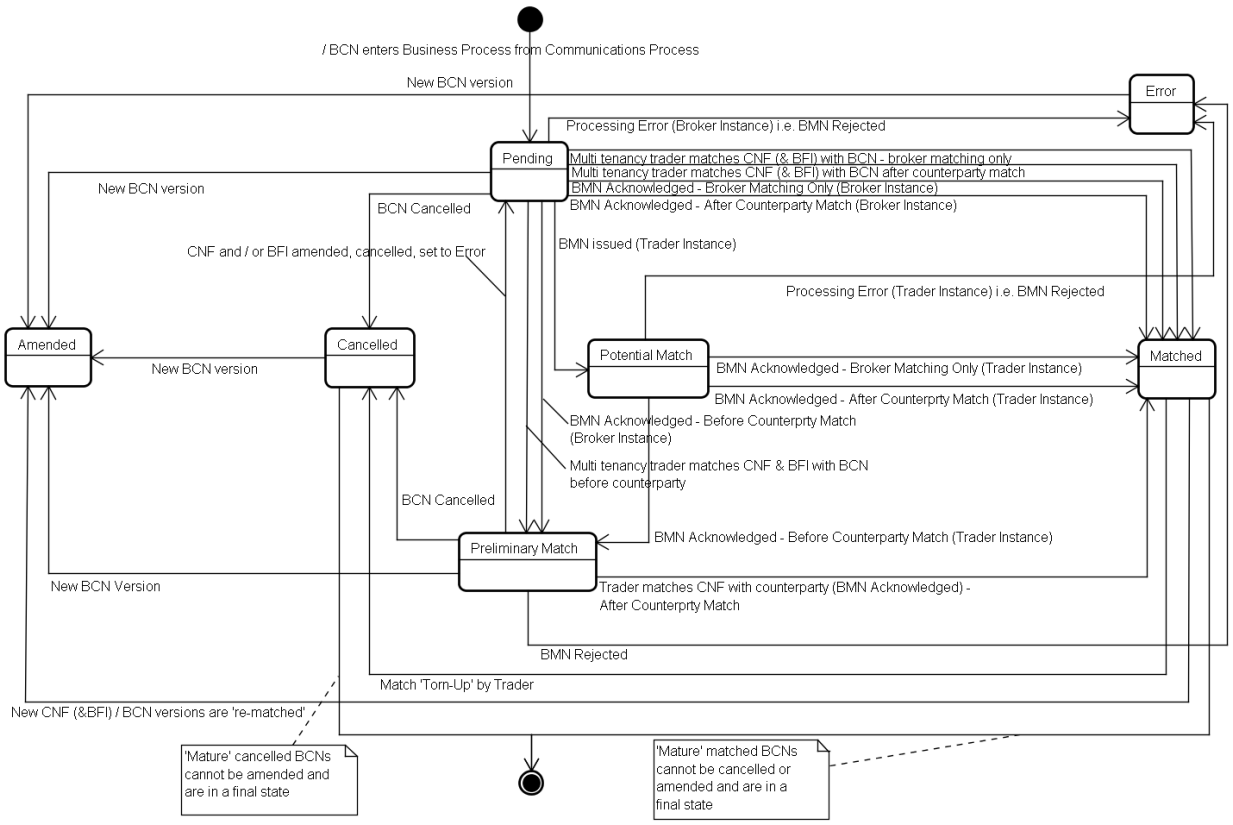


Figure 40 Broker Confirmation State Diagram

The Broker Confirmation document entering the business process from the communications process is assigned the Pending state signifying that it is available for matching. In the Trader instance of the process the Trade Data matching algorithm is applied, as defined in section 5.6, "Business Document Processing", to link the Trade Confirmation with a Broker Confirmation document. Subsequently, if the Trader has opted to include brokerage in the Broker Matching dialogue, the Broker Match is performed by the Trader instance of the

process to validate the brokerage in the Broker Confirmation against the Broker Fee Information document.

The state of the Broker Confirmation is then progressed either via the interim 'Potential Match' state of the Trader instance of the process in the peer-to-peer scenario or directly in the multi-tenancy case, to the Preliminary Matched or fully Matched state depending on certain conditions for the Trade Confirmation document in the related Counterparty Dialogue within the Trader instance of the eCM process.

If the Trade Confirmation document within the Counterparty Confirmation Dialogue is in the Pending, Match Suggested or Error (i.e. non final) state then the Broker Confirmation is progressed to the Preliminary Matched state in the Broker Dialogue

If the Trade Confirmation document within the Counterparty Confirmation Dialogue is in the Matched state then the Broker Confirmation is progressed to the Matched state in the Broker Dialogue.

If the Trade Confirmation is not participating in a Counterparty Confirmation Dialogue then the Broker Confirmation is progressed to the Matched state in the Broker Dialogue.

In case there is a processing error, in the peer-to-peer scenario, when synchronising the state change of the Broker Confirmation document with the Broker Confirmation document in the Broker instance of the process then the Broker Confirmation documents in both instances of the process are assigned the state of Error (or left in the Amended state if it was already there). The error in processing must be resolved outside the scope of the defined dialogue. Once the error is resolved then the Broker Dialogue can be restarted by amendment of the Broker Confirmation document and/or the Broker Fee Information and Trade Confirmation documents.

If the Broker Confirmation document has been moved to the Preliminary Matched state then an amendment to the Broker Confirmation will cause the current version to be set to the final state of Amended.

If the Broker Confirmation document has been moved to the Preliminary Matched state it can be re assigned to the Pending state if either the Trade Confirmation or Broker Fee Information documents are Amended, Cancelled or set to the Error state.

Broker Confirmation documents in the Pending or Preliminary Matched states may be assigned to the Amended or Cancelled states based on external events: either the arrival of a higher version of the same Broker Confirmation document identified by the Document ID or the issue of a Cancellation document for the Broker Confirmation.

A Broker Confirmation document matched with a Trade Confirmation (and optionally Broker Fee Infromation) document can be amended and torn-up. A matched Broker Confrimation document is set to the Cancelled state is the matching Trade Confirmation document is torn-up by the Tradser.

The Amended state is a final state for the Broker Confirmation document.

7.2 General Document Exchange State Processing

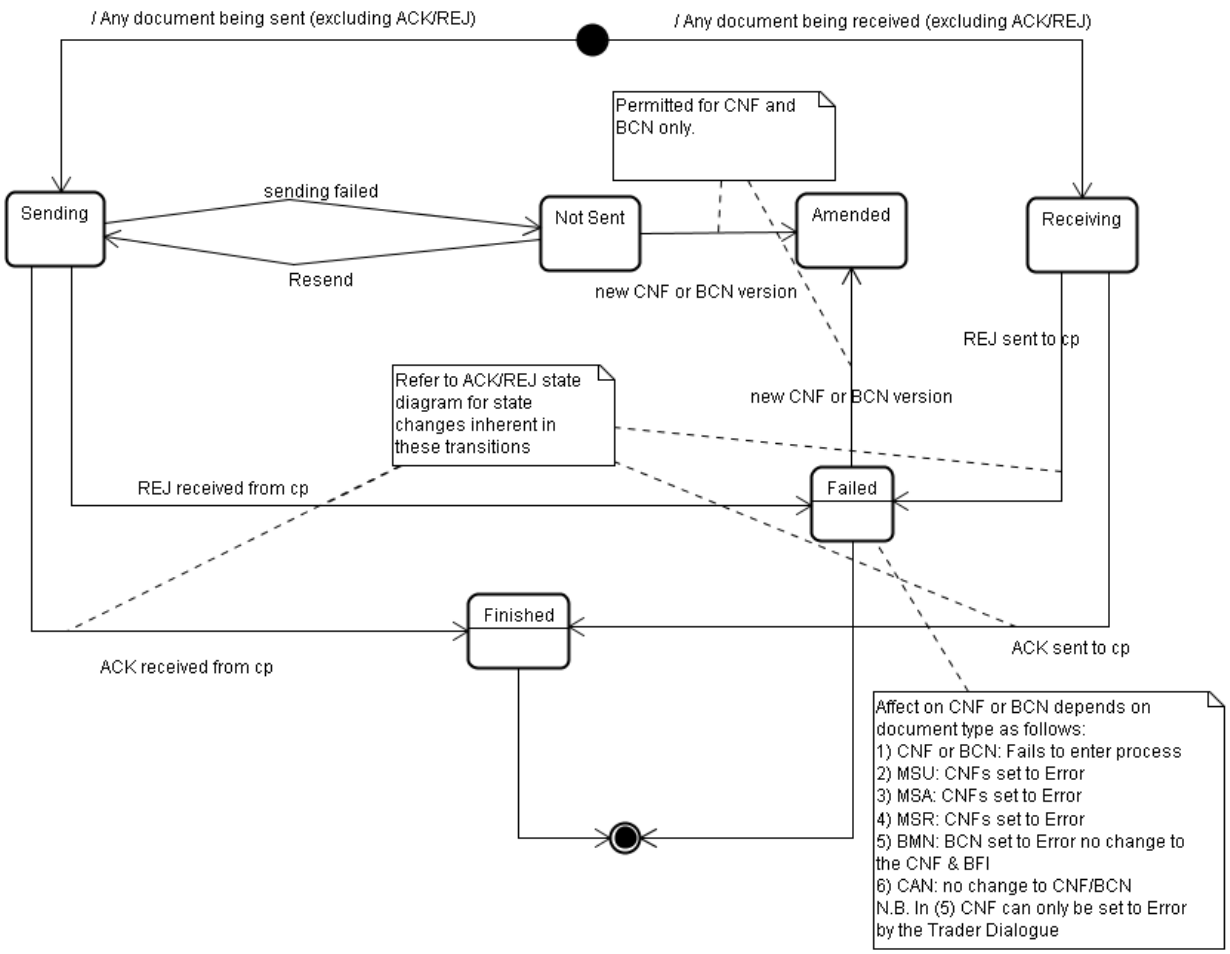


Figure 41 General Document State Processing

Figure 41 General Document State Processing shows the permitted state transitions that apply to all business documents (excluding Acknowledgement and Rejection documents). These state transitions deal both with the exchange of documents between the Buyer and Seller instances of the eCM process in a distributed peer-to-peer deployment and with the exchange of documents as defined by submission and results processing between the backend systems of the Service User and the Service in a multi-tenancy deployment scenario. The diagram conforms to the principles of synchronicity and uniqueness for documents in the process as previously stated.

By definition the state diagram is asymmetric as document exchange is directional i.e. from the sender and to the receiver. A document entering the process will therefore be in either the Sending or Receiving state when it is being transferred from one distributed instance of the process to the other instance.

On entry to the 'Sending' state any pre issue validation of business documents must be applied as specified in section 7.4, "Detailed Transition Processing".

A document in the 'Sending' state will move to the 'Not Sent' state if the delivery cannot be successfully achieved i.e. not 'well received'. The 'Not Sent' state is an exception state and an external trigger is required to return it to the Sending state (i.e. either a timer or manual intervention).

Any validation required when sending the document must be reapplied on re-entry to the Sending state.

A document in the Receiving state will be 'well received' but not yet 'well processed'. Validation against relevant business rules will result in the acceptance or rejection of the document leading to the issue of a business Acknowledgement or Rejection document as appropriate.

If the document was 'well processed' then an Acknowledgement Document is issued and it is moved to the 'Finished' state and the document exchange process terminates.

In the case of the submission of business documents to the Service from the backend systems of the Service User the received document will be passed by the Service to the eCM process. Documents that are 'well processed' will be accepted by the process and a positive result will be returned to the the Service indicating that the communications process can move the document to the Finished state. In the case of results processing the 'well processed' processing of the Box Results documents issued by the Service to the Service User will be trivial, simply returning a positive result. This is because the way that the Service User consumes the Box Results documents is undefined and outside the scope of the eCM process.

If a document is not 'well processed' then a Rejection Document is issued and it is moved to the Failed state and the document exchange process terminates. The affect that a business rejection has on the broader eCM process depends on the status of the business documents and is described in later sections.

New versions of business documents (defined as the same Document ID but a higher Version number) entering the process will cause earlier versions in the Not Sent or Failed states to be moved to the Amended state and will then themselves be processed. In the case of business documents in the Finished state new versions will not cause a transition for a previous version to the Amended state. The arrival of a new version of a business document within the Business Process is defined in 7.4, "Detailed Transition Processing".

Note: *For the purpose of implementation the ability to raise alerts on 'Failed' states in the communications process would be useful in alerting operators to the occurrence of a communications failure.*

In case of race conditions documents will be rejected as a pre-caution in order to avoid state changes becoming unsynchronised or dead-lock situations occur between distributed instances of the process.

7.3 Acknowledgement/Rejection Document State Processing

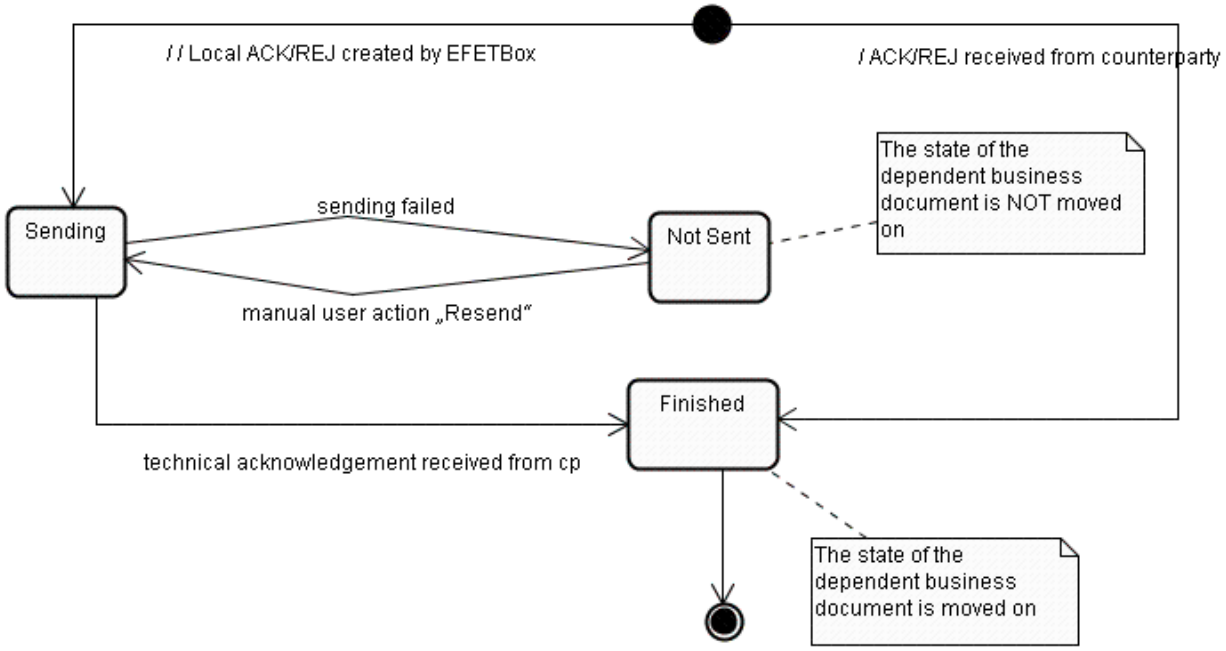


Figure 42 Acknowledgement/Rejection State Processing

Figure 42 Acknowledgement/Rejection State Processing defines the permitted state processing that applies to business Acknowledgement and Rejection documents. These state transitions relate to the synchronisation of state changes between the Buyer and Seller instances of the eCM process.

This process is invoked by the 'Receiving' state to communicate whether an exchanged document is 'well processed' or not.

The document (Acknowledgement or Rejection) will be assigned the state of 'Sending' and will move to the 'Not Sent' state if it is not 'well received'. The 'Not Sent' state is an exception state and external intervention is required to return it to the Sending state. In this circumstance the 'Receiving' state will persist until the document (Acknowledgement or Rejection) is 'well received' and the state moved to 'Finished' at which point this instance of the process terminates. Consequently the document in the 'Received' state also proceeds to the final state.

Once the document (Acknowledgement or Rejection) is successfully delivered it is also assigned the state 'Finished' and the process terminates causing the document that is in the 'Sending' state in the remote instance of the document exchange process will progress to the final state so synchronising the two distributed process instances and the state changes of the business documents with both instances of the eCM process.

Note: The one hour period relating to the transition from 'Sending to CP' to 'Failed' states in previous versions of the standard are here replaced by the ability to resent the ACK document.

7.4 Detailed Transition Processing

Each of the following sections defines the detailed business rules for 'well processed' business documents within the Counterparty and the Broker Processes. In the major section for each dialogue the alternative peer-to-peer and mult-tenancy transitions are separated out.

7.4.1 Trade Confirmation in the Counterparty Dialogue

7.4.1.1 Start to Pending

Two Trade Confirmation documents may enter an instance of the counterparty dialogue within the eCM process: one CNF from each Trader. Both documents must be 'well processed' before they are assigned the Pending status.

A 'well processed' Trade Confirmation document:

- may be a new document unknown to the current or a previous process instance
- a higher version of a document with the same Document ID but a higher Version number in which case:
  - the current version of the document must be in the Pending or Error state
  - the current version of the document must be in the Matched or Cancelled state AND must have the setting to accept amendments to Matched or Cancelled documents enabled
  - The current version must not be in the Match Suggested state nor be referenced in a Matched Suggestion document that has not yet reached the 'Finished' state of the Communication Process
  - Must pass validation as defined in section 7.4.3.1, "Start to Pending", if participating in the Broker Dialogue
  - The current version (if not in the 'Cancelled' state) must be for the same counterparty and broker (if the current version included a broker).

A trade Confirmation document that is not 'well processed' will be rejected from the eCM process and in the case of the multi-tenancy implementation return a 'False' status to the Service which in turn will issue a Rejection Document to the Service User.

Note: Should a lower version of a Trade Confirmation document existing in the Business Process progress to a final state then any higher versions of the Trade Confirmation document that might have entered the communications process will be set to Failed.

7.4.1.2 Pending to Amended

If a Trade Confirmation document is in the 'Pending' state it may be moved to the 'Amended' state by the assignment of a later and higher version of the same document to the 'Pending' state within both instances of the process.

'Well processed' processing for the new version of the document is defined previously in section 7.4.1.1, "Start to Pending".

The 'Amended' state is a final state for amended version of the Trade Confirmation document, since it cannot be further processed, but not for the process.

7.4.1.3 Pending to Cancelled

If a Trade Confirmation document is in the 'Pending' state it will be moved, to the 'Cancelled' state on the entry into the process of a successfully delivered Cancellation document.

A Cancellation document will be 'well processed' if it refers to a document known to the process. In the case of the distributed deployment this includes both the local and remote instance of the process.

The 'Cancelled' state is a final state for the process and both instances will terminate.

7.4.1.4 Matched to Amended

A pair of Trade Confirmation documents in the Matched state will be moved to the Amended state if a new version of both documents enters the Matched state.

7.4.1.5 Matched to Tear-Up Requested

A Trade Confirmation document that is in the Matched state will be moved to the Tear-Up Requested state on entry into the process of a 'well processed' Tear-Up Request document that referes to one of the Sender's own Trade Confirmation documents that is the highest version known to the process and is currently in the Matched state.

Note that when in the interim 'Tear-Up Requested' state the document is still considered to be Matched since the request to tear up has not been accepted, this should be taken into account when reporting on Matched documents.

7.4.1.6 Tear-Up Requested to Cancelled

A Trade Confirmation document in the Tear-Up Requested state will be moved to the Cancelled state on entry into the process of a 'well processed' Tear-Up Request document for the other Trade Confirmation in the previously matching pair.

7.4.1.7 Matched to Cancelled

A Trade Confirmation document in the Matched state will be moved to the Cancelled state on entry into the process of a 'well processed' Tear-Up Request document that referes to one of the Sender's own Trade Confirmation document that is the highest version known to the process and is currently in the Matched state and was previously in a matching pair with the Trade Confirmation document that is currently in the Tear-Up Requested state.

7.4.1.8 Pending to Matched

The multi-tenancy matching dialogue can dispense with the interim states necessary in the peer-to-peer deployment of the process and replace them with one transition directly from the Pending to the Matched state.

The Buyer instance of the process takes the lead and applies the matching algorithm. If the previous version the Trade Confirmation is in the Matched state then the matching algorithm is restricted to matching with the new version of the currently matched Trade Confirmation.

Once a match is established either for a new pair of Trade Confirmation documents or between new versions of a currently matched pair of Trade Confirmations then both the matching documents are moved from the Pending state to the Matched state.

7.4.2 Peer-to-Peer Matching Dialogue

The transitions specific to the peer-to-peer dialogue are described in detail below.

7.4.2.1 Pending to Potential Match

The Buyer instance of the process takes the lead and applies the matching algorithm defined. If the previous version the Trade Confirmation is in the Matched state then the matching algorithm is restricted to matching with the new version of the currently matched Trade Confirmation. Once a match is established, either for a new pair of Trade Confirmation documents or between new versions of a currently matched pair of Trade Confirmations, by the Buyer, then an MSU document is created.

To avoid race conditions the Buyer instance checks that the state of the specific versions of the Trade Confirmation documents from the Buyer or Seller referenced in the MSU are still in the Pending state. If they are then the MSU is passed to the Communication Process where it is assigned the state 'Sending'. If not then the MSU is deleted from the process instance and the Buyer instance of the process restarts the matching process.

When the 'Sending' state has been assigned to the MSU in the Communications Process the Trade Confirmation documents referenced in the MSU are assigned to the state 'Potential Match' and are removed from the matching queue within the Buyer instance of the process.

Note: The is no transition specified from Potential Match to Amended since a trade Confirmation document in the Potential Match state cannot be amended.

7.4.2.2 Potential Match to Match Suggested

'Potential Match' is an interim state and is unique to the Buyer instance of the process. It lasts until the MSU has reached an end state in the Communication Process: 'Finished' or 'Failed'.

If the MSU is assigned to the 'Finished' state in the Communications Process then the referenced Trade Confirmation documents in the Buyer instance of the process will be moved from the 'Potential Match' to 'Match Suggested' state.

7.4.2.3 Potential Match to Error

'Potential Match' is an interim state and is unique to the Buyer instance of the process. It lasts until the MSU has reached an end state in the Communication Process: 'Finished' or 'Failed'.

If the MSU is assigned to the 'Failed' state in the Communications Process then the referenced Trade Confirmation documents in the Buyer instance of the process will be moved from the 'Potential Match' to 'Error' state.

7.4.2.4 Pending to Match Suggested

An MSU will be 'well processed' by the Seller if the Trade Confirmation documents referenced in the MSU are:

- known to the Seller instance of the process
- in the Pending state.

If the MSU is 'well processed' by the Seller instance then the state of the Trade Confirmation documents (in both instances of the process) are synchronised to the new state of 'Match Suggested' and the control moves to the Seller instance.

If either of the Trade Confirmation documents referenced in the MSU cannot be identified in the set of CNFs in the 'Pending' state, for instance one or both are in the Timed Out state, a then the MSU will not be 'well processed' i.e. set to the Failed state in the Communications Process. As defined in section 7.2, "General Document Exchange State Processing", a Rejection document will be issued to the Buyer with a reason explaining the processing error.

Otherwise the Seller instance must independently validate the suggested match received via the MSU document from the Buyer.

If the comparison Seller can agree to the match suggested by the Buyer then a Match Result Acceptance document will be issued by the Seller instance of the process; otherwise a Matching Result Refusal document will be issued.

7.4.2.5 Pending to Error

A Trade Confirmation document in both the Buyer and Seller instances of the process will be set to the Error state from the Pending state, if it is referenced in a Rejection document (i.e. set to the Failed state in the Communications Process).

7.4.2.6 Match Suggested to Error

A Trade Confirmation document in both the Buyer and Seller instances of the process will be set to the Error state from the Match Suggested state under the following circumstances:

- If it is referenced in an MSR document that is successfully delivered (i.e. is 'well processed')
- If it is referenced in an MSR document that not 'well processed' (i.e. set to the Failed state in the Communications Process)
- If it is referenced in an MSA document that not 'well processed' (i.e. set to the Failed state in the Communications Process)

MRS and MSA documents will be 'well processed' by the Buyer if the Match Suggestion document referenced in the MSR or MSA is known to the Buyer instance of the process and that the Trade Confirmation documents referenced by the MSU can also be identified as belonging to the set of 'Match Suggested' documents, otherwise the document will not be 'well processed' (i.e. set to the Failed state in the Communications Process).

7.4.2.7 Match Suggested to Matched

Receipt of a 'well processed' Match Suggestion Acceptance document issued to the Buyer by the Seller will result in the transition of the Trade Confirmation documents identified in the MSU referenced by the MSA in both instance of the process from the Match Suggested state to the Matched state in synchronisation.

The MSA will be 'well processed' if the relevant Trade Confirmation documents are known to the Buyer instance of the process.

The 'Matched' state is a final state for the process and both instances will terminate.

7.4.2.8 Error to Amended

If a Trade Confirmation document is in the 'Error' state it may be moved, synchronously within both instances of the process, to the 'Amended' state by the assignment of a later and higher version of the same document to the 'Pending' state within both instances of the process.

'Well processed' processing for the new version of the document is defined previously in section 7.4.1.1, "Start to Pending".

The 'Amended' state is a final state for amended version of the Trade Confirmation document, since it cannot be further processed, but not for the process.

7.4.3 Trade Confirmation in the Broker Dialogue

7.4.3.1 Start to Pending

The Trade Confirmation document can participate in either or both the Counterparty and Broker dialogues of the eCM process. On entry into the business process it is therefore subject to validation in each dialogue to which it is submitted.

A 'well processed' Trade Confirmation document:

- may be a new document unknown to the current or a previous process instance (both dialogues)
- a higher version of a document with the same Document ID but a higher Version number in which case:
  - the current version of the document must be in the Pending or Preliminary Matched state
  - the current version of the document must be in the Matched or Cancelled state AND must have the setting to accept amendments to Matched or Cancelled documents enabled
  - The current version must not be referenced in a Broker Match Notification document with the Notification Type of 'preliminary' or 'final' that has not yet reached the 'Finished' state of the Communication Process
  - must pass validation as defined in section 7.4.1.1, "Start to Pending", if participating in the Counterparty Dialogue

A Trade Confirmation document that is not 'well processed' will be rejected from the eCM process and in the case of the multi-tenancy implementation return a 'False' status to the Service which in turn will issue a Rejection Document to the Service User.

Note: *Should a lower version of a Trade Confirmation document existing in the Business Process progress to a final state then any higher versions of the Trade Confirmation document that might have entered the communications process will be set to Failed.*

Unless the Broker dialogue has been specifically prioritised (see section 5.4.1.3, "High-Level Trilateral Matching Dialogue") then this transition must always be completed after the transition of the CNF from Start to Pending in the Counterparty Dialogue as described in "Start to Pending". Otherwise if the Broker dialogue has been prioritised and this is the first version of the CNF to enter the process, then CNF in the Counterparty Matching dialogue must not be issued to the counterparty via the Communications Process until the CNF in the Broker Dialogue has been set to the Preliminary Matched state.

7.4.3.2 Pending or Preliminary Matched to Amended

If a Trade Confirmation document is in the 'Pending' or 'Preliminary Matched' state it may be moved, to the 'Amended' state by the assignment of a later and higher version of the same document to the 'Pending' state within the trader instance of the process.

'Well processed' processing for the new version of the document is defined previously in section 7.4.3.1, "Start to Pending".

The 'Amended' state is a final state for amended version of the Trade Confirmation document, since it cannot be further processed, but not for the process.

7.4.3.3 Pending or Preliminary Matched to Cancelled

If a Trade Confirmation document is in the 'Pending' or 'Preliminary Matched' state it will be moved, to the 'Cancelled' state on the entry into the process of a Cancellation document.

The 'cancelled' state is a final state for the process and the instance will terminate.

7.4.3.4 Matched to Amended

The Trade Confirmation document in a pairing of Trade Confirmation (and optionally Broker Fee Information) and Broker Confirmation documents in the Matched state will be moved to the Amended state if a new version of the originally matched document enters the Matched state.

7.4.3.5 Matched to Cancelled

A Trade Confirmation document in the Matched state will be moved to the Cancelled state in the Broker Matching dialogue if the Trader submits a 'well processed' Tear-Up Request document to the Broker Matching dialogue (by using the Broker ID in the Reciever ID field) that refers to a Trade Confirmation document which is the highest version known to the process and is currently in the Matched state with a Broker Confirmation document.

A Trade Confirmation document in the Matched state in the Broker Matching dialogue will be moved to the Cancelled state if the Trade Confirmation document in the Counterparty Matching dialogue is assigned to the Cancelled state.

7.4.3.6 Pending to Matched or Preliminary Matched

The multi-tenancy matching dialogue can dispense with the interim states necessary in the peer-to-peer deployment of the process and replace them with transitions directly from the Pending to the Matched or Preliminary Matched states.

The Trader instance of the process takes the lead and applies the matching algorithm. If the previous version the Trade Confirmation is in the Matched state then the matching algorithm is restricted to matching with the new version of the currently matched Broker Confirmation (and optionally Broekr Fee Information).

Once a match is established either for a new set of documents or between new versions of a currently matched set of documents then the Trade Confirmation is moved from the Pending state to either the Matched or Preliminary Matched state.

If the Trade Confirmation document is part of the Trilateral Matching dialogue and has achieve the Matched state in the Counterparty Matching dialogue then the Trade Confirmation will be moved to the Matched state (with Counterparty) in the Broker Matching dialogue.

If the Trade Confirmation document is part of the Trilateral Matching dialogue and has not achieved the Matched state in the Counterparty Matching dialogue then the Trade Confirmation will be moved to the Preliminary Matched state in the Broker Matching dialogue.

If the Trade Confirmation document is not part of the Trilateral Matching dialogue then the Trade Confirmation will be moved to the Matched state (without Counterparty) in the Broker Matching dialogue.

7.4.3.7 Preliminary Matched to Pending

This transition is triggered by the Broker Fee Information document associated with the Trade Confirmation or the Broker Confirmation being assigned to one of the following states:

- Amended
- Cancelled
- Error

If the process is in the peer-to-peer deployment then the BMN will be 'well processed' by the broker instance if the Broker Confirmation document referenced in the BMN is:

- known to the broker instance of the process
- in the Preliminary Matched state.

If the BMN is 'well processed' by the broker instance then the state of the Trade Confirmation document is set to the 'Pending' state if the Notification Type in the BMN is 'reverse'.

If the BMN is not 'well processed' then the Trade Confirmation is set to Pending state and is subject to further matching.

Furthermore, if the BMN is assigned to the 'Failed' state in the Communications Process then the referenced Trade Confirmation document in the Trader instance of the process will be moved from the 'Preliminary Match' to 'the 'Pending' state since the processing error exisits in the Broker instance of the process and can now only be resolved by amendment of the BCN document which has been moved to the 'Error' state as specified in section 7.4.6.3, "Potential Match to Error", (Trader instance) and section 7.4.6.5, "Pending to Error".

7.4.3.8 Preliminary Matched to Matched

This transition is triggered by an external event: the transition to the 'Matched' state of the Trade Confirmation document in the Counterparty Dialogue of the eCM process.

If the process is in the peer-to-peer deployment then to avoid race conditions the trader instance checks that the state of the specific versions of the Trade Confirmation document, Broker Confirmation and Broker Fee Information referenced in the BMN are still in the Pending state. If they are then the BMN is issued to the broker. If not then the BMN is deleted from the process instance and the trader instance of the process restarts the matching process.

A BMN will be 'well processed' by the broker instance if the Broker Confirmation document referenced in the BMN is:

- known to the broker instance of the process
- in the Preliminary Matched state.

If the BMN is 'well processed' by the broker instance then the state of the Trade Confirmation document is set to the 'Matched' state if the Notification Type in the BMN is 'final'.

'Matched' is a terminal state, In which case the dialogue terminates.

If the BMN is not 'well processed' then the Trade Confirmation remains in the Preliminary Matched state and is subject to further matching.

7.4.4 Peer-to-Peer Matching Dialogue

The transitions specific to the peer-to-peer dialogue are described in detail below.

7.4.4.1 Pending to Potential Match

The trader instance of the process applies the matching algorithm defined. Once a matching Broker Confirmation document has been identified by the trader a BMN document is created.

To avoid race conditions the trader instance checks that the state of the specific versions of the Trade Confirmation document, Broker Confirmation and Broker Fee Information referenced in the BMN are still in the Pending state. If they are then the BMN is passed to the Communication Process where it is assigned the state 'Sending'. If not then the BMN is deleted from the process instance and the trader instance of the process restarts the matching process.

When the 'Sending' state has been assigned to the BMN in the Communications Process the Trade Confirmation document referenced in the BMN is assigned to the state 'Potential Match' and is removed from the matching queue within the Trader instance of the process.

Note: The is no transition specified from Potential Match to Amended since a trade Confirmation document in the Potential Match state cannot be amended.

7.4.4.2 Potential Match to Preliminary Matched or Matched

'Potential Match' is an interim state and is unique to the Trader instance of the process. It lasts until the BMN has reached an end state in the Communication Process: 'Finished' or 'Failed'.

If the BMN is assigned to the 'Finished' state in the Communications Process then the referenced Trade Confirmation documents in the Trader instance of the process will be moved from the 'Potential Match' to 'Preliminary Match' or 'Matched' state.

A BMN will be 'well processed' by the broker instance if the Broker Confirmation document referenced in the BMN is:

- known to the broker instance of the process
- in the Pending or Preliminary Matched state.

If the BMN is 'well processed' by the broker instance then the state of the Trade Confirmation document is set to the new state of:

- Preliminary Matched if the Notification Type in the BMN is 'preliminary'
- Matched if the Notification Type in the BMN is 'final'.

'Matched' is a terminal state, in which case the dialogue terminates.

7.4.4.3 Potential Match to Pending

'Potential Match' is an interim state and is unique to the Trader instance of the process. It lasts until the BMN has reached an end state in the Communication Process: 'Finished' or 'Failed'.

If the BMN is assigned to the 'Failed' state in the Communications Process then the referenced Trade Confirmation document in the Trader instance of the process will be moved from the 'Potential Match' to the 'Pending' state since the processing error exisits in the Broker instance of the process and can now only be resolved by amendment of the BCN

document which has been moved to the 'Error' state as specified in section 7.4.6.3, "Potential Match to Error", (Trader instance) and section 7.4.6.5, "Pending to Error".

7.4.5 Broker Confirmation in the Broker Dialogue

7.4.5.1 Start to Pending

A 'well processed' Broker Confirmation document:

- may be a new document unknown to the current or a previous process instance
- a higher version of a document with the same Document ID but a higher Version number in which case:
  - the current version of the document must be in the Pending, Preliminary Matched or Error state
  - the current version of the document must be in the Matched or Cancelled state AND must have the setting to accept amendments to Matched or Cancelled documents enabled
  - The current version must not be referenced (in the trader instance) in a Broker Match Notification document with the Notification Type of 'preliminary' or 'final' that has not yet reached the 'Finished' state of the Communication Process

A Broker Confirmation document that is not 'well processed' will be rejected from the eCM process and in the case of the multi-tenancy implementation return a 'False' status to the Service which in turn will issue a Rejection Document to the Service User.

Note: *Should a lower version of a Broker Confirmation document existing in the Business Process progress to a final state then any higher versions of the Broker Confirmation document that might have entered the communications process will be set to Failed.*

7.4.5.2 Pending or Preliminary Matched to Amended

If a Broker Confirmation document is in the 'Pending' or 'Preliminary Matched' state it may be moved, to the 'Amended' state by the assignment of a later and higher version of the same document to the 'Pending' state within the trader instance of the process.

'Well processed' processing for the new version of the document is defined previously in section 7.4.5.1, "Start to Pending".

The 'Amended' state is a final state for amended version of the Broker Confirmation document, since it cannot be further processed, but not for the process.

7.4.5.3 Pending or Preliminary Matched to Cancelled

If a Broker Confirmation document is in the 'Pending' state it will be moved, to the 'Cancelled' state on the entry into the process of a successfully delivered Cancellation document.

A Cancellation document will be 'well processed' if it refers to a document known to the process. In the case of the distributed deployment this includes both the local and remote instance of the process.

The 'Cancelled' state is a final state for the process and both instances will terminate.

7.4.5.4 Matched to Amended

The Broker Confirmation document in a pairing of Trade Confirmation (and optionally Broker Fee Information) and Broker Confirmation documents in the Matched state will be moved to

the Amended state if a new version of the originally matched document enters the Matched state.

7.4.5.5 Matched to Cancelled

A Broker Confirmation document in the Matched state will be moved to the Cancelled state in the Broker Matching dialogue if the matching Trade Confirmation document is moved to the Cancelled state.

7.4.5.6 Pending to Matched or Preliminary Matched

In the multi-tenancy matching dialogue the Broker Confirmation follows the state transitions made by the matching Trade Confirmation document as described in section 7.4.3.6, "Pending to Matched or Preliminary Matched".

7.4.5.7 Preliminary Matched to Pending

This transition is triggered by the Broker Fee Information document associated with the Trade Confirmation that has been preliminarily matched with the Broker Confirmation being assigned to one of the following states:

- Amended
- Error
- Cancelled

Or by the Trade Confirmation being assigned one of the following states:

- Amended
- Cancelled

If the process is in the peer-to-peer deployment then the BMN processing as described in section 7.4.3.7, "Preliminary Matched to Pending", applies.

7.4.5.8 Preliminary Matched to Matched

In the multi-tenancy matching dialogue the Broker Confirmation follows the state transitions made by the matching Trade Confirmation document as described in section 7.4.3.8, "Preliminary Matched to Matched".

7.4.6 Peer-to-Peer Matching Dialogue

The transitions specific to the peer-to-peer dialogue are described in detail below.

7.4.6.1 Pending to Potential Match (Trader instance only)

This state transition is valid for the Trader instance of the process only.

When the 'Sending' state has been assigned to a BMN in the Communications Process the Broker Confirmation document referenced in the BMN is assigned to the state 'Potential Match' and is removed from the matching queue within the Trader instance of the process.

7.4.6.2 Potential Match to Preliminary Matched or Matched (Trader instance only)

'Potential Match' is an interim state and is unique to the Trader instance of the process. It lasts until the BMN has reached an end state in the Communication Process: 'Finished' or 'Failed'.

The state of the Broker Confirmation in trader instance of the process is progressed to the 'Preliminary Matched' or 'Matched' states from the 'Potetnial Match' on the successful issue

of a BMN from the trader to the broker instance of the process as described in section 7.4.4.2, "Potential Match to Preliminary Matched or Matched".

7.4.6.3 Potential Match to Error

'Potential Match' is an interim state and is unique to the Trader instance of the process. It lasts until the BMN has reached an end state in the Communication Process: 'Finished' or 'Failed'.

If the BMN is assigned to the 'Failed' state in the Communications Process then the referenced Broker Confirmation document in the Trader instance of the process will be moved from the 'Potential Match' to the 'Error' state in synchronisation with the Broker Confirmation document in the Broker instance of the process ths removing the document instances from further processing.

7.4.6.4 Pending to Preliminary Matched or Matched (Broker instance only)

The state of the Broker Confirmation in the broker instance of the process is progressed to the 'Preliminary Matched' or 'Matched' states in a synchronised way with the Broker Confirmation document in the Trader instance of the process on the successful issue (Acknowledgement) of a BMN from the trader to the broker instance of the process as described in section7.4.4.2, "Potential Match to Preliminary Matched or Matched".

7.4.6.5 Pending to Error

A Broker Confirmation document in both the Broker and Trader instance of the process will be set to the 'Error' state from the Pending state, if it is referenced by an BMN document that is not 'well processed' (i.e. set to the Failed state in the Communications Process)

Note: This processing applies only to a Broker Confirmation document that is currently in the Pending state if it is in another state then it will remain in that state unless otherwise specified elsewhere.

7.4.6.6 Preliminary Matched to Error

A Broker Confirmation document in both the Broker and Trader instances of the process will be set to the Error state from the Preliminary Matched state, if it is referenced by an BMN document that is not 'well processed' (i.e. set to the Failed state in the Communications Process)

Note: This processing applies only to a Broker Confirmation document that is currently in the Preliminary Matched state if it is in another state then it will remain in that state unless otherwise specified elsewhere.

7.4.6.7 Error to Amended

If a Broker Confirmation document is in the 'Error' state it may be moved, synchronously within both instances of the process, to the 'Amended' state by the assignment of a later and higher version of the same document to the 'Pending' state within both instances of the process.

'Well processed' processing for the new version of the document is defined previously in section 7.4.5.1, "Start to Pending".

The 'Amended' state is a final state for amended version of the Broker Confirmation document, since it cannot be further processed, but not for the process.

7.4.7 Broker Fee Information in the Broker Dialogue

The Broker Fee Information document is associated with a Trade Confirmation document and inherits it states from the state of the Trade Confirmation. The only Broker Fee Information explicit processing is described in the following sections.

7.4.7.1 Start to Pending

On entry into the business process the Broker Fee Information document is subject to the following validation.

A 'well processed' Broker Fee Information document:

- may be a new document unknown to the current or a previous process instance
- a higher version of a document with the same Document ID but a higher Version number in which case:
  - the current version of the document must be in the Pending, Preliminary Matched or Error state
  - the current version of the document must be in the Matched or Cancelled state AND must be associated with a Trade Confirmation document that has the setting to accept amendments to Matched or Cancelled documents enabled
  - The current version must not be referenced (in the trader instance) in a Broker Match Notification document with the Notification Type of 'preliminary' or 'final' that has not yet reached the 'Finished' state of the Communication Process

A Broker Fee Information document that is not 'well processed' will be rejected from the eCM process and in the case of the multi-tenancy implementation return a 'False' status to the Service which in turn will issue a Rejection Document to the Service User.

Note: *Should a lower version of a Broker Fee Information document existing in the Business Process progress to a final state then any higher versions of the Broker Fee Information document that might have entered the communications process will be set to Failed.*

If the Trader has opted to disable broker fee matching as part of the Broker Matching dialogue then any BFI submitted to the process, after the setting in the matching algorithm has been disabled, will be rejected from the process.

Note: *Concerning documents already in the process: turning on BFI matching would require BFIs to be added to the CNFs already in the Broker Dialogue, CNFs without BFIs will not match until the BFIs are submitted to the dialogue. Turning off BFI matching will result in CNFs in the Broker dialogue becoming matched independently of the brokerage; in this case the BFI associated with the CNF will be set to the matched state along with the CNF and BCN even though it (the BFI) has not in fact been matched.*

7.4.7.2 Pending or Preliminary Matched to Amended

If a Broker Fee Information document is in the 'Pending' or 'Preliminary Matched' state it may be moved, to the 'Amended' state by the assignment of a later and higher version of the same document to the 'Pending' state within the trader instance of the process. Note that this allows the brokerage to be amended to achieve a matching between the docouments in the Broker Matching dialogue even if the Trade Confirmation is part of a Trilateral Matching dialogue and is already in the Matched state in the Counterparty Matching dialogue.

'Well processed' processing for the new version of the document is defined previously in section 7.4.7.1, "Start to Pending".

The 'Amended' state is a final state for amended version of the Trade Confirmation document, since it cannot be further processed, but not for the process.

8 Communication Protocol and Interfaces

This chapter presents the specific communication protocol elements required to transport all EFET eCM messages. Please refer to references [1] & [2] for further information on the EFET Communications Standard and to how it must be applied in the case of the eCM process.

Appendix A. Definition of eCM Types and Codes

This appendix describes code conventions and best practices for the technical implementation of eCM and other EFET compliant interfaces. It is not limited to the use within the eCM process but should be used and extended to support other implementations related to other processes.

The actual implementation of this standard within the eCM processes and the description of the EFET eCM standards interface is the subject of the relevant sections describing the individual messages.

A.1. Core Components

The core components respect the basic principles defined by ebXML.

Core components are the basic building blocks of the message interchange system.

The ebXML definition of a core component is "a building block for the creation of a semantically correct and meaningful information exchange 'parcel'. It contains only the information pieces necessary to describe a specific concept".

There are two kinds of core component:

- Basic core components that are context independent and may be used in their native mode or in a context specific mode through the addition of a prefix name that qualifies its use within the defined context.
- Context specific "core components" that are used within a specific message context. These components will automatically inherit all the attributes of the basic core component but will have a specific definition to clearly explain its use.

Each of the context specific core components will be assigned a name such as "Buyer Party" and Seller Party". The words "Buyer" and "Seller" identify the function of a party within the context in which the basic core component is used.

A.2. Context-Specific Data Elements in Alphabetic Order

Element Name	Definition	Based on type	Context employed
AgentName	Name of the service provider	NameType	Trade/Broker Confirmation
AgentType	The role of the service provider	AgentType	Trade/Broker Confirmation
Agreement	The Master Agreement underwhich the transaction was conducted	AgreementType	Trade/Broker Confirmation
Automatic-Exercise	Flag indicating if an option will automatically exercise	TrueFalseType	Trade/Broker Confirmation
BrokerID	The Broker code	BrokerIDType	Trade/Broker Confirmation
BrokerSpread-ID	The identifier given by the broker to that particular type of spread transaction	IdentificationType	Broker Confirmation

Element Name	Definition	Based on type	Context employed
BrokerTradeID	Identifier issues by broker and unique to that specific broker	IdentificationType	Broker Confirmation
BSCPartyID	Identifies a party to the UK Electricity market Balancing and Settlement Code (BSC)	BSCPartyIDType	Trade Confirmation
Buyer-Delivery-Account	The account code for the Buyer of an EUA to which the delivery of certificate must be made.	EUAAccountCode-Type	Trade Confirmation
BuyerEnergy-Account	Consumption or production account (GB market only)	EnergyAccountType	Trade/Broker Confirmation
BuyerEnergy-Account-Identification	The account to which the Buyer of a power trade in the UK market will allocate the volume of the trade.	IdentificationType	Trade Confirmation
BuyerHubCode	The shipper code of the Buyer at the hub where the trade will deliver and the capacity is needed.	IdentificationType	Trade/Broker Confirmation
BuyerID	Party ID as defined in the Interface Definition Documents (IDD) on www.elexon.co.uk	BSCPartyIDType	Trade/Broker Confirmation
BuyerParty	The party that is purchasing the commodity.	PartyType	Trade/Broker Confirmation
Calculation-PeriodEndDate	End date of a period during which price data is collected and subsequently used in calculating the settlement of a financial trade.	DateType	Trade/Broker Confirmation
Calculation-PeriodStart-Date	Start date of a period during which price data is collected and subsequently used in calculating the settlement of a financial trade	DateType	Trade/Broker Confirmation
CapacityUnit	The unit of measurement in which the contract capacity quantity is expressed	UnitOfMeasureType	Trade/Broker Confirmation
CappedPrice	The price at which the up side of a call option is stops paying out.	PartyType	Trade/Broker Confirmation
Cash-Settlement	Flag indicating if the option is cash settled or not	TrueFalseType	Trade/Broker Confirmation
Commodity	Defines which energy product is traded	EnergyProductType	Trade/Broker Confirmation
Commodity-ReferencePrice	A commodity reference price/index.	ISDACommodityDefi nitionsType	Trade/Broker Confirmation
Common-Pricing	'Common Pricing' refers to the treatment of holiday schedules observed by underlying indices. Holidays affect the collection of prices since there will be no prices published for an index on a holiday.	TrueFalseType	Trade/Broker Confirmation
Contract-Capacity	The contract capacity of the commodity that has been negotiated.	QuantityType	Trade/Broker Confirmation

Element Name	Definition	Based on type	Context employed
CRCapacity-Conversion-Rate	The conversion factor that must be used in converting a unit of measure in which a commodity reference is quoted to the settlement unit of measure for the deal.	QuantityType	Trade/Broker Confirmation
Currency	ISO currency code. In some cases, the currency element is extended by an optional attribute: "UseFractionUnit". This indicates that, e.g., "pence" is used instead of "GBP"	CurrencyCodeType	Trade/Broker Confirmation
Delivery-PeriodStart-Date	The start date of a delivery period for a financial trade. Delivery periods define the settlement regime.	DateType	Trade/Broker Confirmation
DeliveryDate	For a given commodity reference this identifies which underlying delivery contract is used for pricing i.e. month ahead.	DeliveryDateType	Trade/Broker Confirmation
Delivery-PeriodEndDate	The end date of a delivery period for a financial trade. Delivery periods define the settlement regime.	DateType	Trade/Broker Confirmation
Delivery-PeriodNotion-alQuantity	The notional volume in a delivery period for a financial trade. Used in calculating the settlement in that Delivery Period.	QuantityType	Trade/Broker Confirmation
DeliveryPoint-Area	The area where the commodity is being delivered. In general this refers to the hub on which the commodity is delivered.	AreaType	Trade/Broker Confirmation
DeliveryEnd-DateAndTime	The end date and time of the time interval for a period. The resulting duration is expressed in minutes for a single quantity period. The time interval shall always be expressed in the time zone of the commodity delivery area.	ClockDateTimeType	Trade/Broker Confirmation
DeliveryStart-DateAndTime	The start date and time of the time interval for a period. The resulting duration is expressed in minutes for a single quantity period. The time interval shall always be expressed in the time zone of the commodity delivery area.	ClockDateTimeType	Trade/Broker Confirmation
DocumentID	The unique identification of a document compliant with naming standard defined in 6.1 Naming and Typing Conventions.	IdentificationType	Trade/Broker Confirmation, Suggested Match, Suggested Match Acceptance, Suggested Match Refusal, Cancellation, Acknowledgement/ Rejection

Element Name	Definition	Based on type	Context employed
Document-Version	Version of the document being sent. An entire document may be sent several times with the same identification. The version is used to distinguish one instance of the same document from another with the same identification.	VersionType	Trade/Broker Confirmation, Suggested MatchSuggestionMatch, Suggested Match Acceptance, Suggested Match Refusal, Cancellation, Acknowledgement/ Rejection
Document-Usage	Indicates whether it is a test message or a live message	UsageType	Trade/Broker Confirmation
EarlyExercise	Flag indicating if an option is subject to early exercise.	TrueFalseType	Trade/Broker Confirmation
EffectiveDate	The start date of the first Delivery Period. ISDA term identifying the start swap.	DateType	Trade/Broker Confirmation
Emissions-DeliveryDate	Contractual date that the emissions certificates are due for transfer from the Sellers account to the Buyers account.	DateType	Trade/Broker Confirmation
ErrorSource	Location of the Error (e.g. Xpath of an XML element	String (255)	Match Suggestion Refusal, Rejection
ExerciseDate-Time	Date and Time at which the option has to be exercised for the bounded delivery period	ClockDateTimeType	Trade/Broker Confirmation
ExerciseTime-Zone	Offset relative to UTC used to record the local counterparty time zone when the exercise date and time is in UTC.	TimeZoneOffsetType	Trade/Broker Confirmation
Exercise/-ExpiryDate-Time	The dates of the exercise schedule in UTC of European and Asian options and in the case of an American option the expiry date.	ClockDateTimeType	Trade/Broker Confirmation
Factor	Percentage contribution of a specific Commodity Reference to a basket.	QuantityType	Trade/Broker Confirmation
FeeCurrency	Currency in which brokerage has been agreed	CurrencyCode Type	Broker Confirmation
FixedPrice	The price in a Delivery Period of the fixed side of a swap.	PriceType	Trade/Broker Confirmation
FixedPrice-Buyer	Identifies the counterparty paying the fixed price in a swap	PartyType	Trade/Broker Confirmation
FloatPrice-Buyer	Identifies the counterparty(ies) paying the floating price(s) in a swap	PartyType	Trade/Broker Confirmation
FlooredPrice	The price at which the down side of a put option is stops paying out.	PriceType	Trade/Broker Confirmation

Element Name	Definition	Based on type	Context employed
FormulaID	An identifier of a complex formula the details of which are agreed outside the scope of this standard but which can be referenced by both parties in order to confirm deals of this type.	IdentificationType	Trade/Broker Confirmation
FPCapacity-Conversion-Rate	The conversion factor that must be used in converting a unit of measure in which a fixed price leg of a swap is quoted to the settlement unit of measure for the deal.	QuantityType	Trade/Broker Confirmation
FPCapacity-Unit	Unit of measure of the fixed price leg of a swap	UnitOfMeasureType	Trade/Broker Confirmation
FXMethod	The method used to calculate the agreed FX rate from the FX reference	FXConversionMethod Type	Trade/Broker Confirmation
FXPeriodEnd-Date	End date of a period during which FX data is collected and subsequently used in calculating the FX rate as part of settlement of a financial trade.	DateType	Trade/Broker Confirmation
FXPeriodStart-Date	Start date of a period during which FX data is collected and subsequently used in calculating the FX rate as part of settlement of a financial trade.	DateType	Trade/Broker Confirmation
FXRate	This is an actual FX rate agreed at the time of the trade.	QuantityType	Trade/Broker Confirmation
FXReference	A reference to an agreed spot price where FX information will be collected for using converting between currencies during the calculation of the settlement of a transaction.	FXReferenceType	Trade/Broker Confirmation
Incoterms	Incoterms rules are standard trade definitions most commonly used in international sales contracts. Devised and published by the International Chamber of Commerce, they are at the heart of world trade. See the International Chambere of Commerce (ICC) at http://www.iccwbo.org/incoterms/id3042/index.html	IncotermsType	Trader/Borker Confirmation
Index-CapacityUnit	The unit of measure of a Commodity Reference	UnitOfMeasureType	Trade/Broker Confirmation
Index-Commodity	The commodity of a Commodity Reference	IndexCommodityTyp e	Trade/Broker Confirmation
Index-CurrencyUnit	The unit of currency of a Commodity Reference	CurrencyCodeType	Trade/Broker Confirmation
IndexCap	The cap applied to a Commodity Reference.	PriceType	Trade/Broker Confirmation
IndexFloor	The floor applied to a Commodity Reference.	PriceType	Trade/Broker Confirmation

Element Name	Definition	Based on type	Context employed
IndexStrike-PriceStyle	Defines what the strike price is for an option on an index: either the current price of the commodity reference on the date of settlement or the price on the day of the trade.	IndexStrikePriceStyleType	Trade/Broker Confirmation
Initiate	Did the broker initiate the deal?	TrueFalseType	Broker Confirmation
LinkedTo	Cross reference between a Broker Fee Information document and a Trade Confirmation document.	IdentificationType	Broker Fee Information
LoadType	Conditions under which energy is purchased	ContractType	Trade/Broker Confirmation
Market		CountryCodeType	Trade/Broker Confirmation
Match-Suggestion-DocumentID	Reference to the Match Suggestion document which is accepted or refused.	IdentificationType	Match Suggestion Acceptance, MatchSuggestion Refusal
Multiplier	A factor used in Time Charter deals	QuantityType	Trade/Broker Confirmation
Notification-Agent	Third party used in the UK electricity market to notify the volumes under a deal to the central market.	PartyType	Trade/Broker Confirmation
Option-Currency	Currency of the prices referenced in the option.	CurrencyCodeType	Trade/Broker Confirmation
OptionHolder	The party with the write of exercise over the option	PartyType	Trade/Broker Confirmation
OptionStyle	A code specifying the exercise type "E" : European : option can only be exercised on the exercise date itself "A" : American : option can be exercised on any date, starting from the exercise date until the latest exercise date.	OptionStyleType	Trade/Broker Confirmation
OptionWriter	Identity of the party who writes the option	PartyType	Trade/Broker Confirmation
OptionsType	A code specifying if the option is a "call" or a "put" option	OptionType	Trade/Broker Confirmation
OrderNumber	A code that identifies a derivative contract between two legal entities typically for regulatory compliance.	IdentificationType	Trade Confirmation
Origin	The origin of a physical coal delivery, defines the 'Type' of coal in conjunction with the 'RSS' field	CountryCodeType	Trade/Broker Confirmation
Originator	Software component that raised the error	string	Match Suggestion Refusal, Rejection

Element Name	Definition	Based on type	Context employed
PaymentDate	One of a series of explicit dates identifying when payments are made during settlement of a financial trade.	IdentificationType	Trade/Broker Confirmation
PaymentEvent	The event triggering payment of physical coal deliveries these are sometimes agreed and inclouded as part of the confirmation.	PaymentEventType	Trade/Broker Confirmation
Payment-EventOffset	The number of days relative to the Payment Event, Payment either before (-ve) or after (+ve) that payment is due for a physical delivery of coal. Offsets are in Calendar days (holiday calendards are ignored).	QuantityType	Trade/Broker Confirmation
PIPricingDate	One of a series of explicit dates upon which an index deal will be physically settled	DateType	Trade/Broker Confirmation
Premium-Currency	Currency of the premium	CurrencyCodeType	Trade/Broker Confirmation
Premium-PaymentDate	Date when payment of premium is due	DateType	Confirmation
Premium PaymentValue	Value of the premium payment in the specified currency in the specified period.	PriceType	Trade/Broker Confirmation
PremiumRate	Amount per Premium Unit. If empty, the option has an absolute premium.	PriceType	Trade/Broker Confirmation
PremiumUnit/ Capacity	Capacity unit in which Premium is expressed	UnitOfMeasureType	Trade/Broker Confirmation
PremiumUnit/ Currency	Currency unit in which Premium is expressed	CurrencyCodeType	Trade/Broker Confirmation
PremiumValue	Value of the premium in the specified currency in the specified period.	PriceType	Trade/Broker Confirmation
Price	The price per TimeInterval	PriceType	Trade/Broker Confirmation
PriceUnit/-Capacity	Capacity unit in which Price is expressed	UnitOfMeasureType	Trade/Broker Confirmation
PriceUnit/-Currency	Currency unit in which Price is expressed	CurrencyCodeType	Trade/Broker Confirmation
PricingDate	Code identifying when prices that are used during settlement of a financial trade must be collected.	PricingDateType	Trade/Broker Confirmation
ReasonText	Text describing the reason for rejection	ReasonText	Match Suggestion Refusal, Rejection

Element Name	Definition	Based on type	Context employed
ReceiverID	Identification of the party who is receiving the document.	PartyType	Trade/Broker Confirmation, Suggested Match, Suggested Match Acceptance, Suggested Match Refusal, Cancellation, Acknowledgement/ Rejection
ReceiverRole	Either "trader" (=principal) or "broker", "ECVNA" or "clearinghouse".	RoleType	Trade/Broker Confirmation, Suggested Match, Suggested Match Acceptance, Suggested Match Refusal, Cancellation, Acknowledgement/ Rejection
Referenced-BrokerBFI-DocumentID	Document ID of the Broker Fee Information document that was successfully matched	Identification-Type	Match Notification
Referenced-BrokerBFI-Document-Version	Version of the Broker Fee Information document that was successfully matched	VersionType	Match Notification
Referenced-BrokerCNF-DocumentID	Document ID of the Trade Confirmation document document that was successfully matched	Identification-Type	Match Notification
Referenced-BrokerCNF-Document-Version	Version of the Trade Confirmation document that was successfully matched	VersionType	Match Notification
Referenced-Buyer-DocumentID	Reference to the Buyer Trade Confirmation document ID which is part of the suggested match.	IdentificationType	Match Suggestion
Referenced-Buyer-Document-Version	Reference to the Buyer Trade Confirmation document version which is part of the suggested match.	VersionType	Match Suggestion
Referenced-DocumentID	Reference to the Trade Confirmation document ID which is cancelled.	IdentificationType	Cancellation, Rejection
Referenced-Document-Version	Reference to the Trade Confirmation document version which is cancelled.	VersionType	Cancellation, Rejection
Referenced-SellerDocu-mentID	Reference to the Seller Trade Confirmation document ID which is part of the suggested match.	IdentificationType	Match Suggestion

Element Name	Definition	Based on type	Context employed
Referenced-SellerDocu-mentVersion	Reference to the Seller Trade Confirmation document version which is part of the suggested match.	VersionType	Match Suggestion
Referenced-Document-Type	Indicates the document type of the referenced document	DocumentType	Acknowledgement, Rejection
Rounding	The number of decimal places to which numbers used in calculation of a financial trade must be rounded. This specifically applies to the rounding of the of the averaged value of the index(es) which is based on published (unrounded) prices	RoundingType	Trade/Broker Confirmation
Schema-Release	Indicates the release of the EFET set of Schemas the documents conforms to	String	All document types
Schema-Version	Indicates the version of the EFET set of Schemas the documents conforms to	String	All document types
SecondStrike-Price	The floor price in a collar option	PriceType	Trade/Broker Confirmation
SellerEnergy-Account	Consumption or production account (GB market only)	Energy AccountType	Trade/Broker Confirmation
SellerEnergy-Account-Identification	The account to which the Seller of a power trade in the UK market will allocate the volume of the trade.	IdentificationType	Trade Confirmation
SellerHubCode	The shipper code of the Seller at the hub where the trade will deliver and the capacity is needed.	IdentificationType	Trade/Broker Confirmation
SellerID	Party ID as defined in the Interface Definition Documents (IDD) on www.elexon.co.uk	BSCPartyIDType	Trade/Broker Confirmation
SellerParty	The party that is selling the product	PartyType	Trade/Broker Confirmation
SenderID	Identification of the party who is sending the document.	PartyType	Trade/Broker Confirmation, Suggested Match, Suggested Match Acceptance, Suggested Match Refusal, Cancellation, Acknowledgement/ Rejection
Sleeve	Was the deal sleeved by the broker?	TrueFalseType	Broker Confirmation
SpecifiedPrice	Identifies which price for a Commodity Reference must be used in settlement of a financial trade.	SpecifiedPriceType	Trade/Broker Confirmation
Spread	Was the deal a spread	TrueFalseType	Broker Confirmation

Element Name	Definition	Based on type	Context employed
SpreadAmount	Monetary value of the spread on an index deal	PriceType	Trade/Broker Confirmation
Spread-CurrencyUnit	Currency unit of the spread used in a swap or index deal	CurrencyCodeType	Trade/Broker Confirmation
SpreadBuyer	Identifies which counterparty to the deal will pay the spread.	PartyType	Trade/Broker Confirmation
StrikePrice	Strike price of the option contract	PriceType	Trade/Broker Confirmation
Termination-Date	The end date of the last Delivery Period. ISDA term identifying the start swap.	DateType	Trade/Broker Confirmation
Tolerance	The percentage tolerance agreed for a physical delivery can be a standard term of the contract or a negotiated element.	QuantityType	Trade/Broker Confirmation
TotalContract-Value	Mandatory for fixed price contracts. Total financial value of the transaction in the specified currency. If 'Currency' utilises the attribute 'UseFractionUnit' the TotalContractValue must also be expressed in pence.	PriceType	Trade/Broker Confirmation
TotalFee	Brokerage fee	Quantity Type	Broker Confirmation
TotalPremium-Value	Total financial value of the premium in the specified currency.	PriceType	Trade/Broker Confirmation
TotalVolume	The total volume of a commodity that has been negotiated in a transaction. Equal to capacity*number of time units of delivery	QuantityType	Trade/Broker Confirmation
TotalVolume-Unit	Unit in which the total volume is expressed. (Typically mwh)	UnitUnitOfMeasureType	Trade/Broker Confirmation
TradeDate	The date that a transaction was concluded. Must be expressed in local clock time.	DateType	Trade/Broker Confirmation
TradeTime	The time of day that a transaction was concluded. Must be expressed in local time.	TimeType	Trade/Broker Confirmation
TraderName	The specific name of the person that concluded a transaction	NameType	Trade/Broker Confirmation
Transaction-Type		TransactionType	Trade/Broker Confirmation
Transmission-Charge-Identification	Term used in the UK electricity market to determine which counterparty will pay the transmission charges.	IdentificationType	Trade/Broker Confirmation
Voice	True/false flag recording whether the deal was voice brokered or executed on an electronic broker platform.	TrueFalseType	Broker Confirmation

Element Name	Definition	Based on type	Context employed
WorldScale-Rate	Rate related to fright deals	PriceType	Trade/Broker Confirmation
WrittenCon-firmationOf-Exercise	Flag indicating if an option requires a written confirmation of exercise.	TrueFalseType	Trade/Broker Confirmation

A.3. eCM Field Types

TypeName Order by	Definition	XML Base Type.	Size
AgentType	Values: • "Broker" • "ECVNA" • "ClearingBroker" • "SettlementAgent" • "ExecutionAgent"	NMTOKEN	
AgreementType	The set of valid values are specified on: http://www.efet.org in the Static Data section.	string	35
AreaType	A domain covering a number of related objects, such as balance area, grid area, country, etc. EIC Types are used here.	string	16
BrokerIDType	Identifies a broker for a trade. The set of valid values are specified on: http://www.efet.org in the Static Data section.	string	5
BSCPartyIDType	Identifies a BSC Party for a trade. The set of valid values are maintained at http://www.elexon.co.uk/participating/BSCSignatoriesAgents/bscSignatories.aspx	String	255
ClockDateTimeType	This corresponds to dateTime, but without the time zone extension. The type is derived from dateTime with the following pattern restriction: "20..-..-..T..:..:..".	dateTime	19
CommonPricing-Type	This refers to the whether there has been an agreement to use 'Common Pricing' when calculating settlements. Permitted values are: "True": yes, holidays observed by an index will be applied 'commonly' to all indexes when collecting settlement prices "False": no, holidays observed by an index will not be applied 'commonly' to all indexes.	NMTOKEN	
ContractType	The load type defines the conditions under which energy is purchased, allocated and handled. EG: In the case of TSO communications it represents: daily auction, weekly auction, monthly auction, yearly auction, etc. In the case of Trader to Trader communications it represents: Base load, peak load, etc… The significance of this type is dependent on area specific coded working methods. Values: "Base", "Peak", "OffPeak", "Custom"	NMTOKEN	10

TypeName Order by	Definition	XML Base Type.	Size
CountryCodeType	The identification of the market where the commodity is traded. Permitted values are defined as ISO 3166-1 2 alpha codes.	NMTOKEN	
CurrencyCodeType	The specification of a currency unit respecting ISO 4217 3 alpha codes.	NMTOKEN	
DateType	Identification of a particular calendar day by its calendar year, its calendar month and its ordinal number within its calendar month. The date shall respect ISO 8601 formatting extended format YYYY-MM-DD. Leading zeros shall be used.	date	10
DeliveryDateType	Delivery Date" means, in respect of a Transaction and a Commodity Reference Price, the relevant date or month for delivery of the underlying Commodity (which must be a date or month reported or capable of being determined from information reported in or by the relevant Price Source Valid values are: "Spot": The spot contract "First_Nearby": The month of expiration of the first Futures Contract to expire following that Pricing Date "Second_Nearby": The month of expiration of the second Futures Contract to expire following that Pricing Date "Sixth_Nearby": The month of expiration of the sixth Futures Contract to expire following that Pricing Date "First_Nearby_Including": The month of expiration of the first Futures Contract to expire following that Pricing Date including the final price on the day of expiry "Second_Nearby_Including": The month of expiration of the second Futures Contract to expire following that Pricing Date including the final price on the day of expiry "Sixth_Nearby_Including": The month of expiration of the sixth Futures Contract to expire following that Pricing Date including the final price on the day of expiry "First_Nearby_Excluding": The month of expiration of the first Futures Contract to expire following that Pricing Date excluding the final price on the day of expiry "Second_Nearby_Excluding": The month of expiration of the second Futures Contract to expire following that Pricing Date excluding the final price on the day of expiry "Sixth_Nearby_Excluding": The month of expiration of the sixth Futures Contract to expire following that Pricing Date excluding the final price on the day of expiry "Calculation_Period": The period specified in by the Calculation Period of the deal "Month_Ahead": The period delivery being the month ahead "Day_Ahead": The period delivery being the day ahead.	NMTOKEN	
EnergyAccountType	Definitions within the Balancing & Settlement Code for the UK electricity market. Values: "Production", ", "& "Consumption"	NMTOKEN	

TypeName Order by	Definition	XML Base Type.	Size
EnergyProductType	The identification of the nature of an energy product such as Power, gas, oil, active power, reactive power, coal etc. Values: Gas Power Oil Coal Bullion Metal Agriculturals Paper The identification of the nature of an EUA vintages defined by the European Directive and Certified Emissions Reductions (CERs) as well as equivalent UK legislation: EUAPhase_3 EUAPhase_4 CER ERU AAU UK Allowance These values will be referred to collectively as 'Emissions Commodity' for the purpose of defining related business rule within the document.	NMTOKEN	
EUAAccountCode-Type	EUA account codes must conform to the following format: CC-nnn-nnn-0 CC-nnn-nnnn CC-nnn-nnn Where CC is the Country Code as defined ISO 3166-1 2 alpha codes ; and n represents any single digit integer 0 is the character for zero	string	12
FXReferenceType	This is a reference to a spot price. All references shall be encoded as EFET Static Data on www.efet.org	String	255

TypeName Order by	Definition	XML Base Type.	Size
FXConversion-MethodType	The method for calculating currency conversion from a referenced spot rate. Values are: 'Daily', 'Monthly', 'Mixed' where: 'Daily' = Daily index rate * daily exchange rate 'Monthly' = Monthly average index * monthly average exchange rate 'Mixed' = monthly average index * daily exchange rate Note: These definitions use PricingDateType to identify valid days upon which prices can be collected i.e. rates will only be collected for valid Pricing Dates Note: The value "Monthly" is applicable in all averaging cases regardless of the time period of the calculation period, so for example, if the calculation period for the transaction is a week then the value 'Monthly' should be used but in this context would in actual fact refer to a period of a week since this is the period of the calculation period.	NMTOKEN	
IdentificationType	A code to uniquely distinguish one occurrence of an entity from another.	string	255
IncotermsType	Delivery terms defined by the International Chamber of Commerce (ICC). Valid values are available from the ICC website (http://www.iccwbo.org/incoterms/id3040/index.html) The version of the Incoterms is as defined in the relevant master agreement for the contract.	String	3
IndexCommodity-Type	'Agricultural Products' shall comprise the set of valid values: "Canola" "Cocoa" "Coffee" "Corn" "Cotton" "Livestock" "Milk" "Oats" "Orange_Juice" "Rubber" "Soyabeans" "Sugar" "Sunflower_Seeds" "Wheat" "Wool" 'Energy' shall comprise the set of valid values: "Benzene" "Coal" "Diesel_Fuel" "Electricity"	NMTOKEN	

TypeName Order by	Definition	XML Base Type.	Size
	"Fuel_Oil" "Gas_Oil" "Gasoline" "Heating_Oil" "Jet_Fuel" "Methanol" "Naphtha" "Nat_Gas" "NGL" (= Nat_Gas_Liquids) "Oil" "Ultra_Low_Sulphur_Diesel" 'Emissions' shall comprise the set of valid values (collectively referred to a 'Emissions Commodities'): "EUA" "CER" "Time Charter" 'Freight' shall comprise the set of valid values: "Wet_Freight" "Dry_Freight" 'Metals' shall comprise the set of valid values: "Aluminum" "Copper" "Gold" "Lead" "Nickel" "Palladium" "Platinum" "Silver" "Steel" "Tin" "Zinc"		
IndexStrikePrice-StyleType	Defines how the index is used in determining the strike price of an option on an index, permitted values are: "Index_Following", which means that the strike price of the option is the current state of the index at the present time, meaning that the option is always at the money "Index_Dated", which means that the strike price for the option is the state of the index on the trade date, meaning that the option can vary in and out of the money based on the relative performance of the index compared with the historic value on the trade date.	NMTOKEN	

TypeName Order by	Definition	XML Base Type.	Size
ISDACommodity-DefinitionsType	All values defined in Sub-Annex A to the 2005 ISDA Commodity Definitions plus other explicitly defined indices published on www.efet.org Static Data page, including but not limited to the value: "Formula"	string	255
NameType	A word or combination of words constituting the individual designation by which a person, animal, place, or thing is known.	string	35
NotificationField-Type	Values: "preliminary", "final", "reverse".	NMTOKEN	
OptionStyleType	Values: "American", "European", "Asian", "Cap", "Floor", "Collar", "Bermudan" Note: "Cap", "Floor" and "Collar" refer to an exercise style which can be equated to a strip of automatically exercised optlets with a strike price equal to the 'Cap Price'/'Floor Price'.	NMTOKEN	
OptionType	The type of option contract: Values: "Put", "Call", "Capped_Call", "Floored_Put" Note: 'Capped' calls and "Floored" puts contain a cap/floor on the upside/downside which effectively limits the explicit value of an in the money option.	NMTOKEN	
PartyType	The identification of an actor in the Energy market. Uses EIC codes. EIC company codes for brokers and trading parties will be issued by EFET. For Party EIC codes issued by ETSO see: http://www.etso-net.org/activities/edi/_library/index.asp See definition for EIC code format further down.	string	16
PaymentEventType	Valid values are published on www.efet.org Static Data page but including for example: Schedule_Date Trade_Date Bill_of_Lading Commencement_of_Discharge Completion_of_Discharge Commencement_of_Loading Completion_of_Load EPA_Transfer Final_Pricing Injection_Date Notice_of_Readiness Receipt_of_Invoice	string	32

TypeName Order by	Definition	XML Base Type.	Size
PricingDateType	The date upon which the Specified Price is recorded for settlement purposes. Values: "CBD": Each commodity business day "Monday": Each Monday if it is a commodity business day "Tuesday": Each Tuesday if it is a commodity business day "Wednesday": Each Wednesday if it is a commodity business day "Thursday": Each Thursday if it is a commodity business day "Friday": Each Friday if it is a commodity business day "Saturday": Each Saturday if it is a commodity business day "Sunday": Each Sunday if it is a commodity business day "Monthly": On the same day each month - the actual day is not defined but is considered to be known to the counterparties and broker	NMTOKEN	
PriceType	The price in some currency. Positive quantities shall not have a sign. A price may be expressed up to 9 decimal places, dot-separated and with leading zeros suppressed.	decimal	25
ProcessFieldType	Values: "withCp" or "withoutCp".	NMTOKEN	
QuantityType	The number of occurrences of an object. Positive quantities shall not have a sign. A quantity may be expressed up to 8 decimal places, dot-separated and with leading zeros suppressed. The number of EUA Certificates. Positive quantities shall not have a sign. A quantity shall always be expressed as a whole number (integer) up to 8 figures in length, with leading zeros suppressed e.g. 1 to 99.999.999	decimal	30
ReasonCodeType	A code defining a known technical or business processing error. Will relate to situations when a document is NOT 'Well Received' or when a document is NOT 'Well Processed' A complete list of reason codes is described further down.	NMTOKEN	See valid values
ReasonTextType	The textual explanation of an act.	string	512
RSSType	Must be a SCoTA RSS code http://www.globalcoal.com/scota/scotaSpecs.cfm.	string	32
RoleType	One of the values: "Trader", "Broker", "ClearingHouse", "ECVNA"	NMTOKEN	
RoundingType	Indicates the number of decimal places to round to, valid values are: "0": meaning precisely nil d.p. "1": meaning precisely one d.p. "2": meaning precisely two d.p. "3": meaning precisely three d.p. "4": meaning precisely four d.p. "5": meaning precisely five d.p. "6": meaning precisely six d.p. "7": meaning precisely seven d.p. "8": meaning precisely eight d.p.	NMTOKEN	

TypeName Order by	Definition	XML Base Type.	Size
	"9": meaning precisely nine d.p. "N_A": meaning that there is no greement to the number of d.p.		
ScotaOriginType	The origin code for a Relative Standard Specification (RSS) coal product as defined http://www.globalcoal.com/scota/scotaSpecs.cfm and including: CRAPS RB AUS COL POL RUSS US BOL	String	8
SpecifiedPriceType	In respect of a Transaction and a Commodity Reference Price, any of the following prices (which must be a price reported in or by, or capable of being determined from information reported in or by, the relevant Price Source), as specified in the relevant Confirmation (and, if applicable, as of the time so specified) Values are: "High": (A) the high price; "Low": (B) the low price; "Average": (C) the average of the high price and the low price; "Closing": (D) the closing price; "Opening": (E) the opening price; "Bid": (F) the bid price; "Ask": (G) the asked price; "Ave_Bid_Ask": (H) the average of the bid price and the asked price; "Settlement": (I) the settlement price; "Off_Settlement": (J) the official settlement price; "Official": (K) the official price; "Morning": (L) the morning fixing; "Afternoon": (M) the afternoon fixing; "Spot": (N) the spot price; "Other": (O) any other price specified in the relevant Confirmation	NMTOKEN	
TimeType	A point within a unit of time of 24 hours. The time shall respect ISO 8601 formatting extended format HH:MM:SS(Z).	time	8
TimeZoneOffset-Type	This is the time zone offset from UTC. Valid values are integers from 0 to 24. Must be signed if negative.	Integer	3

TypeName Order by	Definition	XML Base Type.	Size
TransactionType	Need to extend this type to include: "DAH": Day Ahead "IND": Intraday "FOR": Physical Forward that settles against a fixed price "OPT": Option on a physical forward "PHYS_INX": Physical forward that settles against an index "OPT_PHYS_INX": Option on a physical forward that settles against an index Note: "PHYS_INX" and "OPT_PHYS_INX" must be used for version 3.3 and above only The following transaction types are collectively termed 'Financial Transactions' "FXD_SWP": Fixed/float swap "FLT_SWP": Float/float swap "OPT_FXD_SWP": Fixed/float swaption "OPT_FLT_SWP": Float/float swaption "OPT_FIN_INX": Option on an index	NMTOKEN	
TrueFalseType	Data type used to indicate if a condition is true or false. Values: "true", "false".	Boolean	
UnitOfMeasureType	The unit of measure that is applied to a quantity. Valid units are as follows: 100MJ 100MJPerDay AAU Bag BBL BCF BF BSH BTU CBU Celsius CER Cwt Day DTH ERU EUA EUAA Fahrenheit Fee G GAL	NMTOKEN	

TypeName Order by	Definition	XML Base Type.	Size
	GJ GJPerDay GW GWh GWhPerDay hL in Ingot KG kL KM3 KW KWh KWhPerDay L LB LEC M3 MCM MJ MJPerDay MMBTU MMJ MMJPerDay MT MW MWh MWhPerDay MWZero MWZeroh NM3 OBU Ozt ROC SBU SM3 St T Therm ThermPerDay UKA Vega WBU		

TypeName Order by	Definition	XML Base Type.	Size
	Valid value for Emissions (EUA and CER) Trade Confirmation documents is "EUA" Note: 1 EUA = 1 tonne of CO2.		
UsageType	Indicates Test or Live message.The coded type of a document. The document type describes the principal characteristic of a document. Values: "Test" or "Live"	NMTOKEN	
VersionType	A code that distinguishes one evolution of an identified object from another. Information about a specific object may be sent several times, each transmission being identified by a different version number.	integer	3

A.4. Reason Code Types

Naming conventions: Naming domain codes are used as a prefix to qualify error codes and originators:

- "xml"
- "efet"
- "ebxml"
- Vendor-specific, e.g. "ponton" etc.

Minimal required reason codes:

ebXML Error Codes: See ebXML MS2.0 Spec. (ValueNotRecognized, NotSupported, Inconsistent, OtherXml, DeliveryFailure, TimeToLiveExpired, SecurityFailure, MimeProblem, Unknown)

EFET Error Codes: TimeOut, TCAlreadyMatched, NoMatch, InvalidData

Vendor-specific Error codes (non): See vendor-specific documentation

Domain	Error Code	Comment
XML	ValidationFailure	An XML element/attribute could not be validated against the Schema
ebxml	ValueNotRecognized	XML enumeration not defined in Schema
ebxml	NotSupported	An ebXML feature that is not supported, e.g. multi-hop communication
ebxml	Inconsistent	In valid XML document
ebxml	OtherXML	Error explained in more detail in ReasonText
ebxml	DeliveryFaliure	Error explained in more detail in ReasonText
ebxml	TimeToLiveExpired	
ebxml	SecurityFailure	Error explained in more detail in ReasonText
ebxml	MimeProblem	Error explained in more detail in ReasonText
ebxml	Unknown	Error explained in more detail in ReasonText

Domain	Error Code	Comment
efet	InvalidData	One or more data fields are invalid (yet XML Schema compliant).
efet	TimeOut	The trade confirmation timed out on the sender side of the document.
efet	InvalidMatchAttempt	The trade confirmation is generally in a document state that does not allows for matching (e.g. Amended, Failed, Matched etc.)
efet	AmendmentError	The amendment has a wrong version number
efet	IDNotFound	An externally defined ID (e.g. EIC Code) could not be verified
efet	UniquenessViolation	ID used in a trade confirmation is already in use
efet	NoMatch	The sender could not match the two trade confirmations referenced by the Match Suggestion
efet	ReferencedDocNotExists	The referenced Document does not exist in the Counterparts System.
efet	RefDocInvalidState	The referenced Document is not in a valid state for further processing. (e.g. state ACKNOWLEDGED was expected but it is in state PENDING)
efet	MinorVersionInInvalidState	The currently processed Trade Confirmation has minor versions in a state that does not allows amendments. (e.g. state is FAILED)

8.1.1.1 Example 1:

```
<Reason>
    <ReasonCode>ebXML:Validation</ReasonCode>
    <ErrorSource>/TradeConfirmationDocument/DocumentCreation/DateTime </ErrorSource>
    <Originator>ponton:PontonXP</Originator>
    <ReasonText>Element Value could not be validated against dateTime type</ReasonText>
</Reason>
```

8.1.1.2 Example 2:

```
<Reason>
    <ReasonCode>efet:timeout</ReasonCode>
    <Originator>efet:efetbox</Originator>
    <ReasonText>trade confirmation timed out at 2004-30-08T21:30:00Z UTC</ReasonText>
</Reason>
```

A.5. Use of Code Standards

Component	Coding Scheme or Format	Comment
Character set	UTF-8	Used as the character encoding schema
Currency codes	ISO 4217 3 alpha codes	See annex for list of frequently used codes

Component	Coding Scheme or Format	Comment
Date time	ISO 8601 YYYY-MM-DDTHH:MM:SSZ. Shall be expressed in UTC. Midnight is 00:00. For Date values: ISO 8601 format - YYYY-MM-DD. For Time values: ISO 8601 format - HH:MM:SSZ.	Note: Z refers to Zulu time, being a synonym to Coordinated Universal Time or UTC (formerly known as Greenwich Mean Time or GMT). The delivery periods (start and end date and times shall always be expressed in local time.
Delivery areas	EIC codes	For the physical delivery areas, EIC codes issued by ETSO will be used see: http://www.etso-net.org/activities/edi/_library/index.asp Additional EIC codes will be issued and maintained by EFET for virtual trading hubs. See annex for list of ETSO EIC codes for physical delivery areas.
Market	The ISO 3166-1 2 alpha codes are used for the markets that correspond to a country. Special codes are added to the sub-country markets within the U.K.	This EFET coding scheme partly exists of the ISO controlled standard country, extended with EFET controlled codes to identify the markets within the U.K.
Measurement units	UN/ECE Recommendation 20.	See annex for list of frequently used codes
Numeric values	Standard numeric format is UK/American but without comma separation for orders of 103: "nnnnnnn.nn". Always cut leading zeros.	
Party	EIC code	EIC company codes for brokers and trading parties will be issued by EFET. For Party EIC codes issued by ETSO see: http://www.etso-net.org/activities/edi/_library/index.asp It is still under discussion whether the EFET standard will allow the parallel use of EAN codes. In any case, the EIC code will get strong preference above EAN code.

A.6. EFET Coding Scheme

The EFET coding scheme is made up of a number of code lists. All the code lists in question may be found on the EFET website www.efet.org. These lists will be constantly kept up to date and therefore they should be queried occasionally in order to determine if there are any new codes of interest.

Note:

EIC codes (ETSO Identification Codes) are issued anytime by EFET and have the following form: NNxABCDEFGHIJKLc

- NN : Issuing office
- x : digit indicates the type of EIC code, e.g. 'X' indicates a party identification code
- AB..L : A 12 digit identification code
- c : Check digit

EFET Standards regarding delivery points and areas are not issued by EFET but by other Local Issuing Offices within the EIC community. These codes take the same form but with the following exceptions:

- x: indicating the type of EIC code is set to 'Y' for Areas and represent network areas in which capacity constraints are typically managed by a Transmission System Operator
- x: indicating the type of EIC code is set to 'Z' for Measurement Points where a commodity is considered to be traded and exchanged; the pipe line operators are identified in the case of interconnections between gas pipe lines.

In all cases codes used in the eCM process will be 'International' EIC codes and so will be posted on the ETSO EIC code site at: www.edi.etso-net.org

Appendix B. Glossary of Terms

Term	Description
3rd party acknowledgement	A broker acting as an intermediary or third party between Buyer and Seller can report the trade to both parties. He then sends out a 3rd party acknowledgement.
ASP	Application Service Provider
Central Directory & Standardisation Service	Service delivered by EFET.org. The Central Directory Service centralises, maintains and publishes information concerning: The EFET approved eCM process implementation installations and their communication interfaces, Parties being registered with those EFET Boxes+, Parties able to send & receive EFET eCM compliant trade confirmation messages. The Central Standardisation Service centralises, maintains and publishes new releases of the EFET standard and the EFET eCM standard: list of valid EFET codes, EFET eCM interface standard, best practices and other guideline documents
Confirmation Reconciled	The fact that a counter party confirmation has been received that contains material terms similar to the own trade (or confirmation) content and thus is acceptable.
Confirmation Statuses	A trade confirmation can have different statuses: Pending MatchSuggested MatchSuggestionAccepted MatchSuggestionRefused Matched TimedOut Cancelled Rejected
EAN Code	"EAN international" managed codes - see www.ean-int.org The EAN·UCC identification number can comprise 8, 13, 14, 8 digits and is accordingly defined as EAN-UCC-8,-13, -14.
eCM	Electronic Confirmation and/or Matching
EDI	Electronic Data Interchange – the transfer of structured data, by agreed message standards, from one computer application to another by electronic means and with a minimum of human intervention
EFET	European Federation of Energy Traders
EFET Codes	Acceptable values (formats) for specific attributes of an object (e.g. counter party, currency code, product code, delivery date…) published by EFET as part of its EFET standard.

Term	Description
EFET eCM Standard	The EFET eCM standard refers to the EFET standard and describes in more detail the exact message flow, message content and message structure for messages exchanged during an eCM process (either bi-lateral or via a central service provider). An interface behaving according to the EFET eCM standard is said to be EFET eCM compliant. Two EFET compliant interfaces can thus talk to each other and understand each other even if developed by different software providers. The EFET eCM standard thus includes details about the business logic/rules (what message to expect/send and when), the structure of these messages… In summary: this is with the EFET standard the only document needed to build e.g. EFET eCM compliant ETRM system.
EFET IT TF	EFET IT Task Force – the original one
EFET IT TF – Business Workgroup	The EFET IT TF subgroup responsible for defining the business processes and business requirements for the eCM process.
EFET IT TF – Technical Workgroup	The EFET IT TF subgroup responsible for defining the XML schemas and technical communication protocols for the EFET eCM standard.
EFET Standard	The EFET standard would describe the EFET code tables and the structure of a trade or any other object on which information is exchanged between members of EFET and between these and other external market players. For example a trade would be found in the interface definition of the broker software to enable a company to upload directly its trades into its trade capture system but also in the interface definition of the eCM software to enable different companies to exchange trade confirmation messages. This EFET standard is needed to lower the cost of interfacing different systems. Nowadays each solution provider or software developer defines a trade slightly differently and uses different codes for the same value, forcing the development of different interfaces and the use of different code matching tables.
EIC Codes	ETSO Identification Code
Electronic Authentication	An electronic trade confirmation sent by one party having been given the "countersigned" status (and having thus been digitally countersigned and approved) by the other party.
Electronic Match	The fact that an eCM process implementation has, according to the rules described in Chapter 4, identified two confirmations coming from two parties as being a match. Both confirmations will be reported to each party by the eCM process implementation as having status "matched".
Electronic Trade Confirmation	The electronic version of a trade confirmation.
End of Business Day	8 pm CET
ETRM System	Energy Trading and Risk Management System
ETSO	European Transmission System Operators
FTP	File Transfer Protocol
HTML	Hyper Text Markup Language

Term	Description
HTTP	Hyper Text Transfer Protocol. Standard protocol used over the Internet
ICE	InterContinental Exchange – a service provider offering brokering services.
ISO Code	Codes published by the International Organization for Standardization
Key Field	The EFET eCM standards shall include the definition of Key Fields. The introduction of the concept of key and informational fields will define the "meaning and scope" of an authentication or match result message. In the case of exchange of confirmations through a peer-to-peer connection via the eCM process implementation, an MatchSuggestion sent by the Buyer and related to the confirmation of the other party, shall mean that this party agrees on all key fields of the corresponding other party confirmation message. As opposed to key fields, information fields are meant to be purely informational.
Message Authentication	Authentication ensures that messages are what they purport to be and message originators are whom they purport to be, and that intended recipients receive the messages. Provided by use of digital signature (or certificate or private key) that gives the recipient the guarantee of the identity of the sender.
Message Confidentiality	Confidentiality ensures that information can be read only by authorized entities. Use of encryption algorithms and digital signatures (or certificates or private keys). Principle is that both the sender and the receiver have the same key and use the same public encryption algorithm to respectively encrypt and decrypt the message.
Message Handler	An engine that handles the sending, reception and distribution of (XML or other) messages
Message Integrity	Data Integrity ensures that data is unchanged from its source and has not been accidentally or maliciously altered. Message is sent in packets and a cyclical redundancy checksum (CRC) can be used to ensure the number of packets sent is equal to the number of packets received. The transport protocol includes error detection and recovery mechanisms. Integrity can be further enforced by use of a digital signature (or certificates or private keys). The sender will hash the data to generate a checksum that he will encrypt into a "digital signature" using his private key. The message is sent together with that "digital signature". The recipient will use the same hashing algorithm to generate the checksum and use the public key of the sender to produce from the digital signature the checksum he can then compare to the result he got after the hashing.
Message Non-repudiation	Non-repudiation ensures that strong and substantial evidence is available to the sender of message that the message has been delivered, and to the recipient, of the sender's identity, sufficient to prevent either from successfully denying having sent or received the message. This includes the ability of a third party to verify the integrity and origin of the message.
Message Validation	Process of checking whether the message format & content is EFET eCM standard compliant.
P2P	Peer – to – peer. Refers to bilateral or direct communication between two peers (two equal parties).
SLA	Service Level Agreement - This is a contract between the client and the service provider and sets out the terms and conditions upon which the services will be delivered.
Trade Authentication	The countersigned version (countersigned by one of both parties) of a trade confirmation sent by the other party.

Term	Description
Trade Confirmation	A legal document describing all the material terms of a trade. It often refers to a Master or other Agreement in place between both parties or contains some legal terms.
Trade Confirmation document ID	A unique identifier for the trade. This identifier should be unique for the system in which the trade has been captured. An industry wide unique reference would be identical across the Buyer, Seller and intermediary systems and unique across all systems. Such an industry wide unique reference currently does not exist.
UTC	Coordinated Universal Time. Previously referred to as GMT or Z (zulu time).
VPN	Virtual Private Network
XML	eXtended Markup Language
XML generator	An engine that generates XML messages

Appendix C. Definition of Vanilla and Complex Products

The CNF and BCN structure in v3.3 was extended to include standard (or 'vanilla') and 'complex' financial products. These two catagories of deal are defined as follows:

1. 'Vanilla' deals have explicitly confirmed pricing terms i.e. no formulas are used, but only actual commodity references not subject to any calculation.
2. 'Complex' deals comprise deals with simple derived prices such as look-back averages, differences and aggregations of baskets of prices, for which the underlying commodity references and other parameters used in the settlement calculation may be confirmed.

'Complex' deals also support confirmation of supporting data for highly complex externally referenced, bilaterally agreed algorithms.

These definitions place certain limitations on the structure of 'vanilla' CNF and BCN documents the table below speicifes these limitations in reference to the sections permitted with a 'vanilla' structure for each major type of deal.'Vanilla' options comnprise the 'vanilla' deals with the addition of an appropriately completed Options Section.

Trade types	Definition
Vanilla Fixed/Float	Must comprise only the following sections: Header 1 (Mandatory) Agents 1-n (Mandatory if Brokered) Delivery Periods 1-n (Mandatory) Fixed Price Information 1 (Mantaory) FX Information 0-1 (Conditional) Float Price Information only 1 (Mandatory) Commodity Reference only 1 (Mandatory) FX Information 0-1 (Conditional) Calculation Periods 1-n (Mandatory with exactly one for each Delivery Period)
Vanilla Float/Float	Must comprise only the following sections: Header 1 (Mandatory) Agents 1-n (Mandatory if Brokered) Delivery Periods 1-n (Mandatory) Float Price Information 2 (Mandatory) Commodity Reference only 1 (Mandatory) FX Information 0-1 (Conditional) Spread Price Information 0-1 (Mandatory if this leg carries a positive spread) FX Information 0-1 (Conditional) Calculation Periods 1-n (Mandatory with exactly one for each Delivery Period)

Trade types	Definition
Vanilla Physical Inx	Must comprise only the following sections: Header 1 (Mandatory) Time Interval Quantities 1-n OR EUA Trade Detail 1 (Mandatory) Agents 1-n (Mandatory if Brokered and/or GB Power) Hub Codification Information 1 (Mandatory for Gas) Account An dCharge Information 1 (Mandatory if Brokered and/or GB Power) Delivery Periods 1-n (Mandatory) Float Price Information 1 (Mandatory) Commodity Reference only 1 (Mandatory) FX Information 0-1 (Conditional) Calculation Periods 1-n (Mandatory with exactly one for each Delivery Period)

Appendix D. Backwards Compatability with v3.3.1

Release 4 Version 0 (v4.0) of this standard introduces several changes permitting: the process to be deployed in a multi-tenant, amendment of cancelled Trade Confirmation and Broker Confirmation documents, amendment and the 'tear-up' of matched documents as well as the removal of the 'Time Out' state in favour of aged document reporting and inclusion of physical coal fields. The following summaries the affect of backwards compatibility with v3.3.1 of the eCM process:

Time Out: Trade Confirmation and Broker Confirmation documents will not enter the 'Timed Out' state in v4.0 of the process. In the case where the interaction is with a peer-to-peer v3.3.1 implementation of the process the two instances of the Trade and/or Broker Confirmation documents will become unsynchronised existing in both the 'Pending' and 'Timed Out' state in the separate peer-to-peer instances. It is recommended that the time out period for v3.3.1 of the eCM process is generally extended to 365 days within the eCM community as part of the deployment of eCM v4.0 to avoid this situation which will otherwise require the v3.3.1 user to request an amendment from the v4.0 user. Failure to maintain the documents in a synchronised ('Pending') state may lead to the documents in the the v4.0 instance of the process being set to the 'Error' state should a Match Suggestion document be issued for a pair of documents that have entered the 'Timed Out' state in the v3.3.1 instance of the process.

Amendment of cancelled documents: if a peer-to-peer dialogue occurs between a v4.0 and a v3.3.1 version of the process, an amendment to a cancelled document will be rejected since the stricter rules appled by the earlier version of the process will dictate the final outcome of the validation applied by each instance the process.

Amendment of matched documents: if a peer-to-peer dialogue occurs between a v4.0 and a v3.3.1 version of the process, an amendment to a 'Matched' document will be rejected since the stricter rules appled by the earlier version of the process will dictate the final outcome of the validation applied by each instance the process.

Tear-Up Request: if a peer-to-peer dialogue occurs between a v4.0 and a v3.3.1 version of the process, any 'Tear-Up Request' document will be rejected since it is an unknown document type for the earlier version of the process which will dictate the final outcome of the validation applied by each instance the process.

Physical Coal: as with other extensions to the schema the v4.0 schema is backwardly compatible, however a v4.0 schema will permit the inclusion of additional fields for specification of the confirmation and broker confirmation of physical coal. If an extended version of the dopcument is submitted to an older version of the process it will be rejected.

Appendix E. Clarifications to the Standard and Subsequent Versions

EFET reserve the right to publish clarifications from time to time to this standard. Clarifications will not materially change the standard but will resolve ambiguities and correct any errors that may be discovered after publication. Such clarifications shall take the form of a separate addendum to the main document and will be published in the same location as the standard.

A new minor version of the eCM v4 standard is foreseen. eCM v4.1 is expected to include updates to the Trade and Broker Confirmation documents to add support for cleared products and to align developments with the work of the electronic eXchange Related Processes (eXRP) Project Workgroup.