ECM DOCUMENT 1

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LEXICON

VERSION 1.9.

CREATED BY EFET IT TF – TECHNICAL & BUSINESS WORKGROUPS

Revision History

Version	Date	Changes	Author of changes
Version 1.2		Created by EFET IT TF – Technical workgroup	EFET IT TF – Technical workgroup
Version 1.2.2	16/7/2002	Amended to reflect new vision as proposed by Electrabel & Transmeta.	
Version 1.4	18/7/2002	Extensively reviewed & approved by EFET IT TF – Business Workgroup during 18/7 Brussels Workshop	EFET IT TF – Business Workgroup
Version 1.5	12/8/2002	Amended to include comments by Mike Conroy (Schlumberger Sema): • Affirmation is now authentication. • Peer-to-peer is used instead of bilateral. • Added the definition of key field, message authentication, confidentiality, integrity and non-repudiation. • ECMS has been replaced by ECM • Minor syntax and grammar corrections…	Kris Bouckaert (Transmeta)
Version 1.6	26/8/2002	Added UTC	Sophie van der Haegen (Electrabel)
Version 1.7	16/9/2002	Align document names	
Version 1.8	8/10/2002	Copyright note	
Version 1.9	9/10/2002	Replace EXIS application with EFET box	

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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 Matching Service Provider	A service provider who runs an electronic trade confirmation matching service. A Central Matching Service Provider will be labelled EFET ECM compliant if he supports the EFET ECM standard. Other requirements such a service should fulfil are described in **EFET ECM doc3 - Recommendations for Central Matching Service.**
Central Directory & Standardisation Service	Service delivered by EFET.org. The Central Directory Service centralises, maintains and publishes information concerning: • The EFET approved Central Matching Services, • Parties being registered to those Central Matching Services, • Parties able to send receive and send bi-laterally 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: • Matched (only to be given by Central Matching Service provider) • Authenticated or Countersigned (only to be given by counter party) • Invalid (can be given by receiver when format is not valid)
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 Authentication	The countersigned version (countersigned by one of both parties) of a trade confirmation sent by the other party.
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.
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. your own EFET box, an EFET ECM compliant Central Matching Service or an EFET ECM compliant ETRM system. The first release of this EFET ECM standard will only support power forward contracts and will be described in **ECM doc5 - EFET Standards 1.0 - ECM Interface Definition**
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. They will have to produce and validate: • **EFET ECM doc1 - Lexicon**. • **EFET ECM doc 2 - EFET Standards 1.0 - Central Matching and P2P Authentication Process.** • **EFET ECM doc3 - Recommendations for Central Matching Service**

	• **EFET ECM doc4 - EFET Standards 1.0 - Core Components & Coding Scheme** - the EFET codes • **EFET ECM doc6 - Recommendations for EFET box**, the business requirements part
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. They will have to produce and validate • **EFET ECM doc4 - EFET Standards 1.0 - Core Components & Coding Scheme** - the technical part about the protocol • **EFET ECM doc5 - EFET Standards 1.0 - ECM Interface Definition** • **EFET ECM doc6 - Recommendations for EFET box**, the technical requirements part
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. The EFET IT TF would have to define the objects or data entities to be included in the EFET standard. The attributes (incl. format) of each of these objects will be defined. For some of these attributes a list of valid EFET codes has to be agreed upon. Already existing standard codes within the industry should be taken into account (e.g. EAN Codes, ETSO Identification Scheme, Calendars published by Exchanges, etc.) The EFET standard might also include an implementation guideline giving directions on how to use the EFET standard to develop an EFET compliant interface. The first release of this EFET standard is focusing solely on power forward contracts and will be described in **EFET ECM doc4 - EFET Standards 1.0 - Core Components & Coding Scheme**
EFET XML Handler	The logic that will translate the information coming from proprietary ETRM systems into an EFET ECM compliant message

	and manage incoming EFET ECM compliant messages. It thus basically is a message handler and EFET ECM compliant XML generator. EFET should lobby so that the ETRM tools themselves will be EFET ECM standard compliant and eliminate the need for an EFET XML handler.
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 Trade Confirmation	The electronic version of a trade confirmation.
Electronic Match	The fact that a Central Matching Service provider has, according to the rules described in **EFET ECM doc3 - Recommendations for Central Matching Service**, identified two confirmations coming from two parties as being a match. Both confirmations will be reported to each party by the Central Matching Service as having status "matched". Each party will also receive a match report including a MatchID, reference to the matched confirmation and a copy of the counter party confirmation content.
Electronic Signature	
End of Business Day	8 pm CET
ETRM System	Energy Trading and Risk Management System
ETSO	European Transmission System Operators
EFET box	Electronic Exchange Information System An application consisting on one hand of the EFET XML handler and on the other hand of different business modules (e.g. ECM, scheduling, …) delivering extra functionalities. ECM-related functionalities might typically be confirmation reconciliation and subsequent generation of authentications, reporting functionalities, etc… Future modules can be added to the EFET box once common EFET standards and processes have been defined on the corresponding functionality. This application will be of particular interest to parties not registered to any central service provider. Business and technical requirements concerning this EFET box are no part of the EFET ECM standard.

	Nevertheless, a spontaneous grouping of interested parties can jointly decide to share part of the development cost of this EFET box. To facilitate this process, the EFET IT TF – business and technical workgroup will produce **EFET ECM doc6 - Recommendations for EFET box**, detailing the recommendations on the functional and technical requirements.
FTP	File Transfer Protocol
HTML	Hyper Text Markup Language
HTTP	Hyper Text Transfer Protocol. Standard protocol used over the Internet
ICE	InterContinental Exchange – a service provider offering brokering services and central trade confirmation matching services and as such an example of a Central Matching Service provider.
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 the use of Central Matching Service provider, a match message sent by a Central Matching Service provider shall mean that the key fields of the confirmations to which the match message refers are identical. The key fields of two confirmations will thus have to be identical for the Central Matching Service to report a match on those two confirmations. In the case of exchange of confirmations through a peer-to-peer connection, an authentication message sent by one of the two parties 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. A party will thus check the Key fields of a confirmation before replying with an authentication message on that confirmation. As opposed to key fields, information fields are meant to be purely informational.
Logica Prototype	The prototype of a Central Matching Service built by Logica in collaboration with a number of EFET members.
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 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 Handler	An engine that handles the sending, reception and distribution of (XML or other) messages
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 Reference	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