



CFCF Terminal and Acquirer Certification Policy

based on nexo Specifications

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1 Glossary

Acquirer

Contracts with merchants to agree on the acceptance of those cards, the acquirer is licenced for. Collects the transactions from contracted merchants, which are submitted to the interchange system. Use acquirer processors to process the transactions.

Acquirer systems / ACQ

System implemented by an Acquirer in conformance with the nexo IS specification.

Approval

Acknowledgement that a payment scheme or an Approval Body is prepared to accept operation of a payment scheme component within its scheme or community. The approval is based on certificates delivered by eligible certification bodies. The approval letter is issued by the responsible body of that payment scheme, the Approval Body or Approval Authority. For approval payment schemes may also take other considerations beyond security and interoperability compliance into account, e.g. for own risk management policies, own regional requirements or configurations.

Approval Body

See [Approval]

Certification

Procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements" [ISO/IEC Guide 2]. In this document the functional requirements to comply with are listed in the chapter "references".

Certificate or CFCF Certificate

The written output of a certification process in form of a document issued and signed by a Certification Body. Certificates for the time being only cover functional compliance with nexo standards.

Certification Applicant or Vendor

Product or system manufacturer and/or any other entity requesting its Certification (solution provider). In this document, Vendors are also referred to as Certification Applicants.

Certification Object

The payment system component, which is submitted to compliance.

Common Functional Certification Framework (CFCF)

The CFCF is a consortium composed of members (Card Payment Schemes and Approval Bodies). The Objective of the CFCF is to coordinate and provide interested stakeholders with a common trusted Certification Infrastructure and Processes, endorsed and recognized by participating members basing on nexo Implementation Specifications owned by nexo as well as potentially on other Implementation Specifications.

CFCF Certification Committee or Certification Committee

Committee composed of members of the CFCF in charge of reviewing and monitoring all certification activities related to the nexo specifications.

CFCF Certification Body or Certification Body

Entity, accredited by the CFCF Consortium to conduct Certification activities based on nexo specifications.

nexo

nexo is a global standardisation initiative with the mission to:

- design, develop, promote and maintain card payment and cash withdrawal standards, protocols and implementation specifications, which follow a universal ISO 20022 standardisation process, in particular
 - develop and maintain the nexo Implementation Specification nexo IS for card acceptance and acquiring solutions ;

- define and maintain functional test cases developed according to the nexo IS
- facilitate domestic and cross border payment acceptance
- deliver open and non-proprietary solutions to reduce costs and foster competition

Test or Compliance Testing

Assessment process of a Product's (or system's) Compliance in regards of defined specifications, conducted within a Test Laboratory and whose results are summarized in a Test Report as described in [CFCF evaluation].

CFCF Implementation Conformance Statement or ICS

Form completed by the Certification Applicant listing all optional functions - as specified in the nexo reference specifications – according to the CFCF members' requirements.. The ICS provides standardized information about the capabilities and optional features that have been implemented in a product or system, as well as the limitations of the implementation. The ICS takes the form of a questionnaire to be completed by the Vendor.

POI

Point of Interaction (POS terminal) implemented in conformance with the nexo IS specification.

Test laboratory or Laboratory

Entity accredited by a Certification Body to perform Compliance Testing on a Certification Object having implemented nexo standards.

Test report

Document issued by a Test Laboratory summarizing the results of the Tests performed by the Test Laboratory.

Test Specification

The Test Specification defines the requirements for the compliance testing of a payment system's component based on a specific implementation specification endorsed by CFCF e.g. the nexo Test Specification. The Test Specification covers the test cases, test case requirements and test coverage matrix. The Test Specification therefore defines the requirements which are to be fulfilled by the component in order to be certified. The Test Specification defines all requirements and preparations which are necessary to perform the tests. The Test Specification covers a specific range of functions without claiming to be comprehensive.

The Test Specification will be included in the [CFCF references] and will be accepted by the CFCF to be taken into account for Certification.

Test Tool

A Test Tool is an implementation of the nexo IS Test Specification used to verify the product compliance with nexo IS. Test Tools shall be qualified by CFCF according to test tool related policies, including implementation and qualification, that are defined in [CFCF Tools].

Test Tool Supplier or Test Tool Provider

Test Tool Supplier provides the Test Tool having implemented the nexo iS Test Specification for Compliance Testing and Certification.

2 Abbreviations

ACQ	Acquirer System
CAPE	Card Payments Exchange
CB	Certification Body
CFCF	Common Functional Certification Framework
EMVCo	Europay MasterCard Visa Company
HAP	Host Acquirer Protocol
ICS	Implementation Conformance Statement
ISO	International Standards Organization
MDR	Message Definition Report
MUG	Message Usage Guide
nexo IS	nexo Implementation Specification
SAP	Sale System and Attendant Protocol
nexo FAST Terminals	nexo Financial Application Specification for SCF Compliant EMV

3 References

[Oversight]	Regulation of the European Central Bank (EU) No 795/2014 of 3 July, 2014, on oversight requirements for systematically important payment systems, ECB 2014/28
[CFCF Process]	Annex 1 CFCF Certification Administrative Process, current version
[CFCF Evaluation]	Annex 2 CFCF General Test Description for Terminal and Acquirer Systems, current version
[CFCF Tools]	Annex 3 CFCF Procedure for Test Tool qualification, current version
[CFCF References]	Annex 4 CFCF Detailed Certification Requirements
[CFCF CM]	Annex 5 CFCF Change Management of CFCF Certificates
[nexo Scope]	nexo Implementation Specification Functional Scope, current version
[Volume]	European Payment Council, SEPA Card Standardisation Volume Book of Requirements, current version
[CFCF ICS]	List of functional requirements for POI and Acquirer Systems selected by CFCF for CFCF certification basing on [OSCar Scope]
[ISO Guide 2]	Standardization and related activities -- General vocabulary

4 Introduction and Scope of the Document

The goal of the present document is to describe the functional Test and Certification Policy applicable to POI and acquirer systems developed following the nexo Implementation Specification neco IS within CFCF.

The document describes the roles of the different stakeholders involved as well as the basic CFCF certification process based on nexo IS.

This CFCF certification policy covers implementations of the nexo IS functional specification. Security certification is out of scope of this document and of CFCF.

As the CFCF covers certification only, Approval is out of scope of this document.

Detailed information linked respectively to the defined Test or Test Laboratory accreditation can be found in the “CFCF General Test Description for Terminal and Acquirer Systems” [CFCF evaluation]” or the “CFCF Certification Administrative Process [CFCF Process]” or the “CFCF Test Tool Qualification Procedure [CFCF Tools]”. A detailed description of the change management of CFCF certificates in case of delta testing is provided in [CFCF CM].

All four documents are attached as annexes to this document.

Applicable versions for all CFCF referenced documents and specifications are listed in “CFCF Detailed Certification Requirements [CFCF References]” also attached as an annex to this document.

5 Certification Infrastructure

5.1 Model

The CFCF certification infrastructure enables a test and certification process of nexo solutions.

The governance of the certification process runs by the members of the CFCF. The test and certification process is based on the principle of consensus-based decisions between the members of the CFCF who would like to base their approvals on the CFCF certification process using nexo implementation specifications. The certification infrastructure shall be maintained and enhanced in order to make it available as a general service to interested Approval Bodies.

The CFCF will provide for a liaison with the relevant specification providers, foremost with nexo. This liaison defines the cooperation between the Specification Providers and the CFCF

The CFCF will ensure that both functional test and certification processes create synergies to ensure the test and processes are complementary and avoid redundancies.

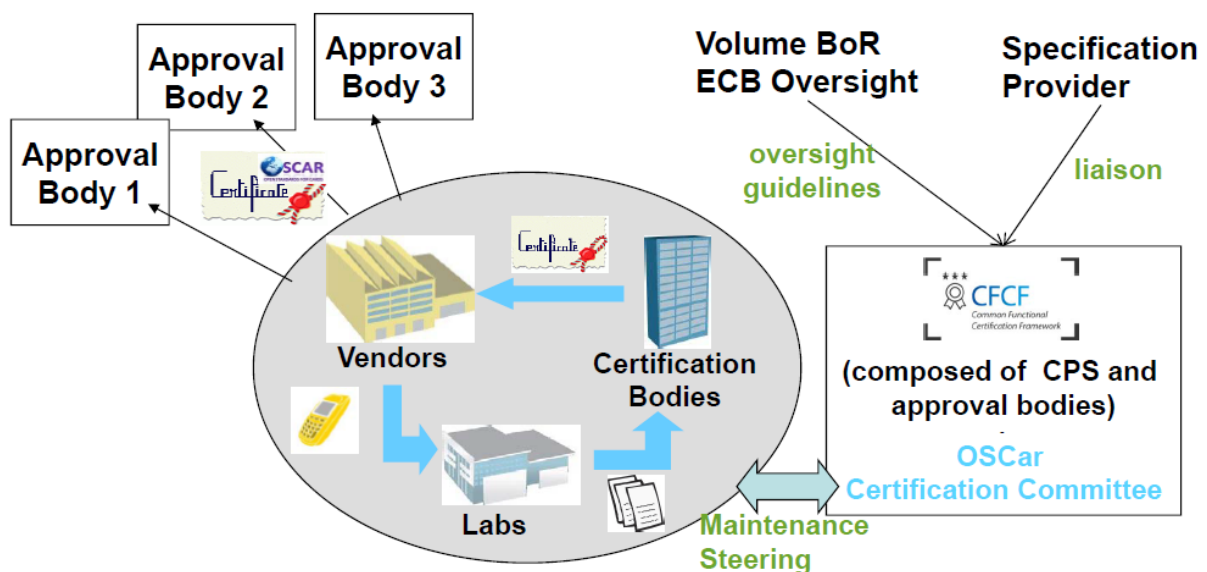


Figure 1: CFCF Test and Certification Model

This infrastructure involves :

- Certification Applicants (Vendors),
- Test Laboratories
- Certification Bodies and

- the Certification Committee

These parties have to fulfil the roles and meet the criteria described in this document.

These roles are based on the usage of the nexo Implementation Specification, the nexo Test Specification as well as on the test methodology and the administrative process agreed within the CFCF and the liaison of CFCF and nexo. The Certification Bodies produce Certificates, which will be used by the Approval Bodies as part of Type Approval.

Based on the common specification, the common test specification, a common test methodology and common certification processes, the CFCF certification infrastructure provides for a “one-stop-shopping” for all nexo compliant solutions.

A certificate based on one single test report can be used by Approval Bodies as part of Type Approval.

5.2 The CFCF Certification Committee

The CFCF Certification Committee will manage and maintain the CFCF certification infrastructure. The role and responsibility of the CFCF certification committee is described as follows:

- Decide on the release policy of the nexo test specification and the nexo IS Implementation Specification relevant for the Certification and edit and maintain the [CFCF References] accordingly
- Maintain the CFCF Certification Policy and related documents .
- Manage the Test Tool qualification programme.
- Approve, qualify and coordinate Certification Bodies.
- Define rules for Test Laboratory accreditation and register accredited Laboratories.
- Define the rules for auditing.
- Qualify external auditors, if applicable.
- Publish and maintain the “CFCF recognition list” of accredited Certification Bodies and accredited Test Laboratories.
- Ensure the consistency of certification decisions by performing a close communication process with the Certification Bodies and Test Laboratories.
- Arbitrate eventual conflicts linked to Certifications between stakeholders.

- Act as an escalation body for all test results, which cannot be solved on Laboratory and Certification Body level. All decisions taken in this role will be archived in a data base for further consistent usage by Laboratories and Certification Bodies. Archived data shall not be accessible to anyone as it concerns vendor specific confidential information. Specific communication (eliminating sensitive info) will be systematically implemented following escalation.
- Define together with Certification Bodies and Laboratories criteria for “major” and minor” deviations in order to support approval decisions of the Approval Bodies participating in CFCF.
- List all Certificates and of all Certified products or provide for links to the dedicated information of Certification Bodies.
- define a common maintenance policy for Certificates with regard to the duration of the Certificates and its renewal thereafter.
- Coordinate test specification and implementation specification issues including the provision and maintenance of a dedicated data base for these issues with the specification provider. Coordinate lessons learnt.

6 Roles and Responsibilities

6.1 Relationships

Certification is a procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements (ISO Guide 2). A generic overview of the roles involved in this process and their relationships is provided by figure 2:

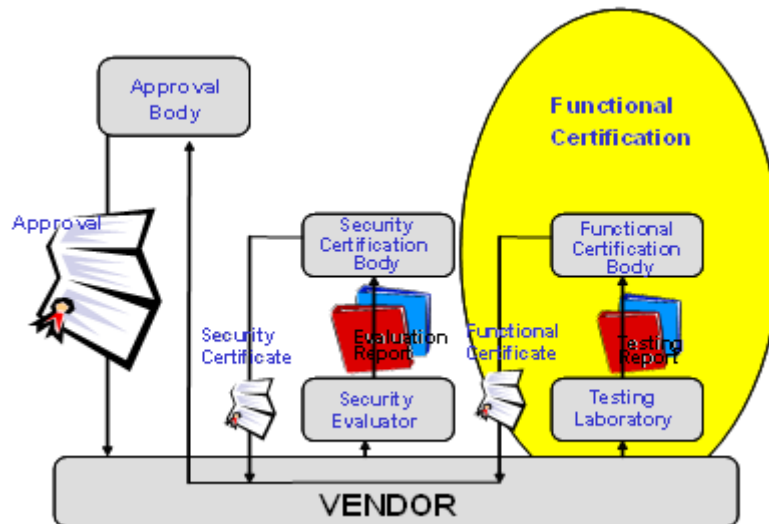


Figure 2 : Certification Roles and Relationships

The target of the CFCF is the functional certification of products based on the nexo specifications and the CFCF Certification infrastructure, which is marked in yellow in figure 2.

To demonstrate its conformance the products are tested by Test Laboratories. These Laboratories perform the functional tests based on the nexo Test Specification derived from the nexo Implementation Specification. They provide for the necessary skills and qualified Test Tools. The Test results are summarized in a Test Report, which is – based on the agreement of the Vendor - submitted to a Certification Body. This Certification Body assesses the Test reports and issues a compliance Certificate to the vendor.

For approval, payment schemes or Approval Bodies may also take other contractual criteria beyond security and functional compliance into account, e.g. for own risk management policies.

6.2 Relationship within the CFCF Certification Infrastructure

The CFCF Consortium is defining an official accreditation policy for Certification Bodies. This official accreditation policy will define :

- the roles and relationships within the CFCF Consortium, including the CFCF Certification Committee, and the Certification Bodies.
- the requirements applicable to the accredited Certification Body for Laboratory accreditation such as language to be used for communication, test report templates for Product Certification or use of qualified Test Tools

The accredited Certification Body will implement these requirements in its contracts with the Test Laboratories and in its Certification contract with Vendors.

6.3 Description of the Roles and Responsibilities

This chapter describes the above mentioned roles and responsibilities in more detail.

Certification Applicant or Vendor

A vendor, as the certification applicant, implementing a product or a system based on nexo specifications, can as a certification applicant apply for a Certificate for its product or system. For that purpose they initiate the Certification process by registering their products or systems with an accredited Certification Body. Once registered, the product or system will be named certification object.

The certification applicant is free to choose the Test Laboratory from the list of accredited test laboratories.

Test Laboratory

A Test Laboratory is an entity accredited by a CFCF accredited Certification Body to perform compliance tests on a product called certification object. The compliance tests must be performed according to [annex 4 CFCF Reference] in the version decided by the CFCF certification committee .

Test Laboratories can choose for which evaluation object they want to be accredited by which Certification Body. They act in competition with other Test Laboratories.

Test laboratories have to meet the following requirements:

- be accredited by a Certification Body according to the CFCF Laboratory accreditation criteria defined in [CFCF Evaluation] and [annex 4 CFCF Reference],
- use qualified Test Tools,
- participate in the Test Tool qualification process,
- perform unbiased and business-independent Tests,

- produce Test reports according to the test report requirements defined in [CFCF Evaluation]. These reports evidence all eventual deviations from the expected Test results,
- be independent from any card scheme or Approval Body,
- perform Tests across card schemes,
- be independent from any Certification Applicant,
- be independent from any Certification Body,
- provide the Certification Body with more information than requested, if applicable,
- support the Certification Bodies assessment,
- contribute to the improvement of the Test process and methodology, especially by participating in the close communication process established by the Certification Committee.
- inform about technological evolution and impact on Test environment,
- ensure the confidentiality of Test results,
- inform the Certification Body about findings, which are of relevance for the OIS specification or Test specifications as well as for the Test Tools and Test methodology agreed on with nexo.

Certification Body

A Certification Body must prove evidence to be eligible to provide for CFCF Certification services. Certification Bodies act freely on the market and offer certification services to card schemes or Approval Bodies.

Certification Bodies perform the following tasks for functional product compliance:

- perform unbiased and business-independent assessments of certification objects on the basis of test reports, which comply to the Test report requirements. This includes the identification of nexo Test Specification and nexo IS. The Certification Body will discuss issues, if any, with the Test Laboratory in order to provide the Certification Committee with a first expertise,
- Issue certification reports on the Certification Objects, that evaluate the compliance of the Certification Objects with the nexo Specifications (see § 7 of the present document). All Certification results are reported to the Certification Committee. All

deviations from the expected test results will be assessed by the Certification Committee,

- issue Certificates in case of a positive certification report, which can be reused for multiple acceptance by any card scheme or Approval Body participating in CFCF or accepting the CFCF processes outside of CFCF,
- are accredited by the CFCF,
- work across card schemes,
- are independent from any Certification Applicant / Vendor,
- are non-discriminatory or impartial from any Test Laboratory,
- act as a registration and communication body for Vendors, Test Laboratories and card schemes/Approval Bodies,
- inform the Certification Committee in cooperation with the test laboratory about Test and Certification findings, which are relevant for the OSCar specifications, Test specifications, and the CFCF process. Gather and disseminate field feedback information,
- provide for registration forms and Implementation Conformance Statements (ICS) for vendors,
- provide the Certification Committee with additional information related to certification, if requested,
- publish and maintain lists of Certified products certified by this Certification Body. All issued Certificates are reported to the CFCF Certification Committee for publication on the CFCF web site www.CFCF.eu. Together with the Certificate product information provided by the vendor is sent to the CFCF Certification Committee for web site publication,
- participate in the Test Tool qualification process as described in [CFCF Tools] as a validation manager,
- accredit Test Laboratories to perform functional Tests according to the CFCF recognition rules. This recognition will disseminate nexo test requirements and guidelines and will mandate the use of qualified Test Tools,
- adhere to the CFCF Certification rules as defined in the “CFCF accreditation policy.
- ensure full comparability of [CFCF Evaluation] by requiring the nexo test requirements from all recognized test laboratories,
- coordinate the implementation of process improvements within the Test Laboratories,

- Define a fee structure for the various Certification and accreditation services,
- participate in the close communication process established by the CFCF Certification Committee.

7 Certification Objects

CFCF is focussed on the functional certification of

1. nexo IS POI applications (POI) and
2. nexo IS Acquirer Host System (ACQ).

nexo IS POI application

A nexo IS POI application is defined according to [nexo Scope].

The reference implementation specifications and test specification are defined in [CFCF References].

nexo IS Acquirer Host System

A nexo IS Acquirer Host application is defined according to [nexo Scope].

The reference implementation specifications and test specification are defined in [CFCF references].

The Acquirer to Issuer interface is out of scope of the CFCF Certification.

8 CFCF Certification Flow

The CFCF certification flow works as follows. A detailed description of this work flow is given in § 7 of [CFCF Process] (see annex 1 of the present document)..

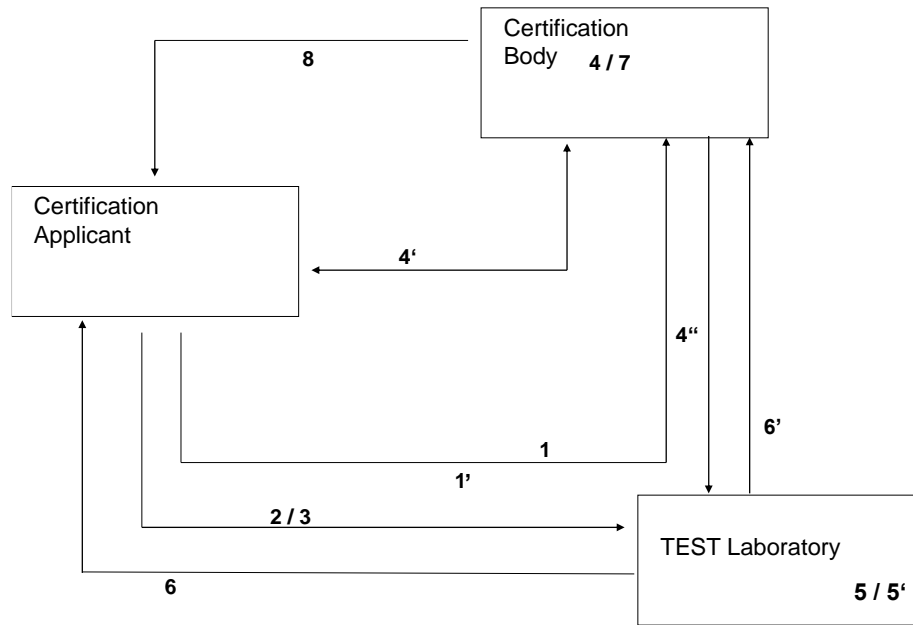


Figure 4: CFCF Certification Flow

0) Registration request. The Certification Applicant contacts a Certification Body in order to receive the necessary information how to get a Certificate (Note: this step is not described in Figure 4).

1) Certification request submission. The Certification Applicant sends information about the Product (or system) identification and implementation (Implementation Conformance Statement « ICS ») and submits it with an explicit Test and Certification request letter to a Certification Body.

2) Test request submission. The Certification Applicant sends information about the Product identification and implementation and submits it with an explicit Test and Certification request letter to the Test Laboratory.

1) and 2) can be performed simultaneously.

3) The Vendor works out the ICS together with the Test Laboratory.

4) The ICS is checked by the Certification Body in order to start the test. The Certification Body has the last say and validates the ICS

4') An information about the positive result of the ICS checking is given to the certification applicant.

4'') In addition the ICS qualification result of the Certification Body is also sent to the laboratory and the Certification Committee.

4') and 4'') can be performed simultaneously.

5) Test. A Test Laboratory evaluates the Product on the basis of the specification referenced in [Annex 4].

5') Technical advice. In case of non-compliance of the Certification Object, the Test Report must include or be accompanied by a technical advice on the Product.

6) Test Report: The Test Laboratory sends the test results, summarised in a Test Report to the Certification Applicant.

6') Test report. The Test Report is sent to the Certification Body by the Vendor or by the Test Laboratory upon Vendor request.

7) Certification. The Certification Body, chosen by the Certification Applicant, reviews all the elements participating in the Compliance of the Certification Object regarding the functional requirements, meaning the Laboratory's Test Report and technical advice, the scope and level of implementation, and specifies discrepancies' impact, if there is any.

8) Certificate. If appropriate, the Certification Body grants the Certification Applicant a Certificate for that specific Product by signing the Certificate. If not a Certification Report detailing noncompliance issues is sent to the Certification Applicant and to the CFCF Certification Committee.

The Certification Body is responsible to provide the information to publish the certificate on the internet.

9 Relationship to Specification Providers

The CFCF Consortium provides for a liaison with the specification providers, foremost with nexo that owns nexo IS and the nexo IS Test Specification.

The CFCF Certification Committee will ensure that both functional test and certification processes create synergies and that the test and processes are complementary and avoid redundancies.

The role of the liaison working group may result in specification or test specification documentation updates and coordinates a mutual exchange of any information needed for specification and Certification.

10 Fee Structure

Fees have to be paid by the Vendor to the Certification Body for the administration of the Certification process, according to the Certification Body's pricing policy.

Fees have to be paid by the Test Laboratories to the Certification Bodies for accreditation according to the Certification Body's pricing policy.

Fees have to be paid by the Test Tool providers to the Certification Bodies for their validation efforts.

Fees have to be paid by the Vendors to the Test Laboratories for their Testing efforts according to the Laboratory's pricing policy.

11 Maintenance of Certificates

The common maintenance policy for Certificates with regard to the duration of the Certificates and its renewal thereafter are defined by the Certification Committee and are detailed in [CFCF Process].

Annex 1

[CFCF Process]. CFCF Certification Administrative Process

Annex 2

[CFCF Evaluation] CFCF General Test Description for Terminal and Acquirer Systems

Annex 3

[CFCF Tools] CFCF procedure for Test Tools qualification

Annex 4

[CFCF References] CFCF detailed certification requirements

Annex 5

[CFCF CM] CFCF Change Management of CFCF Certificates