



# CIPURSE™ V2 Certification Program

Card Certification Process – Rev 1.1

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## Revision History

Version	Date	Major changes since previous revision
1.0	14 Feb. 2014	Initial Revision.
1.1	12 Jan. 2017	<ul style="list-style-type: none"> <li>- Chapter 2.3: Supported interfaces list for Conformance Testing update</li> <li>- Chapter 2.4: Prerequisites for Testing adaptation</li> <li>- Chapter 3.1: Verifications for Configuration Assessment added</li> <li>- Chapter 4.3 : CIPURSE™ Certificate Duration Validity precisions</li> <li>- Chapter 5.2 : ICS contents adaptation</li> </ul>

## Table of Contents

Legal .....	2
Revision History .....	2
1 Introduction .....	5
1.1 Purpose.....	5
1.2 Audience.....	5
1.3 Terminology .....	5
2 Certification Process Description.....	6
2.1 Definition of a CIPURSE™-Certified product .....	6
2.2 Card Certification .....	7
2.3 Conformance Testing .....	7
2.4 Prerequisite for Testing.....	8
3 Details of Card Certification Process.....	8
3.1 Part A: Registration and Configuration Assessment .....	10
3.2 Part B: Conformance Test Session .....	11
3.3 Part C: Conformance Test Report and CIPURSE™ Certificate .....	12
3.4 Part D: Deployment.....	12
4 Certification Conditions .....	13
4.1 Test Laboratory and Location.....	13
4.2 Pricing and Support .....	13
4.3 CIPURSE™ Certificate Duration Validity .....	13
4.4 CIPURSE™ Specification Change Management.....	13
5 Appendix .....	14
5.1 Product Registration Form .....	14
5.2 PICC Implementation Conformance Statement.....	15
5.3 CIPURSE™-Certified Logo .....	18

## List of Figures

Figure 2-2: CIPURSE™ V2 Certification Overview .....	7
Figure 3-1: CIPURSE™ V2 Product Certification Process.....	9
Figure 5-1: CIPURSE™-Certified Color Version.....	18
Figure 5-2: CIPURSE™-Certified Black & White Version .....	18
Figure 5-3 : CIPURSE™-Certified Logos Minimum Dimensions.....	18

## 1 Introduction

### 1.1 Purpose

This document describes the process defined by the OSPT Alliance to control the compliance of a product with the CIPURSE™ V2 card specifications. It defines the set of requirements and certification rules applicable to obtain a CIPURSE™ Certificate and maintain a product as a CIPURSE™-Certified product.

It covers the following topics:

- Prerequisites
- Laboratory organization
- Conformance Testing
- Registration forms
- Implementation Conformance Statement

It also describes the relationship between the different participants (Test Laboratory / Certification Authority / CIPURSE™ product vendor) during the certification process.

### 1.2 Audience

This document is intended for:

- OSPT Alliance members who want to obtain a CIPURSE™ Certificate
- Test Laboratories that are selected by the OSPT Alliance to perform conformance testing

### 1.3 Terminology

AID	Application Identifier
DUT	Device Under test
IC	Integrated Circuit
ICS	Implementation Conformance Statement
JCRE	JavaCard Run-time Environment
NDA	Non-Disclosure Agreement
PICC	Proximity Integrated Circuit Card
PRF	Product Registration Form
SCP	Secure Channel Protocol

## 2 Certification Process Description

### 2.1 Definition of a CIPURSE™-Certified product

A CIPURSE™ product shall conform to a CIPURSE™ specification.

A CIPURSE™ product can be called CIPURSE™-Certified if the following requirements are met:

- A Conformance Test Report is provided to the Certification Authority (OSPT Alliance) by the Test Laboratory, based on the test plan for CIPURSE™ specification(s) this product is conforming to.
- A CIPURSE™ Certificate is provided to the vendor by the OSPT Alliance based on the Conformance Test Report received from the Test Laboratory.

A CIPURSE™-Certified product can be either:

- A PICC implementing one or several CIPURSE™ Profiles and optionally the CIPURSE™ V2 Crypto Server API,
- A PICC implementing the CIPURSE™ V2 Crypto Server API.

## 2.2 Card Certification

The Card Certification of a CIPURSE™ V2 implementation is the main part of the global Certification Program managed by the OSPT Alliance, applicable to a CIPURSE™ product as defined in section 2.1.

A Card Certification is processed in four parts. Each of them is managed by a separate entity.

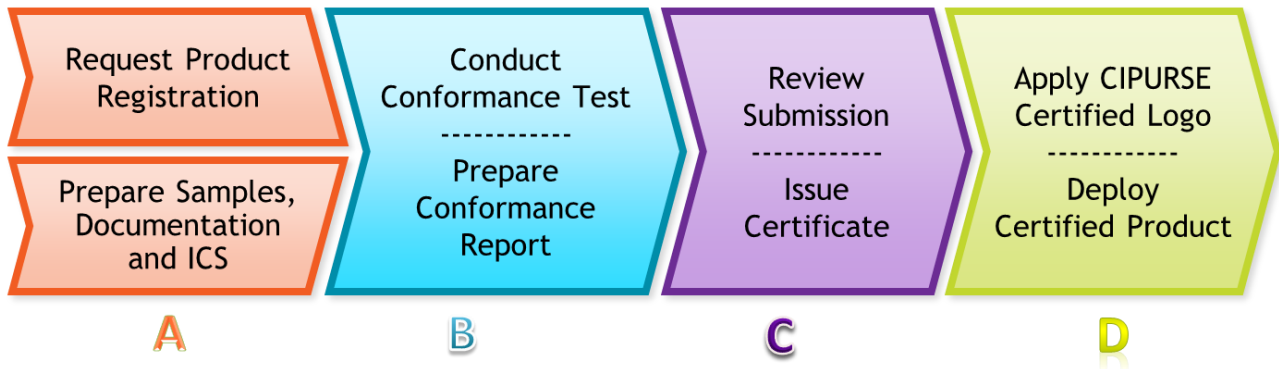


Figure 2-1: CIPURSE™ V2 Certification Overview

- Part A is managed by the Vendor. After contacting the Laboratory for product registration, the Vendor is responsible for preparing its product and documentation. See details in section 3.1.
- Part B is managed by the Laboratory, which is responsible for conducting the test plan. At the end, the Test Laboratory prepares the ‘Conformance Test Report’. See details in section 3.2.
- Part C is managed by the OSPT Alliance. Based on the Test Laboratory ‘Conformance Test Report’, the OSPT Alliance issues the CIPURSE™ Certificate. See details in section 3.3.
- Part D is managed by the Vendor who deploys, maintains and guarantees a product that is in conformance with the certified product. See details in section 3.4.

## 2.3 Conformance Testing

The purpose of conformance testing is to determine if the Device Under Test (DUT) conforms to the requirements of the CIPURSE™ specification.

The conformance testing requires provisioning of samples (such as a smart card, key fob, a tag or an NFC card emulation handset) with one or several of the following interfaces:

- ISO/IEC 14443 contactless interface Type A or Type B
- ISO/IEC 7816-3 contact interface T=0 or T=1
- SWP interface in Type A or Type B or Type F

Additionally to the conformance testing some test scripts are issued on the DUT to provide some indications related to the performance of the DUT. Currently OSPT Alliance does not define minimum performance requirement, the results of the performance tests are provided for information only.

## 2.4 Prerequisite for Testing

Before initiating any CIPURSE Certification, the Vendor must fulfill the following prerequisites:

- Be registered as Full OSPT Alliance Member. Details are available in the Members section of the OSPT Alliance web site ([www.osptalliance.org](http://www.osptalliance.org)).
- Ensure that the Device Under Test (DUT) is compatible with the respective Communication Protocol(s) to be used during the certification (as indicated in the ICS).
- Submit the samples in a form which is suitable for running the conformance test.

## 3 Details of Card Certification Process

The flowchart in the Figure 3-1 on next page illustrates the interactions between the Vendor, the Test Laboratory and the Certification Authority (OSPT Alliance) during the certification process.



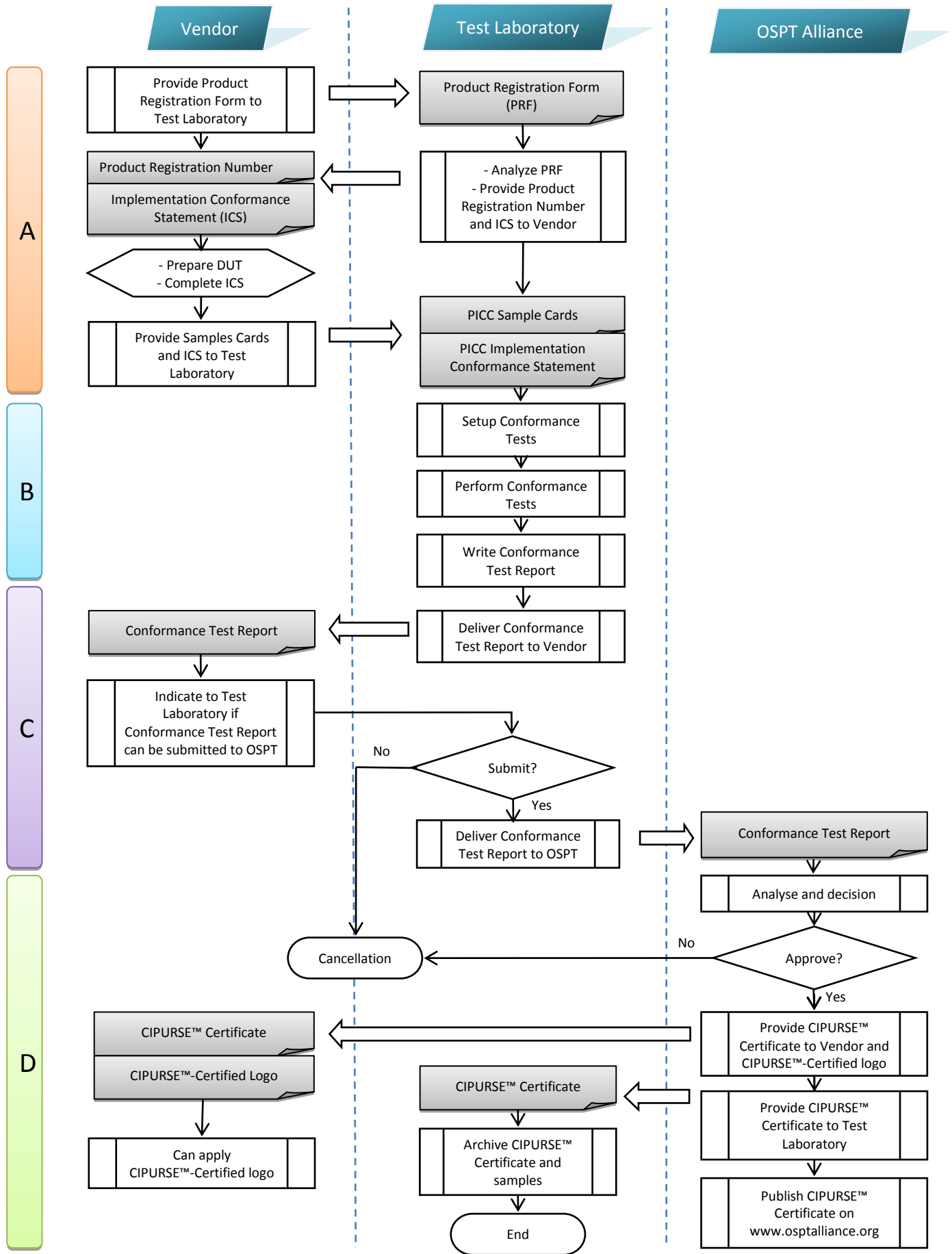


Figure 3-1: CIPURSE™ V2 Product Certification Process

### 3.1 Part A: Registration and Configuration Assessment

The Vendor product registration is the entry point to the CIPURSE™ certification.

The Vendor must complete the Product Registration Form described in Appendix 5.1 and provide it to the Test Laboratory.

The Test Laboratory analyzes the document and provides the Vendor with:

- The Product Registration Number (PRN), which uniquely identifies the certification session for the Vendor's CIPURSE™ product.
- The Implementation Conformance Statement (ICS).
- Number of samples required.
- An optional NDA if requested by the vendor.

The Vendor must provide the Test Laboratory with the Sample Cards and the completed ICS.

ICS details are given in annex 5.2 for informative purpose. Only the details of the ICS provided by the Test Laboratory are applicable for a CIPURSE™ certification.

The Laboratory will verify if the information provided in the ICS complies with the configuration of the provided Sample cards according to the rules define by the OPST Alliance, as:

- All profiles indicated in the fourth byte (Profile\_Support) of the EF.ID\_INFO shall be certified.
- According to the EF.ID\_INFO, all provided samples shall have the same product identification and version (i.e. are the last 6 bytes identical)
- According to the EF.ID\_INFO, the provided samples shall have a unique chip identification (i.e. bytes 10 to 24 different for each sample)
- The value and the name of the owner of the IC manufacturer identifier (IC\_MAN) ninth byte of the EF.ID\_INFO shall be present in ISO/IEC JTC 1 / SC 17 STANDING DOCUMENT 5 – Register of IC manufacturers
- If the vendor (as identified in the ICS) is not the owner of the IC\_MAN value, the vendor shall declare that he has been granted permission by the owner of the IC\_MAN value to use this identifier.
- For each sample and on all ADF types that can be created (L, S and T application) the 40 bytes of EF.ID\_INFO reported in the ICS shall correspond to the 40 bytes read from EF.ID\_INFO of the sample cards.

If one or more condition is false, the Laboratory cannot start the Conformance Test Session. In this case the sample cards and/or the ICS must be adapted until these conditions are true.

### 3.2 Part B: Conformance Test Session

The CIPURSE™ V2 Conformance Test Session is done as a “single shot,” which means that the samples are clearly identified and the tests performed only once. The Vendor does not participate in the test session.

The session proceeds as follows:

- The Test Laboratory analyzes the Implementation Conformance Statement to configure the Test Suite.
- The Test Laboratory executes all the test cases in accordance with its ISO/IEC 17025 management system.
- At the end of testing, the Test Laboratory prepares the Conformance Test Reports for the Vendor.

### 3.3 Part C: Conformance Test Report and CIPURSE™ Certificate

After performing the Conformance Test, the Test Laboratory provides the Vendor with the Conformance Test Report.

The Vendor then decides on one of the following options and informs the Laboratory:

- a. Submission to the OSPT Alliance of the Conformance Test Report.
- b. Restarting the certification with appropriate corrections. This is managed by the Test Laboratory and the Vendor with (at least) a new Product Registration Number for new DUTs and a new ICS document.
- c. Stop the certification. In this case, the Test Laboratory does not provide the Conformance Test Report to the OSPT Alliance.

Once the OSPT Alliance receives the Conformance Test Report (option a):

- The OSPT Alliance reviews the Conformance Test Report.
- If the Conformance Test Report does not show any issue, OSPT Alliance issues the CIPURSE™ Certificate to the Vendor and informs the Test Laboratory.
- Otherwise the OSPT Alliance reviews the Conformance Test Report in details and decides of any further steps.

### 3.4 Part D: Deployment

After issuing the CIPURSE™ Certificate to the Vendor, the OSPT Alliance publishes the information about the CIPURSE™-Certified product and the CIPURSE™ Certificate on its web site at [www.osptalliance.org](http://www.osptalliance.org).

The Test Laboratory receives a copy of the CIPURSE™ Certificate and archives the DUTs (a vendor may ask to the Test Laboratory to return the samples to the vendor in case of mobile phone form factor for example).

The Vendor can apply the CIPURSE™-Certified logo to its products and/or use the CIPURSE™-Certified logo in its commercial documentation mentioning its product. The Vendor shall use the referenced CIPURSE™-Certified logo as defined in Appendix 5.3.

CIPURSE™ Certificate is applicable to all CIPURSE™ products that are built exactly the same way as the DUT.

## 4 Certification Conditions

### 4.1 Test Laboratory and Location

The list of the Test Laboratories selected by the OSPT Alliance and the corresponding contact details are available under the OSPT Alliance web site ([www.osptalliance.org](http://www.osptalliance.org)).

### 4.2 Pricing and Support

Pricing and conditions are fixed by the OSPT Alliance and are available under the OSPT Alliance web site ([www.osptalliance.org](http://www.osptalliance.org)) or by contacting the Test Laboratory.

The Test Laboratory may offer additional services (debugging test session or software licenses for Test Suite...) that can help the vendor before entering into certification.

### 4.3 CIPURSE™ Certificate Duration Validity

A CIPURSE™ Certificate does not have an expiration date.

Vendors can ask the OSPT Alliance to delist their certified product(s) from the OSPT Alliance official CIPURSE™-Certified Product(s) list by informing the OSPT Alliance Executive Director.

When a full member resigns from the OSPT Alliance, certified product(s) from the respective member will be delisted.

### 4.4 CIPURSE™ Specification Change Management

The OSPT Alliance reserves the right to update the CIPURSE™ specification and the related test plan at any time. A CIPURSE™ Certificate always includes references which allow the identification of the CIPURSE™ specifications and related test plan.

## 5 Appendix

### 5.1 Product Registration Form

<b>Certification Session Identification</b>	
<b>Product Registration Number:*</b> (Assigned by the Test Laboratory based on the OSPT Alliance member ID)	

<b>Vendor Description</b>	
Vendor Name:*	
OSPT Alliance member since:	

<b>Product Description</b>	
Commercial Product Name:*	
Product Version:*	
CIPURSE™ Profile(s) to be certified:*	<input type="checkbox"/> Profile L <input type="checkbox"/> Profile S <input type="checkbox"/> Profile T
Select none, one or multiple checkbox(s). Shall CIPURSE™ Server Crypto API be certified on the JavaCard platform?*	<input type="checkbox"/> Yes <input type="checkbox"/> No

Information in fields marked with an asterisk (\*) will be used on the public OSPT Alliance web site and the certificate.

## 5.2 PICC Implementation Conformance Statement

The Implementation Conformance Statement (ICS) is provided by the Test Laboratory (see chapter 3.1).  
The ICS details below are provided for informative purpose only.

<b>Vendor Information</b>		
Vendor Name		
<b>Technical Contact</b>		
Name		
Address		
Phone		
Fax		
Mail		
<b>Product Information</b>		
Product Registration Number (From the Product Registration Form)		
Commercial Product Name (From the Product Registration Form)		
Product Version (From the Product Registration Form)		
CIPURSE™V2 profile(s) to be certified?  (from the Product Registration Form; all profiles indicated in the Profile_Support byte of EF.ID_INFO shall be certified)	<input type="checkbox"/> CIPURSE™L Profile  <input type="checkbox"/> CIPURSE™S Profile  <input type="checkbox"/> CIPURSE™T Profile	
<b>PICC Sample General Information</b>		
Communication Protocol(s)	<input type="checkbox"/> 14443 Type A <input type="checkbox"/> 14443 Type B  <input type="checkbox"/> SWP TYPE A <input type="checkbox"/> SWP TYPE B <input type="checkbox"/> SWP TYPE F	<input type="checkbox"/> 7816-3 T=0 <input type="checkbox"/> 7816-3 T=1
Lower Bit Rate (kbit/s):		
Higher Bit Rate (kbit/s):		
Logical channel range supported	<input type="checkbox"/> 0 <input type="checkbox"/> 0-3 <input type="checkbox"/> 0-19	
For JavaCard product, referenced JCRE platform	Global Platform Version: JavaCard Version:	
<b>Sample identification</b>		
Visual PICC Sample Identification		
Serial Numbers for each sample (byte 8-23 of EF.ID_INFO)	# 1: # 2:	





Package AID value to be used for CIPURSE application installation	<CIPURSE applet package AID>
Application Class(es) AID value to be used for CIPURSE application installation Details of application should be indicated.	e.g.: <CIPURSE application Class AID> for CIPURSE Profile L
PxSE Applet Version	<PxSE Applet Version>
Package AID value to be used for PxSE application installation:	<PxSE Applet Package AID>
Application Classe AID value to be used for PxSE application installation:	<PxSE Application Class AID>

For CIPURSE Profile L product only:

In order to facilitate the execution of the test session with CIPURSE Profile L, it is useful to be able to restore the card to a blank state before executing the next test. If the card can be erased between individual tests, please provide a detailed sequence of command to achieve this result.	<input type="checkbox"/> CIPURSE Profile L product can be erased <input type="checkbox"/> CIPURSE Profile L product cannot be erased
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------

### Report confidentiality

The report must be ciphered (using GPG) when sent by email.	YES/NO  If yes, please provide the public key for each recipient.
-------------------------------------------------------------	-------------------------------------------------------------------------

### 5.3 CIPURSE™-Certified Logo

The following logos can be used by Vendors having a CIPURSE™-Certified product referenced on [www.osptalliance.org](http://www.osptalliance.org).



Figure 5-1: CIPURSE™-Certified Color Version



Figure 5-2: CIPURSE™-Certified Black & White Version

These logos can be printed on the CIPURSE™-Certified products and/or used in the Vendor documentations. For these purposes, OSPT Alliance provides the vendor with both high quality logo files with the CIPURSE™ certificate delivery email.

When printed on a product, the OSPT Alliance recommends maintaining the following minimum dimensions of the CIPURSE™-Certified logos (Figure 5-1 and Figure 5-2):



Figure 5-3 : CIPURSE™-Certified Logos Minimum Dimensions

Note that the ratio between height and width is  $\sim 1: 2,2$ .