ZHAGA

Interface specification

Zhaga Testing and Certification Manual

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Zhaga Testing and Certification Manual

Summary (informative)

This manual specifies the operational procedures for testing and certification and complements the Zhaga Testing Center Agreement.

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1 General

1.1 Introduction

The Zhaga Testing Center Agreement (ZTCA) specifies the legal obligations and rights of Zhaga Testing Centers. This Zhaga Testing and Certification Manual [ZTCM] complements the ZTCA and further details the operational procedures for Zhaga Testing Centers. It thus serves as an operational handbook for Zhaga Testing Centers. The first sections of this ZTCM correspond to the main sections of the ZTCA and detail the operational procedures for Authorization, Change in Authorized Scope and auditing, test report summary and reporting, and market surveillance. The following sections summarize further operational practices related to testing and certification as developed within Zhaga: Family testing.

The Task Force Testing maintains the ZTCM and may propose updates for Technical Coordination Working Group (TCWG) and Steering Committee (SC) approval.

1.2 Summary

This manual specifies the operational procedures for testing and certification and complements the Zhaga Testing Center Agreement.

The procedures are for becoming a Zhaga Testing Center and as deployed by the Zhaga Testing Centers, for requesting and auditing an Authorized Scope, auditing a Testing Center, participating in a round robin, internal deployment and auditing of test laboratories, and testing and certification.

1.3 References

[IECEE OD 2006]	Guidelines and Information for IECEE Assessments: Procedures and Documentation, published on the IECEE website, https://www.iecee.org/documents/refdocs/
[ZTCA]	Zhaga Testing Center Agreement, published on the Zhaga website.
[ZTRS]	Zhaga Test Report Summary Template, published on the Zhaga website.
[ZWG]	Zhaga Website Guidelines: how to upload a certified product, published on the Zhaga website.

1.4 Acronyms

PWG	Promotion Working Group
SC	Steering Committee
ZTCM	Zhaga Testing and Certification Manual; this document
TCWG	Technical Coordination Working Group
ZTC	Zhaga Testing Center
ZTCA	Zhaga Testing Center Agreement, [ZTCA]

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2 Authorization

2.1 Becoming a Zhaga Testing Center

The Process to become a Zhaga Testing Center is depicted in Figure 2-1.

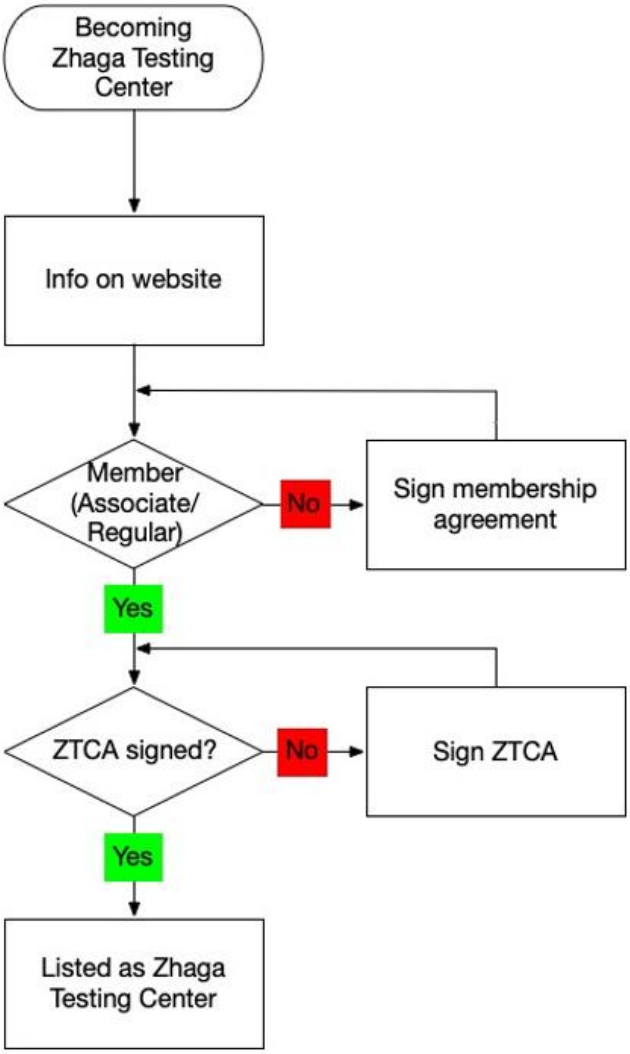


Figure 2-1: Process to become a Zhaga Testing Center.

The Zhaga Membership Agreement and the Zhaga Testing Center Agreement (ZTCA) are available from the Zhaga Website.

In order to become or remain a Zhaga Testing Center, a testing center operates or controls at least one test laboratory that is accredited by an accreditor that is a full member of ILAC MRA, has signed the Zhaga Regular or Associate Membership Agreement, and has paid the annual membership fee.
After a testing center has become a Zhaga Testing Center, the Zhaga PWG Chair will update the Zhaga website to advertise the new Zhaga Testing Center.

Becoming a Zhaga Testing Center does not authorize the Testing Center to perform the Test for any Scope. For this separate SC approval is required, see Section 2.2.

2.2 Requesting an Authorized Scope

A Zhaga Testing Center may be authorized to perform the Test for a Scope. It acquires this authorization through a request to the Steering Committee. The process for requesting an Authorized Scope is shown in Figure 2-2.

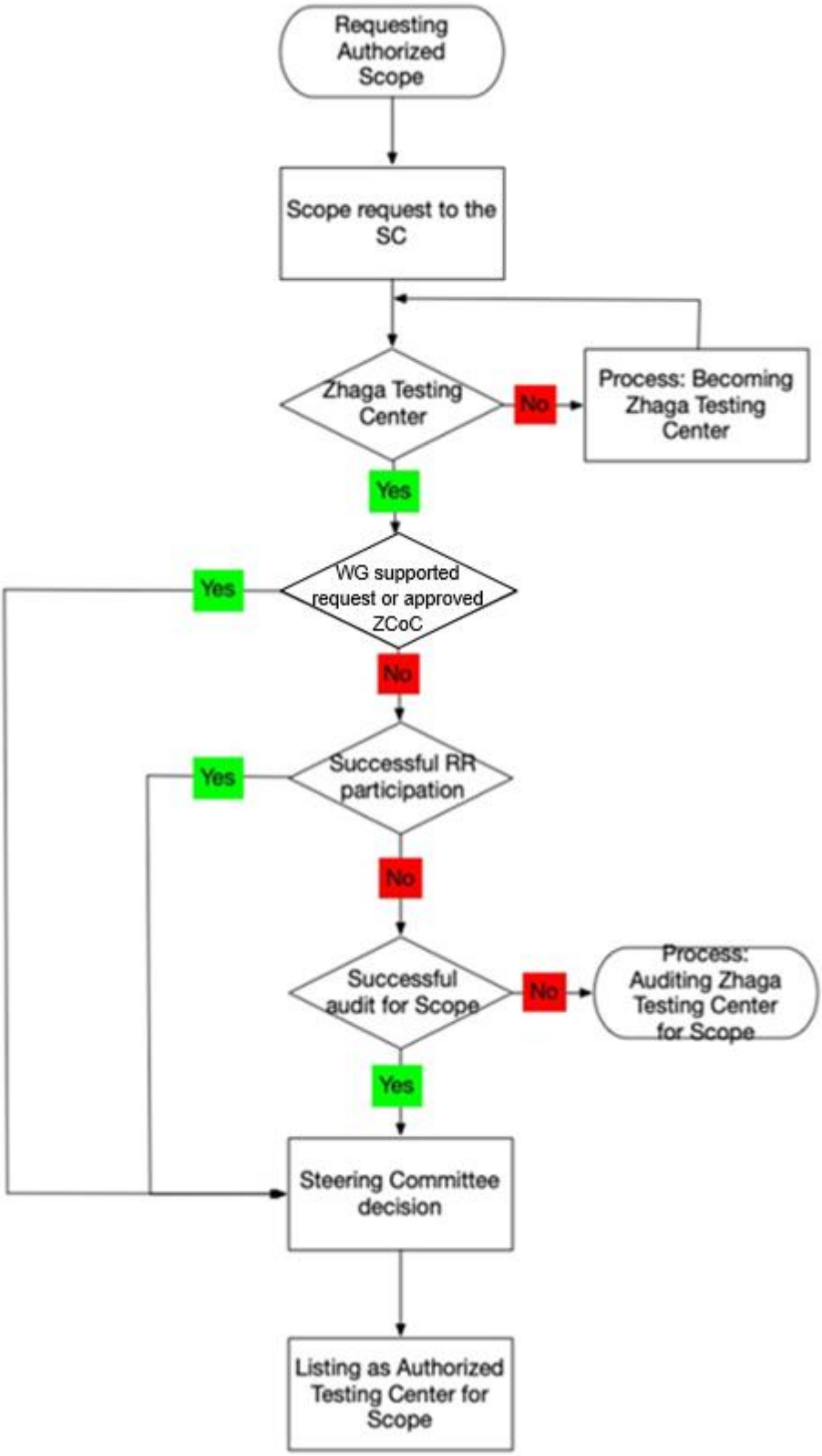


Figure 2-2: Process to request an Authorized Scope.

In order to be successful in its request for an Authorized Scope, the Zhaga Testing Center must have shown its ability to perform the Test for this Scope. This ability can be shown via participation in a round robin testing procedure during book development, through an audit by a Fellow Testing Center that has already been authorized for this Scope, or based on a Zhaga Claim of Competence. The process for participation in

a Round Robin is described in Section 2.4. The process for auditing a Zhaga Testing Center for a Scope is described in Section 2.3. The process for a request for an Authorized Scope based on a Zhaga Claim of Competence, is described in Section 2.6

In case no round robin was conducted during the book development and an audit is not available, the SC may still honor a Working Group supported request for a Scope authorization, see Section 2.5

The Zhaga SC will accept the request if the conditions are met unless an unforeseen situation applies that will cause the SC to decide differently.

After a successful request, the Zhaga PWG Chair will update the Zhaga website to advertise the new Authorized Scope for the Zhaga Testing Center.

2.3 Auditing a Zhaga Testing Center for a Scope

A Zhaga Testing Center may demonstrate its ability to perform the Test for a Scope through an audit by a Fellow Testing Center which is authorized for this Scope. If the auditing Zhaga Testing Center is a Zhaga Associate Member, then that member shall have been authorized for this Scope for more than one year, before being allowed to authorize another Zhaga Testing Center for the same Scope. The audit may be requested by a Zhaga Testing Center that intends to be authorized for this Scope, as depicted in Figure 2-3, or by the Zhaga Steering Committee as part of an investigation, as depicted in Figure 2.4.

The procedures for auditing a Zhaga Testing Center for a Scope is shown in Figures 2.3 and 2.4.

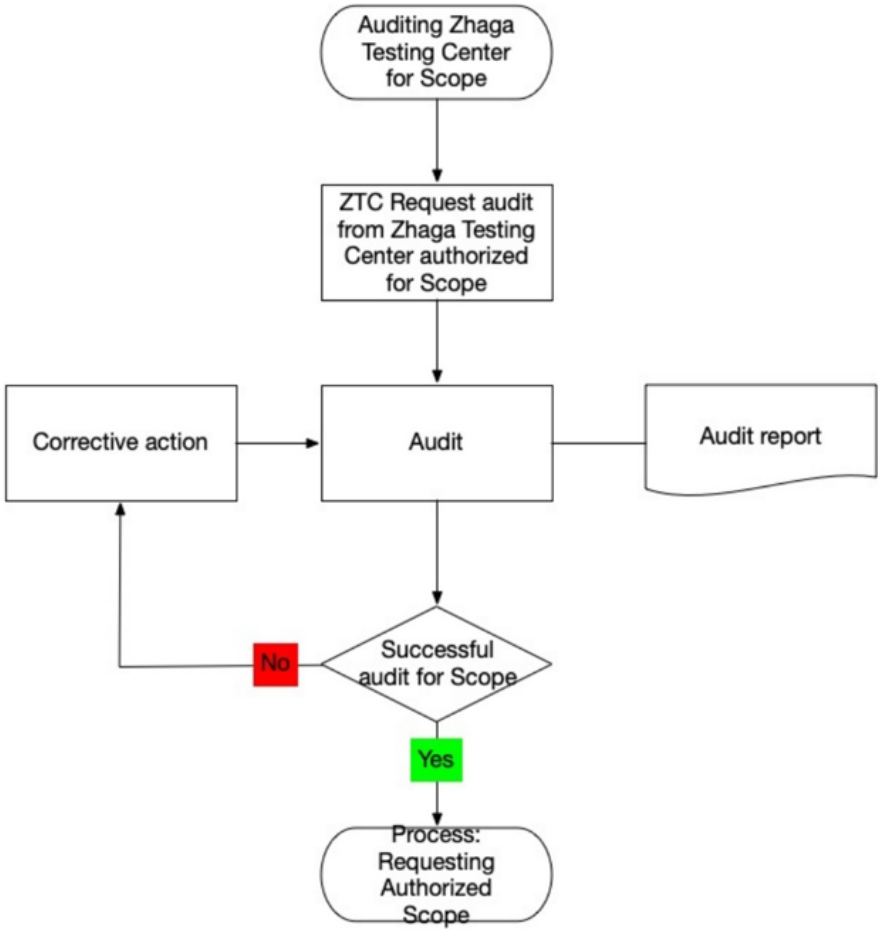


Figure 2-3: Procedure for auditing a Zhaga Testing Center for a Scope – ZTC initiated

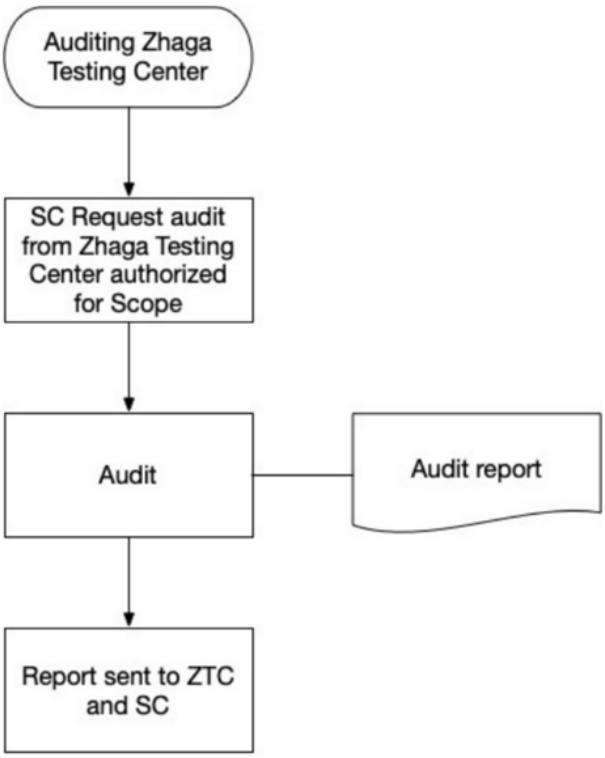


Figure 2-4: Procedure for auditing a Zhaga Testing Center for a Scope – SC initiated

A Zhaga Testing Center is audited utilizing the Assessment report template in Annex A of this ZTCM. [IECEE OD 2006] is used as a reference as to how to conduct the audit.

In case a Zhaga Testing Center initiates the audit, the auditing of a Zhaga Testing Center by a Fellow Testing Center is a business between the testing centers in which Zhaga is not directly involved. The reasonable fee for such audits is established following the guidelines stated in [IECEE OD 2006].

After a successful audit, the Zhaga Testing Center receives an audit report according to the Assessment report Template in Annex A of this ZTCM from the Fellow Testing Center and may proceed to request the Zhaga SC to be authorized for this scope, through a submission of the request and the Audit report to the Zhaga SC, see Section 2.2.

In case the Zhaga Steering Committee initiates the audit, the fee for the audit is arranged between Zhaga and the Zhaga Testing Center performing the audit. The reasonable fee for such audits is established following the guidelines stated in [IECEE OD 2006].

The actual audit is performed according to arrangements between the Zhaga Testing Center that is audited and the Zhaga Testing Center that carries out the audit. The actual audit is carried out without undue delay.

After the audit, both the Zhaga Testing Center being audited and the Zhaga SC receive the audit report from the auditing Zhaga Testing Center. In case a variance was found during the audit, the Zhaga SC and the Zhaga Testing Center being audited act according to Clause 3.4 of the ZTCA.

2.4 Participation in a Round Robin

As part of the development of a Zhaga Book and the Test, a round robin testing procedure may be conducted to validate the reproducibility of the testing procedures.

Zhaga Testing Centers that are also Regular members may participate in the round robin testing procedure and may thus demonstrate their ability to perform the Test for a Scope. Zhaga Testing Centers that have successfully participated in a round robin procedure may therefor request authorization for the corresponding Scope and need not be audited externally.

Note that the round robin testing procedure also enables the auditing procedure described in Section 2.3. Through the round robin, the first testing centers are authorized. These can then serve as auditors for the procedure described in Section 2.3.

2.5 WG supported request for an Authorized Scope

During some book developments the round robin is waived, for example because the testing procedure is similar to the testing procedure for another book. In such cases, an audit as in Section 2.3 is not possible because no testing centers have already been authorized.

In this case, a Zhaga Testing Center that is also a Regular member may still request authorization for the corresponding Scope. The Steering Committee will grant this request if it is backed by the Working Group that develops the book.

The nature of the Test and the need for a round robin are part of the joint deliberations of the Working Group developing the book and the Task Force Testing and the considerations may vary considerably with the nature of the books involved and are not spelled out in this ZTCM. As a general rule, the working group will initiate a Round Robin procedure to verify that the Test can be carried out reliably by Zhaga Testing Centers. A Round Robin may be waived if the Test is very similar to the Test for an already approved Zhaga book.

2.6 Request for an Authorized Scope based on a Zhaga Claim of Competence

In case of the expansion of the Authorized Scope with new editions of Zhaga Books for which the ZTC has been previously authorized, a special procedure is developed. To avoid redundant assessments where there is sufficient evidence of existing competence, Zhaga provides an administrative process for documenting and recognizing that competence, named Zhaga Claim of Competence.

Based upon an impact assessment of the Working Group that develops the book together with Task Force Testing, Zhaga SC decides whether or not the Zhaga Claim of Competence procedure as described in this paragraph can be used. If this is the case, a Zhaga Testing Center can request authorization for the corresponding scope by submitting the ZCoC document in Annex B of this ZTCM.

The ZTC shall provide the necessary evidence of additional technical competence and/or test equipment. The Secretary General assigns two technical experts to review the application and to determine whether the request for authorization for the corresponding Scope should be granted. Based on this review, the Zhaga SC may approve this request.

The technical experts focus on the aspects as detailed in the received ZCoC document and document their decision using the form in Annex C of this ZTCM.

In the event of conflicting decisions, the Secretary General facilitates discussions between the technical experts to reach consensus. If no consensus can be reached between the technical experts, the SC will take a final decision.

2.7 Procedure for deployment and auditing of test laboratories of a Zhaga Testing Center

A Zhaga Testing Center authorized for a Scope is allowed to deploy internal test laboratories, owned and operated by the same parent company, for performing the Test. The Zhaga Book Scopes of any internal test laboratory is limited to the Authorized Scopes of the Zhaga Testing Center

The Testing Center may audit its internal test laboratories utilizing the assessment report template in Annex A. [IECEE OD 2006] may be used as a reference as to how to conduct the audit.

A Zhaga Testing Center authorized for a Scope shall make available to the Zhaga Steering Committee a copy of the internal audit results upon request by the committee.

3 Change in Authorized Scope and Auditing

A Zhaga Testing Center may remove a Scope for which it is authorized by a notification to the Zhaga SC. Subsequently, the Zhaga PWG Chair will update the webpages and remove this authorization for this Zhaga Testing Center from the list of authorizations published on the Zhaga website.

A Zhaga Testing Center that stops being a Zhaga member looses authorization for all Scopes for which it had previously been authorized.

A Zhaga Testing Center will cooperate with an audit for a Scope for which it is authorized upon request by the Zhaga Steering Committee. No details are provided as to the conditions that might generate such a request. The process for the audit is as described in Section 2.3.

4 Test Report Summary and Reporting

4.1 Zhaga certification of a product

A Zhaga Testing Center that is authorized for a Scope may perform the Test for that Scope and arrange product certification for an interested manufacturer. The process for product certification is shown in Figure 4-1.

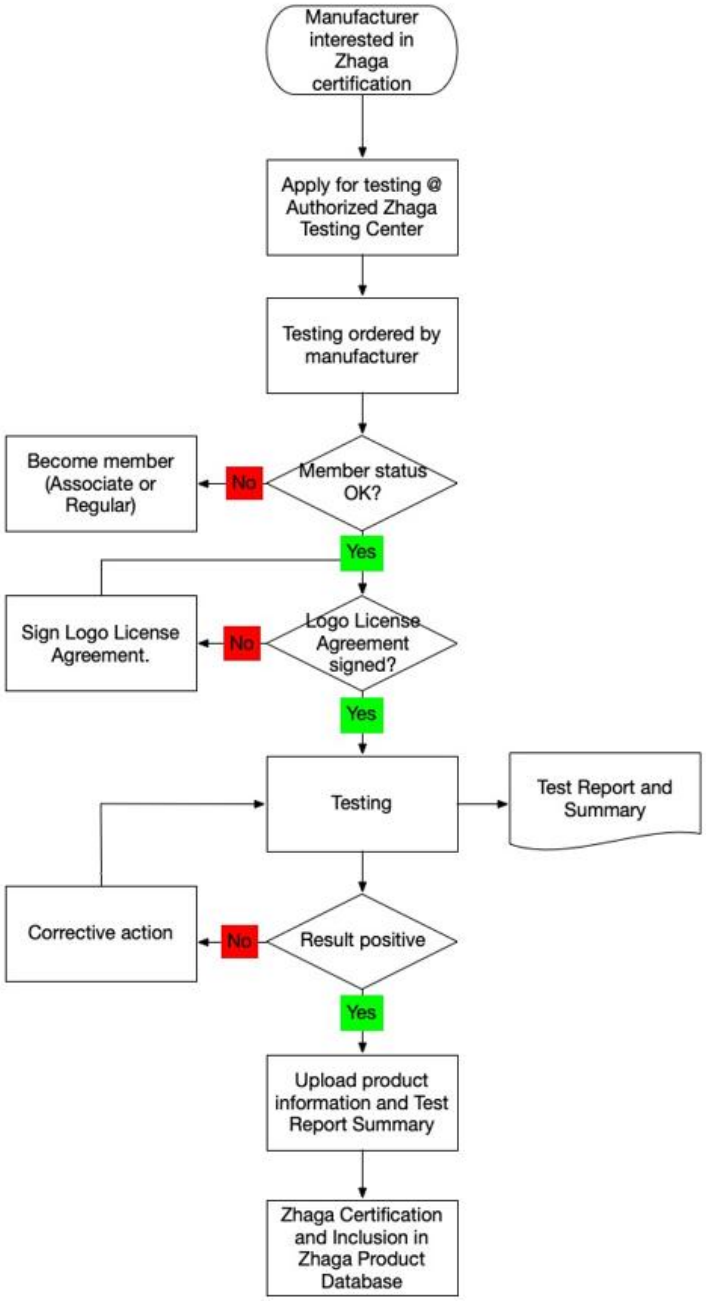


Figure 4-1: Process for Zhaga certification of a product.

The process for certification of a product is depicted in the flow diagram in Figure 4-1. Below we list some additional details.

1. The product manufacturer checks the Zhaga website and determines which Zhaga Testing Centers are authorized for the Scope that allows testing of the product.

2. The product manufacturer applies for testing the product at one of these Authorized Testing Centers and asks for a quotation. The manufacturer may apply at various Authorized Testing Centers to receive a quotation that best meets its requirements.
3. For Zhaga-D4I certification: the Authorized Zhaga Testing Center checks whether the product manufacturer is a Zhaga Regular member or Associate member, whether it has signed the Zhaga Logo License Agreement and whether it has signed the D4I Logo License Agreement or whether the company is a DALI member. If yes, the steps 5 to 7 can be executed.
4. For other Zhaga certifications: the Authorized Testing Center checks whether the product manufacturer is a Zhaga Regular member or Associate member and whether it has signed the Zhaga Logo License Agreement. If yes, the steps 5 to 7 can be executed.
5. The product manufacturer orders the execution of the Test at the Authorized Testing Center.
6. The Authorized Testing Center executes the Test and sends the test results to the product manufacturer.
7. If the result of the test is positive, the Authorized Testing Center updates the Zhaga product database by uploading the Test Report Summary. This upload is available after login to the members' area of the Zhaga website by Zhaga Testing Center.

   This Test Report Summary is based on the template that has been issued as a separate Zhaga document [ZTRS].

   - The procedure to upload product information to the Zhaga database is described in a separate document [ZWG].
   - The product database implements several restrictions for the upload of Test Report Summaries. Zhaga Testing Centers may only upload Test Report Summaries for their Authorized Scopes. Test Report Summaries may only be uploaded for companies that are Associate or Regular member and that have signed the applicable logo license agreements.
   - These restrictions are managed by the Zhaga PWG Chair.
8. After the Test Report Summary has been uploaded, the product is certified, and a certification certificate can be downloaded from the product database.

5 Market surveillance

“Market Surveillance” means the conformance inspection for products taken from the market, as conducted by Zhaga.

The legal requirements related to Zhaga Market Surveillance are specified in Section 5 of [ZTCA] and a Zhaga Testing Center shall not unreasonably refuse to collaborate with a market surveillance investigation.

There are no specific conditions that trigger a market surveillance. If the Zhaga SC comes to the conclusion, or is led to suspect, that there are Licensed Products on the market that are inoperable noncompliant, it may decide to carry out a Market Surveillance for these products. It may then decide to acquire, in the way most appropriate for the product type, a number of these products. It may subsequently select an Authorized Testing Center, following the policy of Clause 7 of the Testing Center Agreement, to perform the Test on these products.

Depending on the outcome of the Test and the type of noncompliance, the Zhaga SC will act as described in Clause 5 of the Zhaga Logo License Terms and Conditions.

6 Family testing

To reduce the testing effort and prevent unnecessary testing it is possible to use the family testing procedure.

A Zhaga Testing Center can, in cooperation with the manufacturer, choose for family testing. The products for which testing is applied for shall in that case be substantially similar. This means that the products concerned are manufactured from the same materials and components and shall be within a product range.

The Zhaga Testing Center shall determine the test program which is needed to cover all the technical requirements for the whole range of products. This can be done in close cooperation with the manufacturer.

The intention is to minimize the testing effort while still ensuring that all products in the range comply with the requirements as set forth in the Zhaga books.

Annex A Assessment report template

The document below shall be used as a template for reporting the audit of a Zhaga Testing Center.



Assessment Report template.doc

Annex B Zhaga Claim of Competence

The document below shall be used for requesting a scope extension based on a Zhaga Claim of Competence.



Zhaga_CoC.docx

Annex C Technical Expert Decision Form

The document below shall be used for reporting the decision of the Technical Expert on a Zhaga Claim of Competence.



Technical_Expert_decision_form.docx