

Subject: Global Infrastructure and Networks – GSCG002 Technical Conformity Assessment

Application AreasPerimeter: *Global*

Staff Function: -

Service Function: -

Business Line: *Infrastructure & Networks***CONTENTS**

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Version no. 3 dated 16/03/2021

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THE HEAD OF NETWORK COMPONENTS STANDARDIZATION
Maurizio Mazzotti

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1. DOCUMENT AIMS AND APPLICATION AREA

The scope of this document is to describe the procedures for technical conformity assessments of components and equipment to be supplied (directly or indirectly) to all Enel Global Infrastructure and Networks Countries:

Country	Distribution Company
Argentina	Edesur
Brazil	Enel Distribuição Rio Enel Distribuição Ceará Enel Distribuição Goiás Enel Enel Distribuição São Paulo
Chile	Enel Distribución Chile
Colombia	Codensa
Iberia	e-distribución
Italy	e-distribuzione
Peru	Enel Distribución Perú
Romania	Enel Distribuție Banat Enel Distribuție Dobrogea Enel Distribuție Muntenia

Table1

1.1 RELATED DOCUMENTS TO BE IMPLEMENTED AT COUNTRY LEVEL

This document applies to both Enel Global Infrastructure and Networks Srl Company and to Infrastructure and Networks Business Line perimeter, when each Company does not have to issue further documents.

2. DOCUMENT VERSION MANAGEMENT

Version	Date	Main changes description
3	16/03/2021	Issuing of Global Infrastructure and Networks - GSCG002 Technical Conformity Assessment

3. UNITS IN CHARGE OF THE DOCUMENT



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Responsible for drawing up the document:

- Global Infrastructure and Networks: Operation and Maintenance / Network Components Standardization

Responsible for authorizing the document:

- Global Infrastructure and Networks: Head of Operation and Maintenance unit
- Global Infrastructure and Networks: Head of Health, Safety, Environment and Quality unit.

4. REFERENCES

- Code of Ethics of Enel Group;
- Enel Human Right Policy;
- The Enel Group Zero Tolerance of Corruption (ZTC) Plan;
- Organization and management model as per Legislative Decree No. 231/2001;
- RACI Handbook Infrastructure and Networks no. 06;
- Enel Global Compliance Program (EGCP);
- Integrated Policy of Quality, Health and Safety, Environment and anti-Bribery;

5. ORGANIZATIONAL PROCESS POSITION IN THE PROCESS TAXONOMY

Value Chain/Process Area: Networks Management

Macro Process: Materials management

Process: Network components standardization

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6. DEFINITIONS AND ACRONYMS

Acronym and Key words	Description
Manufacturer Product	Component manufactured by a Supplier in accordance with a technical specification
Technical Conformity Assessment (TCA)	A “conformity assessment” ¹ with respect to “specified requirements” ² consists in functional, dimensional, constructional and test characteristics required for a product (or a series of products) and quoted in technical specifications and quality requirements issued by Enel Group distribution companies. This also includes the verification of conformity with respect to local applicable regulation and laws and possession of relevant requested certifications
Conformity assessment body	Body that performs the conformity assessment activities [ISO 17000]

¹ Definition 2.1 of ISO/IEC 17000

² Definition 3.1 of ISO/IEC 17000

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First-party conformity assessment	Conformity assessment activity that is performed by the person or organization that provides the object [ISO 17000 – ref. 2.2]
Second-party conformity assessment	Conformity assessment activity that is performed by a person or organization that has a user interest in the object [ISO 17000 – ref. 2.3]
Third-party conformity assessment	Conformity assessment activity that is performed by a person or body that is independent of the person or organization that provides the object, and of user interests in that object [ISO 17000 - ref. 2.4]
Enel Equipment Key code	It's an equipment representative for a group (family) of similar equipment chose by Enel
Enel Equipment Family code	Equipment belonging to a specific group (family) in which another equipment is identified as key code
TCA systems	The “conformity assessment systems”, is applicable specifying that the rules and procedures to carry on the TCA are those specified in the present document
Type A documentation	Not confidential documents used for product manufacturing and management from which it is possible to verify the product conformity to all technical specification requirements, directly or indirectly
Type B documentation	Confidential documents used for product manufacturing and management where all product project details are described, in order to uniquely identify the product object of the TCA
TCA report	Document describing the activities carried out for TCA
TCA dossier	Set of final documents delivered by the Supplier for the TCA
Supplier’s Declaration of Conformity (SDC)	Is a “declaration”, i.e. first-party attestation [ISO 17000 – ref. 5.4]



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Statement of Conformity (SC)	Product conformity attestation consisting in an official document issued by ENEL, following a second-party TCA [ISO/IEC 17000]
Certification Acknowledgment (CertA)	Official document issued by ENEL attesting the acknowledgment ³ of a certification ⁴ , following a third-party TCA
Certification	Third-party attestation related to products, processes, systems or persons [ISO/IEC 17000]
Legal declaration of conformity	Official document issued by a legal representative of the supplier declaring the product conformity to all relevant laws and standard in force in the country of installation of the product.
Material LifeCycle Management (MLM)	Integrated IT platform to manage the processes of Technical Specifications (TSM), Technical Conformity Assessment (TCA), Quality Control Tools (QCA), Defects Managing (CMD), Warranties and Materials Shipping(MSH)

³ 7.5 of ISO/IEC 17000

⁴ 5.5 of ISO/IEC 17000



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6.1 Enel Global Infrastructure and Networks countries Reference standards

Reference documents listed below (amendments included) shall be the edition in-force at the contract date.

ISO/IEC 17000	Conformity assessment – Vocabulary and general principles
ISO/IEC 17020	General criteria for the operation of various types of bodies performing inspection
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
ISO/IEC 17050-1	Conformity assessment - Supplier's declaration of conformity - Part 1: General requirements (ISO/IEC 17050-1:2004, corrected version 2007-06-15)
ISO/IEC 17050-2	Conformity assessment - Supplier's declaration of conformity - Part 2: Supporting documentation (ISO/IEC 17050-2:2004)
ISO/IEC 17065	Conformity assessment – Requirements for bodies certifying products, processes and services

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7. GENERAL TOPICS

7.1 Manufacturer product

Component manufactured by a Supplier in accordance with a technical specification issued by the Enel Global Infrastructure and Networks Countries and identified by:

- Enel Global Infrastructure and Networks Country type code (e.g. GSX00Y/ZZ) and/or local codification (e.g. 123456)
- Supplier's type designation
- product documentation (see 7.5)
- manufacturing factory
- manufacturing process

7.2 Costs and penalties

All the costs related to the TCA are at the expense of the Supplier. Flat-rate fees can be applied for each TCA process to cover ENEL costs, depending on the applicable TCA system (see 8).

In the following cases, penalties may be applied (only in case of TCA system S or T):

- negative results of inspections;
- unavailability of Supplier's facilities (e.g. unavailable test room, or test sample);
- notification times later than the minimum indicated in 10.3

When such events occur, ENEL shall report that circumstances in MLM and the supplier receive an automatic notification.

Above mentioned penalties and TCA delays shall be contested within 15 days from ENEL notification, otherwise they will be considered accepted by the supplier.

The amounts of flat-rate fees for TCA and penalties are included in the contractual documentation.

7.3 TCA request

The TCA request is the procedure step by which the supplier shall identify the products for which wants to open a TCA process, giving information like: supplier's contacts, product codes, type of TCA, third bodies accreditations, manufactory factory, etc.

7.4 Third-party conformity assessment body (hereinafter "*third-body*") accreditations

7.4.1. Selection and determination

In case of TCA system requests whereby selection and determination functions are carried out by third-party, the Supplier shall select and submit to ENEL approval a third-body accredited according to IAF (International Accreditation Forum) to operate in compliance with ISO/IEC 17020 or ISO/IEC 17065 for the specific product family object of the TCA.

An accreditation for a specific material belonging to the product family object of the TCA is acceptable as well.

7.4.2. Review and attestation

In case of TCA system requests whereby review function is carried out by third-party, the Supplier shall select and load in MLM a third-body accredited according to IAF (International Accreditation Forum) to operate in compliance with ISO/IEC 17065 for the specific product family object of the TCA⁵.

An accreditation for a specific material belonging to the product family object of the TCA is acceptable as well.

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Attestation function is always carried out by second-party.

7.5 Product documentation

7.5.1.Type A documentation

Copy of the approved and endorsed type A documentation is delivered to the ENEL and the Supplier authorizes its reproduction and diffusion internally to the Enel Group distribution companies.

As general criteria, unless otherwise indicated in the technical specifications, type A documentation at least consists in:

- type A and type B (see 7.5.2) documents list
- operation, maintenance and installation manuals
- Software manuals
- overall dimensional drawings and main details
- nameplate(s) drawing
- list of the Suppliers of main sub-components
- relevant manufacturing process documentation
- product colored pictures
- information requested by the document “*Quality Specification for Electronic Assemblies*” (in case of the product includes electronic components)⁵
- whatever needed to give evidence of compliance to all technical specification requirements.

All documents shall be compliant with ISO 9001 criteria, therefore they shall be uniquely identified by name, revision and issue date, with a clear Supplier identification (e.g. by mean of Supplier's letterhead).

End-user documentation (e.g. operation, maintenance and installation manual, electric schemes, overall dimensional drawings, nameplate etc.) shall be in local language of product destination country; if ENEL local language is different, they shall be translated in its language or in English. Other documents shall be in ENEL local language or in English.

7.5.2.Type B documentation

As far as TCA process is concerned is considered Type B documentation the whole Supplier's reference and knowledge needed for product manufacturing.

Type B documentation, which may be endorsed by ENEL, shall be preserved by the Supplier.

Type B documentation is not delivered to ENEL but it shall be shown to the ENEL, whenever requested.

All documents shall be compliant with ISO 9001 criteria, therefore they shall be uniquely identified by name, revision and issue date, with a clear Supplier identification (e.g. by mean of Supplier's letterhead).

Type B documentation shall be in ENEL local language or in English.

7.6 Tests

7.6.1.General requirements

As general rule, unless otherwise indicated in the technical specifications, required tests (routine, type and special tests) shall be carried out on a sample of each product subject to the TCA.

All tests shall be carried out in a laboratory compliant with one of the following criteria:

⁵ some information requested by this document belong to type B documentation, therefore shall be included in type A documentation instead of type A documentation

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- a) a laboratory accredited according to ILAC (International Laboratory Accreditation Cooperation) to operate in compliance with ISO/IEC 17025 for each specific test to be carried out; the laboratory will issue a test report;
- b) a non-accredited laboratory (including the Supplier's laboratory) under the supervision of a third-body accredited for selection and determination (see 7.4.1); the third-body will issue an inspection report attesting the laboratory suitability and the test result, attaching the test report issued by the laboratory;
- c) For specific cases with family codes, tests in the First Party Certification, could be carried out in the supplier's laboratory and self-certificated; the laboratory shall be operated in compliance with ISO 9001 requirements.

We talk about Enel equipment family codes when in the same contract there's a Enel equipment key code with a TCA carried out in second or third part. In all cases the laboratory shall carry out a sample identification according to 7.6.2.

7.6.2. Sample identification

Test reports shall contain a proper test sample identification consisting at least in:

- Supplier's type designation
- Manufacturing Factory
- ratings and main technical characteristics
- overall dimension drawing
- electrical schemes (when relevant)
- pictures
- whatever required by technical specifications and/or applicable standards
- any relevant information useful to identify the test sample.

7.6.3. Test applicability

Notwithstanding with criteria in 7.6.1 and if not already stated by the relevant technical specification or standard, ENEL, in case of S TCA system, or the Third-body, in case of T TCA system, could accept at his own responsibility the applicability of another type or special test; in case of F TCA system this acceptance is under the supplier responsibility.

The Supplier shall provide (F TCA system included) a technical report (hereinafter "*Applicability Report*") for each test, including the details according to the table below. The Applicability Report shall always include in annex all the relevant test reports, technical documents, drawings and anything necessary for the assessment.

At any case test applicability shall be compliant with basic criteria according product relevant standard.

This information shall be loaded in MLM in different phases of the process as described in section *10- Management of TCA process in MLM-TCA*.

The following cases are identified⁶:

⁶ According to 7.6.1, tests are generally carried out on the specific product object of TCA (Case 1) of the table

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	Sample under test	Test status	Reference technical specifications and/or standards	Content of the Applicability Report
Case 1	specific product object of TCA	To be performed	In force	Not required
Case 2	specific product object of TCA	Already performed	In force	Not required
Case 3	similar product object of TCA	To be performed	In force	Detailed description of similarities of the products with regard to the test
Case 4	similar product not object of TCA	Already performed	In force	Detailed description of similarities of the products with regard to the test
Case 5	specific product object of TCA	Already performed	Expired/different	Detailed description of similarities of the reference technical specifications and/or standards regard to the test
Case 6	similar product not object of TCA	Already performed	Expired/different	Detailed description of similarities of the products and the reference technical specifications and/or standards with regard to the test

Table 1 – Tests applicability cases

Test reports validity is limited to 15 years, so they cannot be used for new TCA or TCA updates (see chapter 11) when the test report issuing date is longer than 15 years on the day of the TCA request

The applicability of test reports accepted by one of Enel Group's distribution company may be accepted also by the other distribution companies.

7.7 TCA report

The TCA report shall contain at least:

- the list of all technical specifications and standards used as reference for the TCA, specifying their name, revision and issue date;
- the identification of the product object of the TCA, by mean of the elements listed in 7.1
- the tests table (see the template in ANNEX A), including test reports and applicability reports;
- the reference values and acceptability ranges to be used for routine tests (if any);
- a detailed description of any possible exception approved by ENEL with respect to technical requirements;
- any possible certifications/declarations requested by local regulation and law.

In case that more products are object of the same TCA, it's possible to provide a single TCA report. TCA report shall be identified with revision and issue date.

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7.8 TCA dossier

For each product object of the TCA the Supplier shall provide on digital support a dossier consisting in:

- TCA report
- copy of the endorsed (stamped and signed) type A documentation
- third-body certification (in case of functions carried out by third-party)
- supplier's declaration of conformity, signed by a legal representative of the Supplier (see ANNEX C);
- legal declaration of conformity, signed by a legal representative of the Supplier (see ANNEX D.1).

For some specific components allocated to Spain (see ANNEX E) this document is replaced by the document named "Declaración de Conformidad" (see ANNEX D.2) a copy of which has to be delivered with each component supplied in Spain.

In case that more products are object of the same TCA, it's possible to provide a single TCA dossier.

The supplier shall preserve the TCA dossier and all the relevant documents for at least 10 years from the TCA final attestation.

7.9 TCA final attestation

At the end of the TCA ENEL will send a communication consisting in:

- a confirmation of the TCA dossier reception, in case of F TCA system;
- the "Statement of Conformity (SC)", in case of S TCA system;
- the "Certification Acknowledgment (CA)", in case of T TCA system.

This communication, submitted by an automatic mail from MLM, will indicate:

- the identification of the Supplier;
- reference to this document (GSG002);
- the list of all technical specifications used as reference for the TCA, specifying their name, revision and issue date;
- the identification of the product, by mean of the elements listed in 7.1;
- reference to the TCA report and/or to the third-party certification;
- referents for ENEL

In case that more products are object of the same TCA, it's possible to provide a single TCA final attestation.

7.10 TCA management and planning

In order to start and plan the TCA activities and share all possible supplier's doubts (technical and/or procedural), the ENEL could ask to have a kick-off meeting in its premises, in the supplier premises or remotely.

Independently to the applicable TCA system, the supplier shall keep ENEL continuously updated about the TCA status and the activities planning, in order to give a reliable forecast of the TCA conclusion. To do that, the supplier shall periodically sent to ENEL a detailed TCA planning, by means of tools that ENEL will specify (excel file, GANTT, online system etc.).

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8. TCA SYSTEMS

According to the functional approach stated in Annex 1 of ISO/IEC 17000, the following TCA systems are defined, depending on the performer of the various functions (first-party, second-party or third-party).

The contract states which system shall be followed for each component (different TCA systems could be requested for different components in the same contract) .

TCA system type	Selection	Determination	Review	Attestation
F	first-party	first-party	first-party	second-party
S	second-party	second-party	second-party	second-party
T	third-party	third-party	third-party	second-party

Table 2 – TCA systems

9. TCA FUNCTIONS DESCRIPTION

9.1 Selection (see A.2 of ISO/IEC 17000)

9.1.1.Type A documents preliminary approval

The Supplier shall provide Type A documents to the conformity assessment body for a preliminary analysis and approval in order to verify (on the paper) their compliance with the requirement of the technical specification.

Independently from the applicable TCA system, possible request of exception with respect to the technical specification shall be clearly requested to the ENEL in this phase and highlighted through the Type A documents. The approval of the exception request is at total discretion of the ENEL (if selection function is performed by third-party, the third-body shall require to include ENEL official approval of exceptions in Type A documentation).

9.1.2.Tests applicability approval

The Supplier shall provide for approval to the conformity assessment body the tests table (see the template in ANNEX A) with the relevant test reports and applicability reports.

9.1.3.Tests planning approval

The Supplier shall provide for approval to the conformity assessment body (see par. 10.3 for minimum notification time, applicable in case of S and T TCA systems) a detailed plan of tests, specifying for each test the following information:

- Date (start and finish)
- Place
- Accreditation information (of the laboratory or of the third-body, in case of non-accredited laboratory)

9.1.4.Prototype(s) selection

According to par. 4.1 of ISO/IEC 17000 one (or more) sample(s), compliant with approved preliminary Type A documents, shall be manufactured and selected by the Supplier. If not differently required by technical specifications, the Supplier can decide the number of identical specimens to be used for the TCA. All samples shall be at the expense of Supplier.

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9.2 Determination (see A.3 of ISO/IEC 17000)

9.2.1. Prototype visual inspection

According to par. 4.3 of ISO/IEC 17000 an inspection of a prototype selected by the Supplier (see 9.1.4) is necessary to verify dimensional, constructive and functional compliance with:

- technical specifications;
- preliminary approved Type A documents;
- as far as possible, definitive Type A and B documents, shall be made available in paper copy by the Supplier during the inspection.

In case of negative result of the inspection, the Supplier shall perform the requested modifications on all selected samples and, if necessary, the prototype visual inspection shall be repeated.

In case of third-party determination, ENEL will anyway perform an additional prototype visual inspection. ENEL has also the right to renounce to its additional inspection.

ENEL may require the Supplier to set up an online visual inspection (OVI) in order to perform effectively prototype inspection remotely.

7.2.1.1 Online Visual Inspection (OVI)

According to previous point ENEL can request to carry out an online visual inspection for which must be previously agreed by means a specific procedure.

The prototype should have implemented all the technical requirements that have been determined during the homologation process. The manufacturer should have the necessary personal, tools and technical requirements to be able to carry out all the tests. Likewise, all the staff attending the OVI must comply with those necessary measures that guarantee their safety during the tests.

The OVI requires a set of high definition video-cameras, fixed and mobiles, with independent adjustments according to the needs of the test to be carried out and previously defined in the procedure. Cameras should be able to broadcast in-situ the execution of any test, close-up focus, zoom in and general plan. Mobile cameras must allow shiftment to any device of the equipment where a more detailed check is required.

All the tests carried out during the OVI have to be recorded (video and audio) by ENEL and/or by the supplier. All graphic reports collected by the supplier during the OVI should be subsequently sent to Enel with the respective final report of the tests carried out.

9.2.2. Type A and type B documents endorsement

In case of S and T TCA systems, after the positive result of the prototype visual inspection, the definitive versions of Type A documents and, if considered necessary, Type B documents will be endorsed in order to freeze the product object of the TCA.

In case of S TCA system, the endorsement of type A documents could be performed electronically; if an on-line system is used to manage the TCA, the endorsement can be avoided.

9.2.3. Tests execution and witness

After the positive result of the prototype visual inspection, the Supplier can proceed with tests execution according to the approvals described in 9.1.2 and 9.1.3. Test shall be performed on sample(s) selected in 9.1.4 considering rules of 7.6.

ENEL has the right to witness all planned tests, therefore ENEL shall be informed about test planning and all its modifications, with the minimum notice stated in 10.3 (only for TCA systems S and T).

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If the device involved in the TCA process includes a SW (Software) component, after the Type A documents preliminary approval, the Supplier can proceed with the execution of the tests on the SW according to approvals described in 9.1.2 and 9.1.3 ENEL has the right to witness all planned tests.

Therefore, ENEL shall be informed about test planning and all its modifications, with the minimum notice stated in 10.3. (only for TCA systems S and T).

9.3 Review (see A.4 of ISO/IEC 17000)

According to par. 5.1 of ISO/IEC 17000, after the positive result of the determination function, the following documentation shall be reviewed, in order to verify the fulfillment of technical specification and of the present procedure:

- TCA report (see 7.7)
- the endorsed type A documents
- The referred type B documentation

In particular, the correspondence between the inspected prototype and tested samples shall be verified by checking the endorsed type A documents and the test samples identification (see 7.6.2).

In case of third-party review, the third-body shall issue a certification to guarantee the positive technical conformity assessment with respect to the relevant technical specification and to the present procedure.

If the device involved in the TCA process includes a SW (Software) component, the function responsible for the review has the right to repeat the execution of a sample of the planned tests in presence of the Supplier.

9.4 Attestation (see A.4 of ISO/IEC 17000)

After positive result of review function, the Supplier shall provide to the ENEL the complete TCA dossier (see 7.8).

According to par. 5.2 of ISO/IEC 17000, if the dossier is compliant with requirements of this procedure the ENEL will provide the TCA final attestation (see 7.9).

10. DETAILED CONFORMITY ASSESSMENT PROCEDURES

10.1 Sequence of activities and responsibilities

The following table, for each TCA phase, reports the normal sequence of activities with the relevant assignment of responsibilities.

The ENEL (only for TCA systems S and T) shall approve every deviation with respect to this sequence. Nevertheless, any possible consequence (e.g. repetition of tests, delays) from such deviation is at own risk of the Supplier.

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MLM Phase	Description	Reference paragraph	TCA system type F		TCA system type S		TCA system type T		
			Supplier	ENEL	Supplier	ENEL	Supplier	ENEL	Third body
1-1.1-2	TCA request	7.3	R	A	R	A	R	A	-
3-3.1-	Type A preliminary documents	9.1.1	R+A	- /A*	R	A	R	I/A*	A
3-3.1	Test applicability	9.1.2	R+A	-	R	A	R	I	A
3-3.1	Test planning	9.1.3	R+A	-	R	A	R	I	A
4	Prototype(s) selection	9.1.4	R+A	-	R	A	R	I	A
4.1	Prototype visual inspection	9.2.1	R+A	-	R	A	R	A**	I/A
5 – 5.1	Type A and Type B definitive documents	9.2.2	R+A	-	R	A	R	I	A
6-6.1	Tests	9.2.3	R	-	R	I	R	I	I
7	Review	9.3	R+A	-	R	A	R	I	A
7	TCA dossier	7.8	R+A		R	A	R	A	-
8-8.1-8.2	TCA Final attestation	7.9	I	R+A	I	R+A	I	R+A	-
R: responsible for doing the activity					A: accountable for the approval of the activity				
C: consulted for support and contribution to the activity					I: informed about the activity				
Note *: approval only in case of exception request									
Note **: ENEL has the right to renounce to its inspection									

Table 3 - Sequence of activities and responsibilities

In case of first-party and third-party systems, Enel reserves the right to verify all the documentation.

10.2 Communication between Supplier and ENEL

All the communications will be by e-mail or, if available, using an online system.

10.3 Notification

In case of TCA system S or T, all the activities, which may require trips of ENEL (e.g. tests), shall be communicated with sufficient advance, in particular:

- 14 working days for domestic and regional trips
- 21 working days for intercontinental trips

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Staff Function: -

Service Function: -

Business Line: *Infrastructure & Networks*

11. PRODUCTS MODIFICATIONS

All supplied samples shall be completely compliant with the product object of the TCA, considering the product identification criteria stated in 7.1.

If some modification are introduced by the Supplier e.g change of subpart Supplier, new materials, new dimensions etc., a new TCA shall be requested. In such cases the TCA procedure is the same described in 10. In the TCA report, all the modification introduced shall be detailed.

11.1 Management of the SW modifications

If the product involved in the TCA process includes a SW (Software) component, the certification of that component shall be managed according to the following criteria:

11.1.1. SW Modification with an impact in the HW (Hardware)

If the SW update requires a change in HW a new TCA shall be requested. In such cases, the TCA procedure is the same described in 10. In the TCA report, all the modification introduced shall be detailed.

11.1.2. SW update

In case of SW update, having no impact in the HW of the product, the review and attestation functions will regard only the SW.

Therefore, the ENEL can agree on not updating the TCA final attestation of the product. In this case, in order to attest the conformity of the SW, a report containing the new version of the SW will be prepared and shared with the Supplier by letter or ordinary e-mail.

This report shall be attached to the last valid TCA final attestation of the product.

In any case, the Supplier shall make available the last version of the SW.

12. SUSPENSIONS OF THE CONFORMITY ATTESTATION

According to 9.2. and 9.3 of ISO/IEC 17000, for each of the following conditions, the TCA conformity attestation may be suspended: :

- Negative results of tests performed on the supplied products or during the production;
- Faults or defects on installed products
- False or incorrect declarations or certifications

In case of suspension of the conformity attestation, the ENEL will send a communication to the Supplier including the identification references of the TCA final attestation and specifying the reason for the suspension. For false/incorrect declarations, Enel also reserves the right to take the due contractual and/or legal actions.

When the conditions which led to suspension/ are resolved the TCA could be reactivate

- If the reactivation does not entail any change on TCA dossier, the ENEL shall reactivate the TCA in MLM
- If the reactivation entails changes on TCA dossier, the supplier shall open a new TCA process in MLM

In case of suspension of the TCA attestation of a product issued by one of Enel Group's distribution company, suspension/ may be applied also by the other distribution companies.

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13. MANAGEMENT OF TCA PROCESS IN MLM-TCA

13.1 MLM definitions

New TCA	Process of MLM by which the supplier requests a TCA of a product for the first time
Update TCA	Process of MLM by which the supplier can request an update of TCA dossier for a product that has previously obtained the TCA and already uploaded in MLM.
Confirm existing TCA	Process of MLM by which the supplier can load the TCA Conformity document obtained for the product previously to the introduction of the MLM.
TCA request for tender	Application whereby a supplier asks to start a process of TCA for the awarded components in a tender
TCA request spontaneous	Application whereby a supplier can start a process of TCA for components not included in a tender.
TCA delay	Part of the total time exceeded over the contractual date to achieve the TCA dossier due to delays on the phases under responsibility of the supplier

13.2 Flowcharts of TCA process in MLM-TCA

Based on the TCA system selected by the ENEL for the product object of the TCA process, and according to TCA type selected by the supplier: new TCA, update or confirming a previous TCA of the product, the MLM app will guide the supplier through the different phases of the process.

These phases and main activities are shown in tables 5 and 6.

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TCA type	New TCA					
TCA system	First party		Second party		Third party	
Who	Supplier	TD	Supplier	TD	Supplier	TD
previous phase - "TCA cases opening" (only for components awarded in a tender - see 10.1.1.1)		upload TCA cases		upload TCA cases		upload TCA cases
Phase 1 – "TCA request starting"	Component Id		Component Id		Component Id	
Phase 1.1 – "Documents Upload and TCA request confirmation"	Upload laboratories & third bodies Accreditation				Upload Third body Accreditation	
Phase 2 – "TCA request approval"		Control & Approval		Control & Approval		Control & Approval
Phase 3 – "Preliminary Documents transmission"			Upload preliminary documents		Upload preliminary documents	
Phase 3.1 – "Preliminary Documents verification"				Control & Approval		
Phase 4 – "Call for prototype visual inspection"			Inform prototype date		Inform prototype date	
Phase 4.1 – "Prototype visual inspection approval"				Control & Approval		Control & Approval
Phase 5 – "Definitive type A documentation transmission"			Upload Type A documents		Upload Endorced documents by third body	
Phase 5.1 – "Definitive type A documentation approval"				Control & Approval		
Phase 6 – "Definitive test planning"			Upload definitive test planing		Upload definitive test planing	
Phase 6.1 – "Definitive test planning approval"				Control & Approval		
Phase 7 – "TCA dossier transmission"	Upload TCA dossier		Upload TCA dossier		Upload TCA dossier	
Phase 8 – "TCA dossier analisys"		Analisis		Analisis		Analisis
Phase 8.1 – "TCA dossier verification"		Verification		Verification		Verification
Phase 8.2 – "TCA Final Attestation"		Confirmation TCA dossier reception		statement of conformity		Acknowledg ment of TCA

Table 5 – MLM phases and activities for New TCA

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Staff Function: -

Service Function: -

Business Line: *Infrastructure & Networks*

TCA type	TCA update		Confirm existing	
TCA system	1st, 2nd, 3rd party		1st, 2nd, 3rd party	
Who	Supplier	TD	Supplier	TD
Phase 1 – “TCA request starting”	Component Id		Component Id	
Phase 1.1 – “Documents Upload and TCA request confirmation”	Upload Third body Accreditation		Upload TCA Conformity Letter	
Phase 2 – “TCA request approval”		Control & Approval		Control & Approval
Phase 3 – “Preliminary Documents transmission”				
Phase 3.1 – “Preliminary Documents verification”				
Phase 4 – “Call for prototype visual inspection”				
Phase 4.1 – “Prototype visual inspection approval”				
Phase 5 – “Definitive type A documentation transmission”				
Phase 5.1 – “Definitive type A documentation approval”				
Phase 6 – “Definitive test planning”				
Phase 6.1 – “Definitive test planning approval”				
Phase 7 – “TCA dossier transmission”	Upload TCA dossier		Upload TCA dossier	
Phase 8 – “TCA dossier analysis”		Analysis		Analysis
Phase 8.1 – “TCA dossier verification”		Verification		Verification
Phase 8.2 – “TCA Final Attestation”		Acknowledgment of TCA		Acknowledgment of TCA

Table 6 – MLM phases and activities for Update and Confirming TCA

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Staff Function: -

Service Function: -

Business Line: *Infrastructure & Networks*

13.3 Main activities

13.3.1. Phase 1 – “TCA request starting”

13.3.1.1. TCA request for a tender

After a tender is finished, the ENEL shall open a TCA case in MLM for the products awarded in the tender by the Supplier. Later the Supplier will have access to the TCA case and will be able to fill the “TCA request starting” step with next information in order to start the TCA process.

- Contact information of supplier referent
- Supplier’s codes of the products awarded
- Type of TCA: New TCA, Confirming existing or TCA update
- Forecast to main phases of TCA
- Confirming the TCA request

13.3.1.2. TCA request spontaneous

In this case, the Supplier asks to start a TCA process for products not related with any tender by its own commercial interest, by means of a TCA request in MLM, in which following information shall be given:

- Enterprise and factory identification
- Contact information of supplier’s referent
- Enel’s codes and standards for the components to obtain TCA
- Supplier’s codes for the products object of TCA
- TCA System
- Type of TCA: New TCA, Confirming existing or TCA update
- Forecast to main phases of TCA
- Confirming the TCA request

13.3.2. Phase 1.1 – “Documents Upload and TCA request confirmation”

According to the point 7.4, in this phase the supplier will have to load in MLM the accreditation documents of the third bodies and laboratories in accordance with the system and type of TCA selected for the product as it’s showed in the next table.

TCA System	Type of TCA	Description	Documents to Upload
First	New TCA	Laboratories and third bodies	1. List of accredited laboratories 2. List of accredited third bodies 3. Accreditation certificates with scope of laboratories and third-bodies.
First	New TCA (family codes authorized)	Laboratories	1. List of accredited supplier’s laboratories 2. Accreditation of supplier’s laboratories 3. ISO 9001 Certification referring to Supplier’s self certified laboratory
Second	New TCA	None	None
Third	New TCA/update TCA	Accreditation certify	1. ISO/IEC 17065 accreditation certificate with scope for the specific product
Anyone	Confirm existing	TCA conformity letter	1. TCA conformity letter

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Table 7 – Documents to load in Phase 1.1

13.3.3. Phase 3 – “Preliminary Documents transmission”

Only for TCA cases carried out under second or third TCA system.

In this phase the supplier shall load in MLM the "Type A preliminary document" of the product and fill the test applicability information for each test indicated in the Enel Standard, according to what specified in point 7.6.3 for the different applicability cases.

Test table has to be filled in the same order in which tests are listed in the Enel Standard, and furthermore each test has to be identified (field “Test Description”) copying the point title in which the test is referenced in the Enel standard (example: “9.2.1.2 Measurement of winding resistance”) (see ANNEX B)

	1st document	2nd document	3rd document
Product	Type A preliminary document* (* For TCA carried out under Third party system the preliminary Type A documentation shall include the test table endorsed by Third body.		
Test 1 ...	Test report	Applicability report (if any)	Laboratory Accreditation (if any)
Test 2 ...	Test report	Applicability report (if any)	Laboratory Accreditation (if any)
....			
Test n ...	Test report	Applicability report (if any)	Laboratory Accreditation (if any)

Table 8 – Documents to load in Phase 3

13.3.4. Phase 5 - “Definitive type A documentation transmission”

Only for TCA cases carried out under second or third TCA system the supplier shall load in this MLM phase the “Type A definitive documents” in accordance with the table below:

TCA System	Documents to load
Second	Type A definitive document
Third	Type A definitive document endorsed by Third body

Table 9 – Documents to load in Phase 5

13.3.5. Phase 6 – “Definitive test planning”

This definitive version of the test table has to be filled in the same order in which tests are listed in the Enel Standard, as mentioned in phase 3.

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	1st document	2nd document	3rd document
Test 1 ...	Test report	Applicability report (if any)	Laboratory Accreditation
Test 2 ...	Test report	Applicability report (if any)	Laboratory Accreditation
....			
Test n ...	Test report	Applicability report (if any)	Laboratory Accreditation

Table 10 – Documents to load in Phase 6

13.3.6. Phase 7 – “TCA dossier transmission”

Overtaken the previous stages, in this phase the supplier shall upload the whole TCA dossier composed by following documentation

Docs	First or Second party	Third party
Type A documentation	Yes	Yes, endorsed by the Third body
TCA report	Yes	Yes, all tests endorsed by the Third Body
Third body certificate	No	Yes
Manual	Yes	Yes
Declaration of conformity	Yes	Yes
Legal Declaration of conformity	Yes	Yes.

Table 11 – Documents to load in Phase 7

13.3.7. Phase 8.2 – “TCA final attestation”

In this phase, the ENEL will send a communication by mail to the supplier with the result of the TCA process detailing all the data referred to point 7.9 of the present document. The communication will include also a calculation of timings and delays to achieve the TCA based on dates registered in MLM for each phase and the contractual dates declared by Supplier for request, prototype and dossier.

Tab. 12 Resume of different TCA application

14. ANNEXES



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ANNEX A - TEST TABLE MODEL FOR TCA REPORT

ATTENTION: For TCA carried out under Second or Third system, the information has to be provided according to the test table filled in the phases 3 and 6 of MLM

#	Technical specification reference (clause #)	IEC (or other standards) reference (if applicable)	Test description	Test applicability*	Test report reference				Applicability report**		
					Name	Laboratory	Date	Name and revision of technical specification and/or standard referenced in the test report	Name	Rev.	Date
1											
2											
3											
4											
...											

* specify the "Case" of clause 7.6.3 applicable to this test
** not necessary for Case 1 and Case 2 of clause 7.6.3.

Table 12 – Tests table template



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ANNEX B – TESTS TABLE EXAMPLE

Definitive Test Planning

DEFINITIVE TEST

TECHNICAL SPECIFICATION REFERENCE	IEC (OR OTHER STANDARDS) REFERENCE (IF APPLICABLE)	TEST DESCRIPTION	TEST APPLICABILITY	TEST REPORT	APPLICABILITY REPORT	LABORATORY ACCREDITATION CERTIFICATE	MORE INFORMATION
GSNN00X	IEC XXXX-X	6.1 DIELECTRIC TEST	CASE 4	Test report1.pdf	Applicability report1.pdf	Accreditation1.pdf	
GSNN00X	IEC XXXX-X	6.2 BREAKING TEST	CASE 3	Test report2.pdf	Applicability report2.pdf	Accreditation2.pdf	
GSNN00X	IEC XXXX-X	6.3 TEMPERATURE TEST	CASE 2	Test report3.pdf	none	Accreditation3.pdf	

EXAMPLE



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ANNEX C – SUPPLIER'S DECLARATION

Supplier's Declaration of Conformity according to ISO/IEC 17050-1 and ISO/IEC 17050-2

The product (Suppliers code - Enel code) manufactured by (Supplier name) in the factory (city, country), is fully compliant to the technical specification (name, date and revision).

The Technical Conformity Assessment has been carried out in compliance with the Enel Global Standard GSCG002, rev. 02 of xx/xx/2018 ("Technical Conformity Assessment").

This declaration is issued according to ISO/IEC 17050-1 and ISO/IEC 17050-2.

Date, place

Signed (a legal representative)



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ANNEX D.1 – LEGAL DECLARATION OF CONFORMITY MODEL (*)

(*) for all countries except Spain

Legal declaration of conformity by the Supplier

The product (Suppliers code - Enel code) manufactured by (Supplier name) in the factory (city, country), is fully compliant with all applicable standards and laws in _____(please indicate the country of destination), including the following non exhaustive list:

.....

.....

.....

(please include the list of standards and laws)

Date, place

Signed (a legal representative)



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Staff Function: -

Service Function: -

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ANNEX D.2 – SPANISH LEGAL DECLARATION OF CONFORMITY MODEL

“Declaración de Conformidad” by Supplier

El producto _____ (Suppliers code - Enel code) fabricado por _____ (Supplier name), en la fábrica ubicada en _____ (city, country), cumple con todas las normas y leyes aplicables en España, incluidas en la siguiente lista no exhaustiva:

- **RD 337/2014 de fecha 9 de mayo de 2014.** Reglamento sobre condiciones técnicas y garantías de seguridad en instalaciones eléctricas de alta tensión y sus Instrucciones Técnicas Complementarias ITC-RAT 01 a 23.

...

(include others standards and laws relevant)

...

- Todos los documentos y las normas que no figuran en esta declaración y que se recuerdan en la GSXXXXX _____ (include edition and date of the Global Standard in force)
- GSCG002 _____ (include edition and date of the Global Standard GSCG002 in force)

El primer año de comercialización del producto para España es el año 20XX

(In the case of Transformers, include: “Asimismo, este transformador cumple los requisitos exigidos en el **REGLAMENTO (UE) No 548/2014 DE LA COMISIÓN de 21 de mayo de 2014** por el que se desarrolla la Directiva 2009/125/CE del Parlamento Europeo y del Consejo en lo que respecta a los transformadores de potencia pequeños, medianos y grandes así como lo establecido en la **DIRECTIVA 2009/125/ CE: 21/10/2009**, directiva por la que se instaura un marco para el establecimiento de requisitos de diseño ecológico aplicables a los productos relacionados con la energía.”)

Date, place

Signed (a legal representative)



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Business Line: *Infrastructure & Networks*

ANNEX E - LIST OF COMPONENTS NEEDED OF “DECLARACIÓN DE CONFORMIDAD”

I	Ambito (Eng)	Famiglie (Eng)	Classi (Eng)	MG Code	MG Desc (English)
1	Building, civil and environmental	Construction components	Door and window fixtures (wood, plastic, glass and metal)	FCCC04	Various construction materials (skylights, sunbreakers, awnings etc.)
2	Building, civil and environmental	Insulation, deinsulation provision of scaffolding	Realization of thermo / acoustic insulation	FCMI03	Other electrical insulation
3	Building, civil and environmental	Construction components	Prefabricated concrete structures	FCCE01	Cement prefabs (excluding cabins)
4	Electric, automation and networks	Electric cabins in concrete and non-concrete, and accessories	Electrical cabins accessories	FECE08	Cable press seals for installation of LV and MV cables
5	Electric, automation and networks	Electric cabins in concrete and non-concrete, and accessories	Electrical cabins accessories	FECE01	Prefabricated metallic M.V./L.V. cabins completed with all electrical equipment and connecting M.V. cables
6	Electric, automation and networks	Electrical panels	Prefabricated metal enclosed equipment for interruption, disconnection and operation of the medium voltage network.	FEQE06	Prefabricated metal enclosed equipment for interruption, disconnection and operation of the medium voltage network.
7	Electric, automation and networks	Electric cabins in concrete and non-concrete, and accessories	Secondary cabins in vibrated reinforced concrete with electrical equipment	FECE05	Structures in vibrated reinforced concrete for low cabins (box)
8	Electric, automation and networks	Electric cabins in concrete and non-concrete, and accessories	Secondary cabins in vibrated reinforced concrete with electrical equipment	FECE09	Secondary cabins in vibrated reinforced concrete with electrical equipment
9	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Pre-assembled terminals and connection wires	FEEM01	Wire terminals
10	Electric, automation and networks	Electric cables and bare electrical conductors	Cables LV	FECA03	LV cables insulated with elastomers up to 1kV
11	Electric, automation and networks	Electric cables and bare electrical conductors	Cables LV	FECA04	LV cables insulated with PVC
12	Electric, automation and networks	Electric cables and bare electrical conductors	Cables LV	FECA07	Normal thermoplastic LV cables
13	Electric, automation and networks	Electric cables and bare electrical conductors	Cables LV for electrical cabin	FECA05	LV cables insulated with fire retardant PVC
14	Electric, automation and networks	Switches	HV equipment and switches	FEIN02	HV switches (sf6)
15	Electric, automation and networks	Capacitors	Coupling and static capacitors	FECE02	Static condensers
16	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Cable connectors	FELC09	Connectors for underground cable
17	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Earthing and shorting devices	FEEM03	Other groundbeds
18	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment and terminal blocks for stations / cabins / overhead electrical lines HV and / or MV	FEEM05	MV equipment and terminal boards for stations and cabins
19	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment and terminal blocks for stations / cabins / overhead electrical lines HV and / or MV	FEEM08	HV equipment and terminal boards for stations and cabins
20	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment and terminal blocks for stations / cabins / overhead electrical lines HV and / or MV	FECE01	Coupling condensers
21	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment and terminal blocks for stations / cabins / overhead electrical lines HV and / or MV	FEEM13	Terminal board for earthing
22	Electric, automation and networks	Electrical and electronic small parts and fuses	Fuses and fuse protection devices	FEFU01	Fuses and protection equipment with LV fuse
23	Electric, automation and networks	Electrical and electronic small parts and fuses	Fuses and fuse protection devices	FEFU02	Fuses and protection equipment with MV fuse
24	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment, terminals and brackets for lines, stations and electrical substations	FEEM01	Equipment, terminals and brackets for lines, stations and electrical substations
25	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment, terminals and brackets for lines, stations and electrical substations	FEEM01	Equipment, terminals and brackets for lines, stations and electrical substations
26	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment, terminals and brackets for lines, stations and electrical substations	FEEM01	Equipment, terminals and brackets for lines, stations and electrical substations
27	Electric, automation and networks	Equipment, terminals and brackets for lines, stations and electrical substations	Equipment, terminals and brackets for lines, stations and electrical substations	FEEM01	Equipment, terminals and brackets for lines, stations and electrical substations
28	Electric, automation and networks	Switches	LV switches	FEIN11	Automatic LV switches for secondary cabins
29	Electric, automation and networks	Switches	LV switches	FEIN12	Automatic LV switches for measurement units
30	Electric, automation and networks	Switches	MV switches	FEIN17	Vacuum MV switches



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I	Ambito (Eng)	Famiglie (Eng)	Classi (Eng)	MG Code	MG Desc (English)
31	Electric, automation and networks	Isolators	Composite insulators	FEIT01	Modular type HV and/or MV insulators for overhead lines
32	Electric, automation and networks	Isolators	Composite insulators	FEIT03	HV and/or MV glass insulators
33	Electric, automation and networks	Isolators	Glass and porcelain insulators	FEIT11	Feed-through insulators (MV) in porcelain for primary cabin panels
34	Electric, automation and networks	Materials and equipment for user connection	Manufactured items of synthetic resin	FEAT01	Manufactured items of synthetic resin
35	Electric, automation and networks	Electrical and electronic small parts and fuses	Low power electrical, electromechanical and electronic materials	FERP10	Auxiliary relays
36	Electric, automation and networks	protection devices	Protection and control panels	FERP03	Protection and control panels
37	Electric, automation and networks	Electrical panels	LV Panels	FEQE13	LV panels for secondary cabins
38	Electric, automation and networks	Electrical panels	MV panels	FEQE24	MV compartments for primary cabins
39	Electric, automation and networks	dischargers	Metallic oxide HV and/or MT dischargers	FESCO1	Metallic oxide HV and/or MT dischargers
40	Electric, automation and networks	dischargers	Metallic oxide HV and/or MT dischargers	FESCO6	LV dischargers
41	Electric, automation and networks	disconnectors	HV disconnectors and spare parts	FESE03	145 - 170 kV HV disconnectors for primary cabins
42	Electric, automation and networks	disconnectors	HV disconnectors and spare parts	FESE05	HV disconnectors - spare parts
43	Electric, automation and networks	disconnectors	HV disconnectors and spare parts	FESE02	MV control-disconnectors
44	Electric, automation and networks	disconnectors	HV disconnectors and spare parts	FESE01	Non-automatic LV control equipment
45	Electric, automation and networks	disconnectors	MV disconnectors	FESE07	MV overhead disconnectors for outdoors
46	Electric, automation and networks	disconnectors	MV disconnectors	FESE08	MV overhead disconnectors, (motorised and not) for indoors
47	Electric, automation and networks	Electrical panels	Power supply systems for auxiliary services	FEQE27	Power supply systems for auxiliary services
48	Electric, automation and networks	Electrical panels	Power supply systems for auxiliary services	FEQE21	Rectifiers
49	Electric, automation and networks	Electrical panels	Power supply systems for auxiliary services	FEQE14	AC and DC LV panels for auxiliary services
50	Electric, automation and networks	Electrical panels	Power supply systems for auxiliary services	FEQE02	Stabilised power supplies
51	Electric, automation and networks	Storage Systems, Batteries, Accumulators	Storage Systems, Batteries, Accumulators	FEAP01	Lead and sealed accumulators
52	Electric, automation and networks	Storage Systems, Batteries, Accumulators	Storage Systems, Batteries, Accumulators	FEAP03	Rechargeable secondary batteries for stationary applications, auxiliaries included.
53	Electric, automation and networks	Supports and poles	Pylon steel supports	FESO32	Tubular steel supports for stations
54	Electric, automation and networks	Construction of HV stations and electrical substations	Complete electrical stations and cabins (civil and electrical works)	FEST01	Prefab primary cabins (HT/MT) with electrical equipment
55	Electric, automation and networks	Construction of HV stations and electrical substations	Complete electrical stations and cabins (civil and electrical works)	FEST05	420kV, 245kV and 145kV electrical high voltage stations
56	Electric, automation and networks	Measuring Transformers	CT, TT and ACCESSORIES for MV meters	FETM23	MV voltage and current transformers for primary cabins
57	Electric, automation and networks	Measuring Transformers	CT, TT and ACCESSORIES for MV meters	FETM22	LV current transformers
58	Electric, automation and networks	transformers	HV / MV transformers	FETR05	HV/MV TRANSFORMERS FOR PRIMARY SUB-STATIONS AND FOR GENERATION PLANT (HV/MV AND MV/MV) RATED POWER MAX 300MVA /220kV
59	Electric, automation and networks	transformers	HV / MV transformers	FETR13	LV/LV transformers and autotransformers
60	Electric, automation and networks	transformers	HV / MV transformers	FETR14	Other MV/LV transformers and autotransformers
61	Electric, automation and networks	transformers	HV / MV transformers	FETR17	MV/MV transformers and autotransformers in oil
62	Electric, automation and networks	Measuring Transformers	Current and voltage transformers HV	FETM25	HT measurement transformers (ta and tv)
63	Electric, automation and networks	transformers	Oil and resin MV / LV transformers and autotransformers	FETR04	Equipment for earthing the neutral of MV distribution networks (Petersen coils)
64	Electric, automation and networks	transformers	Oil and resin MV / LV transformers and autotransformers	FETR15	MV/LV transformers and autotransformers in oil
65	IT and Telecommunications	Teleoperation, Remote Control and Remote Management Equipment	Equipment for secondary cabin remote control	FTTE05	Equipment for secondary cabin remote control

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