



Kaizen: Better standards through user feedback

David Hanlon

IEC Secretary of the
Conformity Assessment Board

IEC Academy

Webinar

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

AC/31/2017



AC/31/2017
Administrative Circular
2017-11-10

TO ALL NATIONAL COMMITTEES
TO ALL IEC MANAGEMENT BOARD MEMBERS
TO ALL TC/SC OFFICERS
TO ALL IEC CA SYSTEMS OFFICERS

Feedback from the CA Systems to the IEC TC/SCs

Dear Sir/Madam,

1. Introduction

With reference to the SMB Decisions 156/14 and 159/19, this Administrative Circular provides further information about the feedback processes related to CA Systems decision sheets.

2. Background

The IEC CA Systems are key customer users of IEC standards and their feedback on the practical testing and verification of those standards is valuable to the standards writers and should be treated accordingly. IEC CA Systems have committees and expert groups that are harmonizing the application of standards for conformity assessment purposes such as testing, inspection, auditing and certification. To ensure that testing and evaluation to IEC standards is done under the same conditions and circumstances worldwide within the CA Systems with the goal of achieving consistent results, these committees and expert groups are defining common understanding and methodology (where necessary), and documenting their results in decision sheets.

While in some areas, this process is already well managed with involvement of both the CA System experts and the TC experts (see the best practices employed by IECEX and TC 31), some other areas would benefit from improvement to the current situation by creating a formal quality improvement feedback path between the CA Systems and the standards development TC/SCs with the objective of reducing the number of decision sheets by adapting the normative documents themselves (as far as appropriate) with the ultimate goal of obtaining higher consistency and reproducibility of CA results.

3. Actions for CA Systems and TCs/SCs

The Officers of CA Systems and TC/SCs are expected to take into account:

- The need for CA Systems to involve TC/SCs when developing decision sheets;
- The opportunity for TC/SCs to comment on draft decision sheets;
- The need for published decision sheets to be submitted to TC/SCs in case it is necessary to clarify ambiguities or correct errors in their normative documents;
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- The need to improve communications between all CA Systems and the relevant TC/SCs by offering participation in each other's meetings, as is already the case in certain areas.

It is at the CA System's discretion when to implement a decision sheet.

4. Procedure

Each CA System shall have a published operational procedure (e.g. Operational Document OD) in place that satisfies the above requirements. This Procedure shall be publicly accessible, possibly via the CA System's own website. In the absence of a published operational procedure, the CA System will adopt the following procedure. All relevant TC/SCs shall adopt the following procedure.

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- Adopting the content and:
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To enhance the mutual understanding of the different views it is proposed to allow:

- IEC CA Systems to nominate observers to TC plenary meetings and relevant TC/SC WGs.
- TC/SCs to nominate observers to IEC CA Management Committee meetings and their subgroups responsible for decision sheets.

Yours faithfully,

F.W.P. Vreeswijk
General Secretary & CEO

JRS/DHA



How do we make purchasing decisions ?

Based on confidence



- **Brands we know and trust**
- **Retailers / suppliers we know and trust**
- **Trusted advice**

How do we make purchasing decisions ?

Unknown Brands



- **Low cost / risk**
→ we take the risk
- **Higher cost / risk**
→ known supplier
→ trusted advice

How do retailers make purchasing decisions ?

Based on confidence



- Suppliers they know and trust
- Suppliers they audited themselves
- Trusted advice
 - 3rd party audits
 - certification

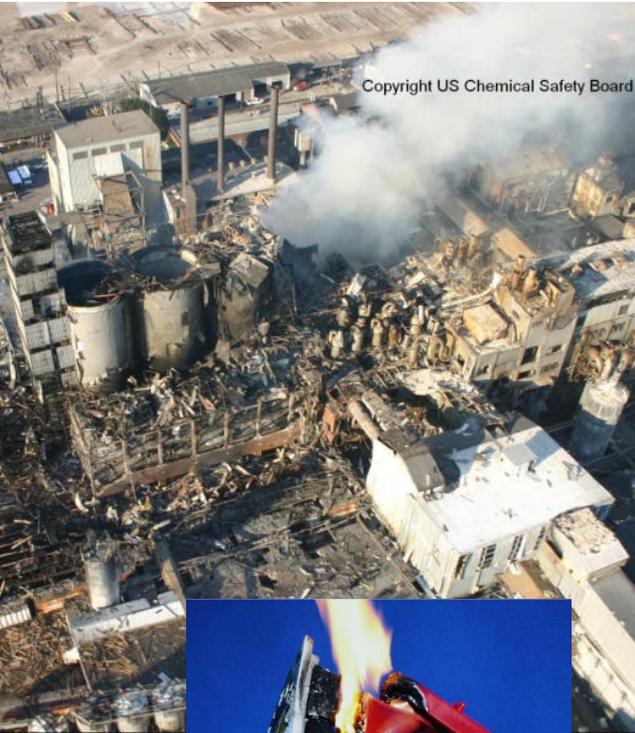
How are most purchasing decisions made ?

Based on confidence



- Confidence level needed depends on
 - quality needed
 - financial risk
 - technical risk

Confidence = Value

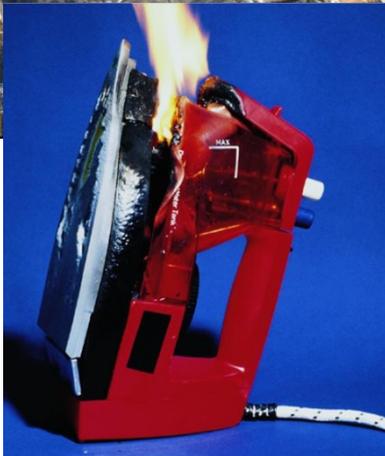


Quality

→ International Standards

Risk

→ Appropriate level of
Conformity Assessment



Confidence = Value



Standards and Conformity Assessment
are like two sides of a coin...

...neither side has value
without the other side

Standards +
Conformity Assessment = Value
= Confidence

Conformity Assessment (CA)

Checking that a product or service conforms to specified requirements



First party CA

- Carried out by manufacturer, supplier
- SDoC, eg CE marking

Second party CA

- Carried out by customer
eg: checking in coming goods/materials

Third party CA

- Carried out by independent organization
- Independent from the supplier & end-user
- Can be test-reports, audit-reports, type-certification, full certification, etc

How IEC CA Systems work



IEC

ISO/IEC

SD



CA

global
services

17000 series
International
Standards
for CA

How IEC CA Systems work



Global CA services

- Membership organization
- Professional CA bodies (CABs)
- CABs anywhere in the world
- CABs must qualified to participate
- CABs help write the rules
- CABs must follow the rules
- CABs are regularly peer assessed to check that rules are followed

How IEC CA Systems work

Members-Organisation

Rules based



- IEC Statutes and Rules of Procedure
- Basic Rules of the CA Systems including relevant ISO/IEC 17000 series
- CA System's Rules of Procedure
- Operational Documents (ODs) for testing, assessment & certification

How IEC CA Systems work

Members-Organisation

Rules based



- Members write the rules
→ and must abide by the rules
- Participating CBs & TLs write operational documents (ODs)
→ common understanding & interpretation
→ harmonized testing methodology
- Peer-assessment is used to check
→ CBs & TLs competency & independence
→ CBs & TLs know, understand
and apply the ODs

How IEC CA Systems work

Value creation

Consistent believable results

because of...



- Common understanding & interpretation of the standards
- Harmonized testing methodologies
- Peer assessment of
 - Competency & independence
 - knowledge of common work practices
 - application of common work practices

leads to...

→ **Mutual Recognition
of CA results**



How IEC CA Systems work

Value creation

Consistent believable results

enables...



- Access to markets
- Faster access to markets
- Cheaper access to markets
- Consistent quality
- Low prices for consumers
- More choice for consumers

Kaizen

改 善

Kai = Change

Zen = Good

...also known as **continuous improvement**, is a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency & quality.

Captive Customer vs Key Customer



A **Captive customer** is a person or a company that has no other choice than to use a particular supplier. They are locked-in.

Captive Customer vs Key Customer



A **Captive customer** is a person or a company that has no other choice than to use a particular supplier. They are locked-in.

A **Key customer** is a person or a company who gives a substantial amount of business to your organisation.

Are IEC CA Systems
captive or key customers ?

IEC statistics

~9'000 standards in IEC catalogue
~90% with requirements

~3'000 used by IEC CA Systems
→ 30% IEC catalogue
>100k certificates/year



key customers

IEC statistics

~9'000 standards in IEC catalogue

~3'000 used by IEC CA Systems
>900 Decision Sheets
 $900/3'000 \approx 30\%$
of IEC standards
need clarification



captive customers

Decision sheets

DECISION SHEET




IEC System for Conformity Testing and Certification
of Electrotechnical equipment

Sheet n°:

CTL DECISION SHEET

IECEE OD-5002-4:2015 © IEC 2015

Standard(s) (incl. year)

IEC 60831-1
Edition 3.0

Category

CAP

Subject

Definition of
to be inspected
on shunt po

Question

How many
60831-1 for

Decision

For the per
type test sc

Type test s

- Thermal s
- Measur
- of the cap
- Voltage t
- Voltage t
- Lightning
- contain
- Discharg
- Ageing t
- Self-hea
- Destruct

Explanat

In clause
definition
ensure a
to be sut

CTL DECISION SHEET (DSH)

Standard(s) (incl. year)	Subclause(s):	Tracking No.	Year
IEC 60598-1 All editions	3.2.6	DSH 0833	2014
Category:			
LITE			
Subject:	Key words:	Developed by	Approved at
"IP X8" marking	- Marking - Table J.2 - IP X8	ETF5-OSMLUM	2016 CTL Plenary Meeting

Question

According to sub clause 3.2.6, the marking of the IP numbers for degree of protection against ingress of dust, solid objects and moisture and, if desired, additional symbols shall be on the outside of the luminaire. Protection against submersion is marked with IP X8. According to Table J.2, the under water conditions (depth of immersion) shall be specified by the manufacturer. Is it enough if the marking (_ _ m) is given in the mounting instruction or shall we have the depth of immersion also together with the IP marking on the outside of the luminaire?

Decision

For fixed luminaire IP X8 the indication of the depth can be specified on the instruction manual. For portable luminaire IP X8 the indication of the depth shall be on the luminaire.

Explanatory notes

Sheet n°: 567/06

Page: 1(1)

Meeting:
Decision confirmed
at 44th CTL meeting

for the sampling plan are
ditional statement is given:
unit surface area shall also
a capacitance value in the
citor with the minimum
ratio is less than that of the
greater". Nevertheless, the
ve case occurs. What is the

olution:
to in § 11 of IEC 61048 or in
possible equal numbers of
capacitors with capacitance per
capacitance value in the range
aps, shall contain as nearly as
lowest capacitance and of
less than that of the minimum

pacitor.
according to the above decision

ge:
unit surface area exceeding that

ge:
rea less than that of the minimum



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IEC - International Electrotechnical Commission | 3 rue de Varembe | PO Box 131 | CH-1211 Geneva 20 | Switzerland
T +41 22 919 0211 | Fax +41 22 919 0300 | mgm@iec.ch | www.iec.ch

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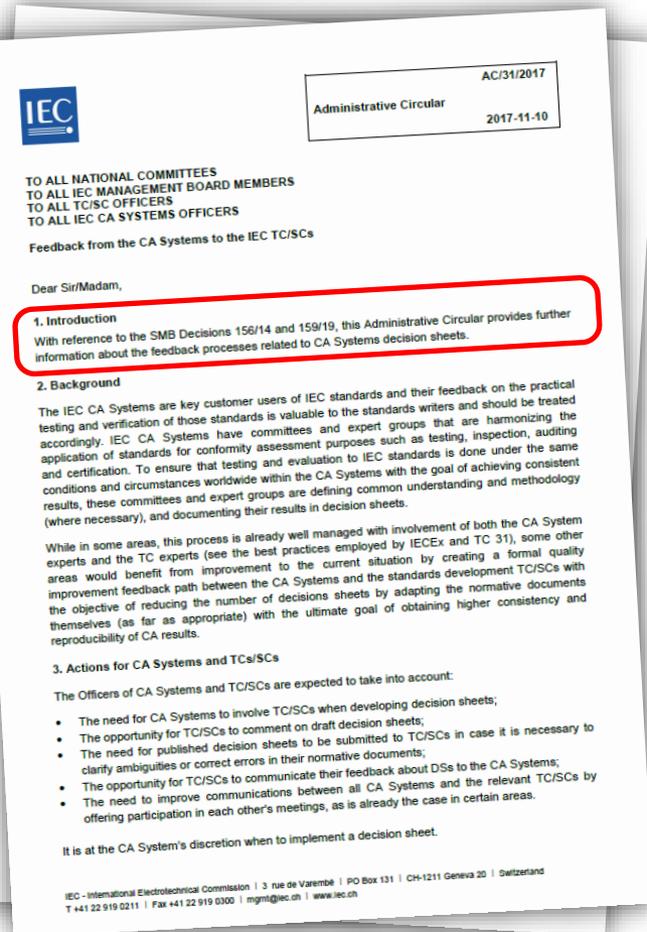
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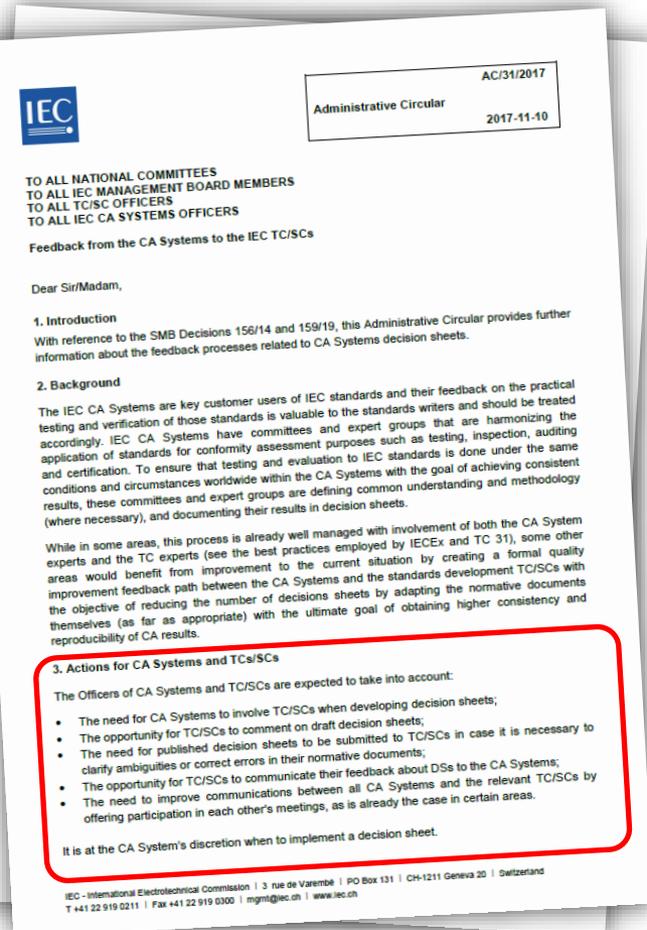
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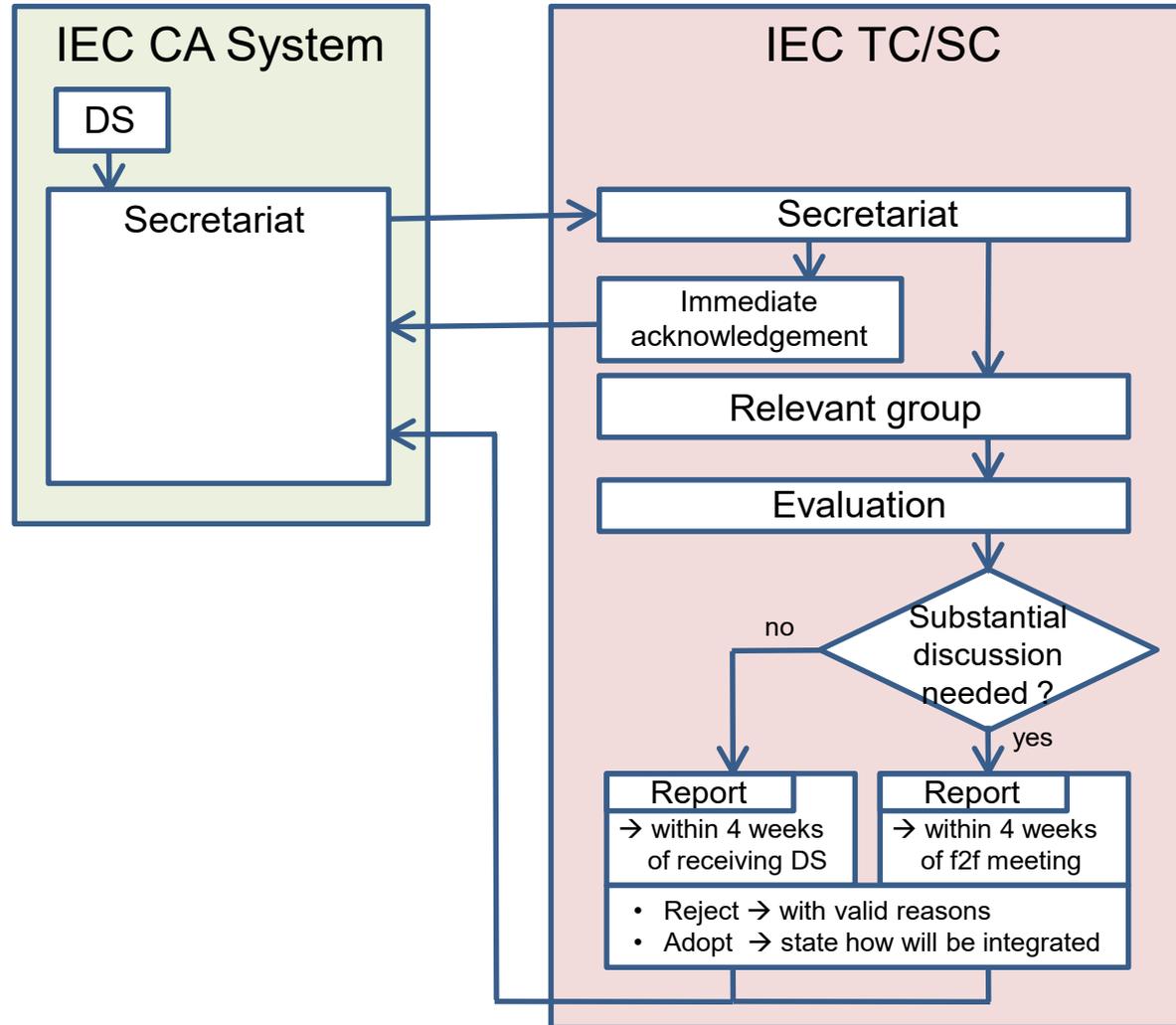
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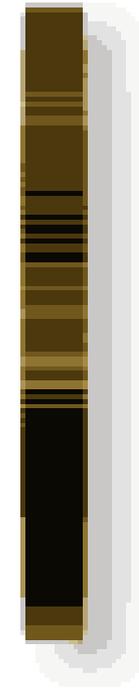


Confidence = Value

Standards = Quality

Conformity Assessment = Proven Quality

Consistent believable CA results = World's best practice



Questions
Remarks
Replies





Thank you

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