
LAST CHANCE TRANSITION TO EN 62368-1

EXPEDITE THE PROCESS
NOVEMBER 2020



G&M COMPLIANCE – WHO ARE WE?



G&M Compliance, Inc.

Fast Compliance, First to Market

- G&M was established in April 1997

Our goal is to represent our **customer's best interests** in acquiring and maintaining regulatory product certifications. To achieve this we focus in the following areas:

- Technical Requirements – Standards, Intent, Applicability
- Procedural Requirements – Certification scheme rules and practices
- G&M is a homologation management company
 - Produce CE reports in-house
 - Manage CB projects with CBTLs

INTRODUCTION - The purpose of this webinar is to **explore different transitions options**. Targeted for end-system products that have current CB scheme reports to IEC 60950-1 or IEC 60065-1

- Basic technical comparison of standards
- Europe's CE Mark requirements
- CB Scheme vs. Low Voltage Directive (LVD) report
- U.S./CAN certification requirements
- Rest of the world (ROW)
- CB benefit rating
- Decision tree for upgrade options: CB scheme vs LVD report

Technical

INTRODUCTION TO
62368-1

Main thrust of the new
hazard-based standard



IEC

- Separation of Requirements by Energy Source/Hazard Category - Helps make the intent of the requirements clear

Technical

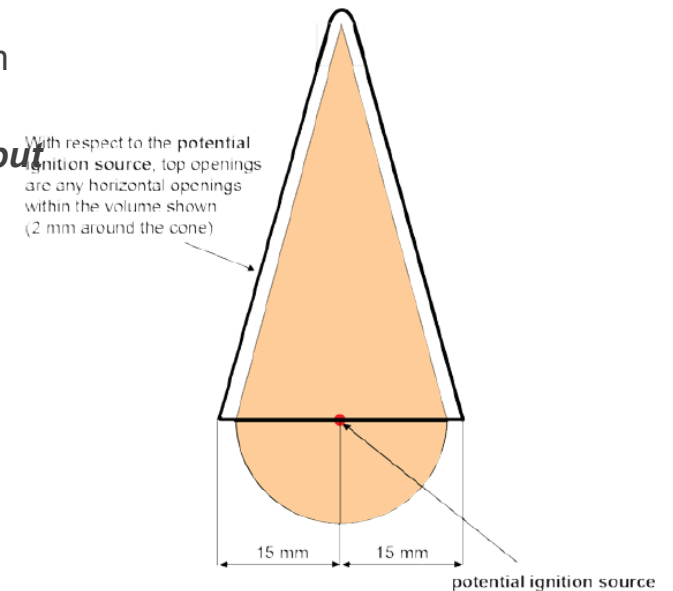
NEW STANDARD (62368-1) OVERVIEW VS. OLD STANDARDS

- New standard not intended to be more stringent than the current standards

- Excerpt from the July 2019 edition of In Compliance Magazine from an article titled: **IEC 62368-1: WHAT CAN WE EXPECT?**

*“Certain tests may have to be repeated if there is a lack of data, **but a redesign is very rare.**”*

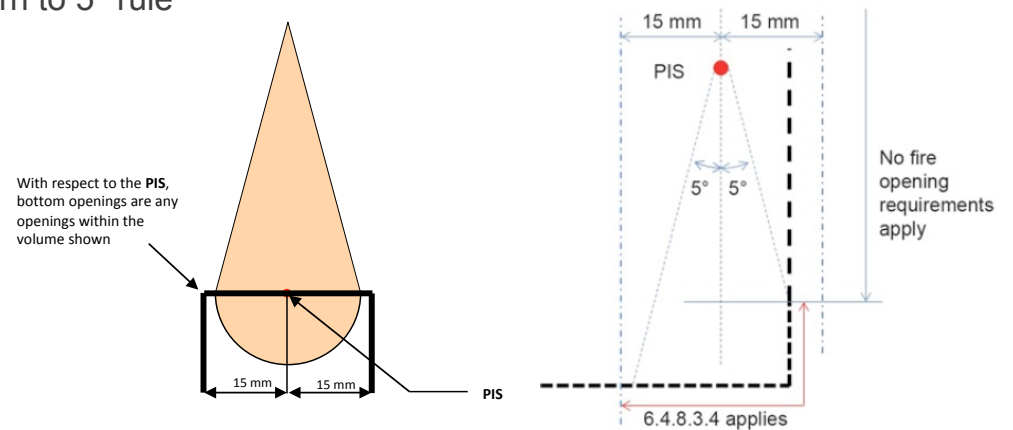
- Main transition issues: Enclosures
 - Top openings – Fire Enclosure
 - Bottom openings
 - Flammability - V-0 vs V-1 (plastic fire enclosures)



Technical

2ND ED. VS 3RD EDITION

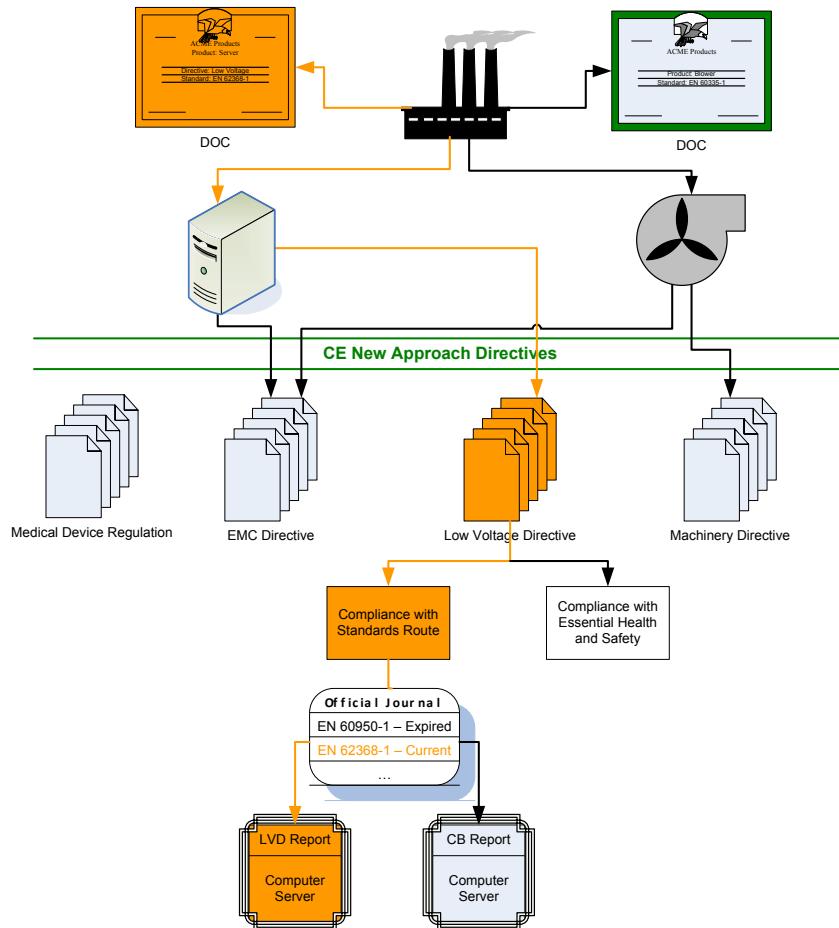
- EN 62368-1, 3rd Ed. was released in March
- Both maintain clause 4.1.1 - Internal and external components and subassemblies that comply with IEC 60950-1 or IEC 60065 are acceptable as part of equipment covered by this document without further evaluation...
- **Fire Enclosure Openings** – Bottom openings return to 5° rule
- Wiring requirements – VW-1 now acceptable



Procedural

EU DRIVING FORCE

- Transition date for 62368-1 standard – 12/20/2020
- No grandfathering of existing certified products – Forces a transition
- Unique CE Mark Structure – Mandatory, National, Self-certification
 - Provides added flexibility
 - Enforcement authorities - customs
 - Customers



CE Self-Declaration Procedure

- Manufacturer or their representative chooses applicable CE directives for their product
- For the LVD the standards route of compliance is typically chosen
- When a current standard is expiring, compliance with the in-coming standard must be declared by DOW
- A technical report detailing compliance with applicable standard requirements should be produced.
- Once the report is complete the manufacturer declares compliance by drawing up a Declaration of Conformity
- There is no CE certification body

CB SCHEME VS LOW VOLTAGE DIRECTIVE (LVD) REPORT

- Technical requirements are basically the same except for national deviations
- Same format for both reports
- CB Scheme Certification – Issued by certification body only. Compliance is determined by the certification body. Additional requirements or strict interpretation of requirements may be enforced. Main purpose to facilitate safety evaluation for national certification marks. Typically bundled with an NRTL mark
- LVD Report – No restrictions on issuing body. Compliance is determined by the manufacturer. Main purpose to support self-declaration process for CE mark. Allows for more flexibility

Procedural

EUROPE 2ND ed Vs 3RD EDITION

- 3rd ed was published March 2020 - CB reports are available
- Current OJ version in Europe is 2nd ed EN 62368-1
- Appears that the 3rd ed may never be published into the Official Journal
- Option to go straight to the 3rd ed
- 2nd ed reconciliation document to show backwards compatibility

Procedural

U.S./CAN – TRANSITION RULES

- U.S. (NRTL) Certification Structure – Voluntary, Private, Certification Body
- Transition date 12/20/2020 the same as Europe
- Grandfathering allowed, with no major changes
- Component swapping, not considered a major change
- U.S. NRTL certification is typically achieved at the same time as CB certification by the same certification body
- Decoupling of CB bundling benefit

REST OF THE WORLD REQUIREMENTS

- Typically Certification Structure - Mandatory, National, Certification body
- Transitioning rules vary from country to country
- Most do not grandfather
- Countries not already accepting 2nd ed likely to transition directly to 3rd ed
- Differing timelines for publication for new standard and DOW of old standard
- Certification bodies allow varying degrees of leveraging CB reports

Procedural

EXPECTED TRANSITION DATES FOR 60950-1 AND 60065-1

Country/Safety Certification Scheme	Have current 62368-1 based national standard:	Expected Publication Date:	Expected Deadline Date:	Edition of the standard to be adopted:
China/CCC	No	Within 1 year	Within 2 years (1 year transition period)	3 rd ed
India/IS	No	2022 - 2023	2023 - 2024	3 rd ed
Korea/KC	No	Within 1 year	Within 2 years (1 year transition period)	3 rd ed. likely
Russia/EAC	Yes	2019 - GOST IEC 62368-1; 2014	N/A	N/A

Procedural

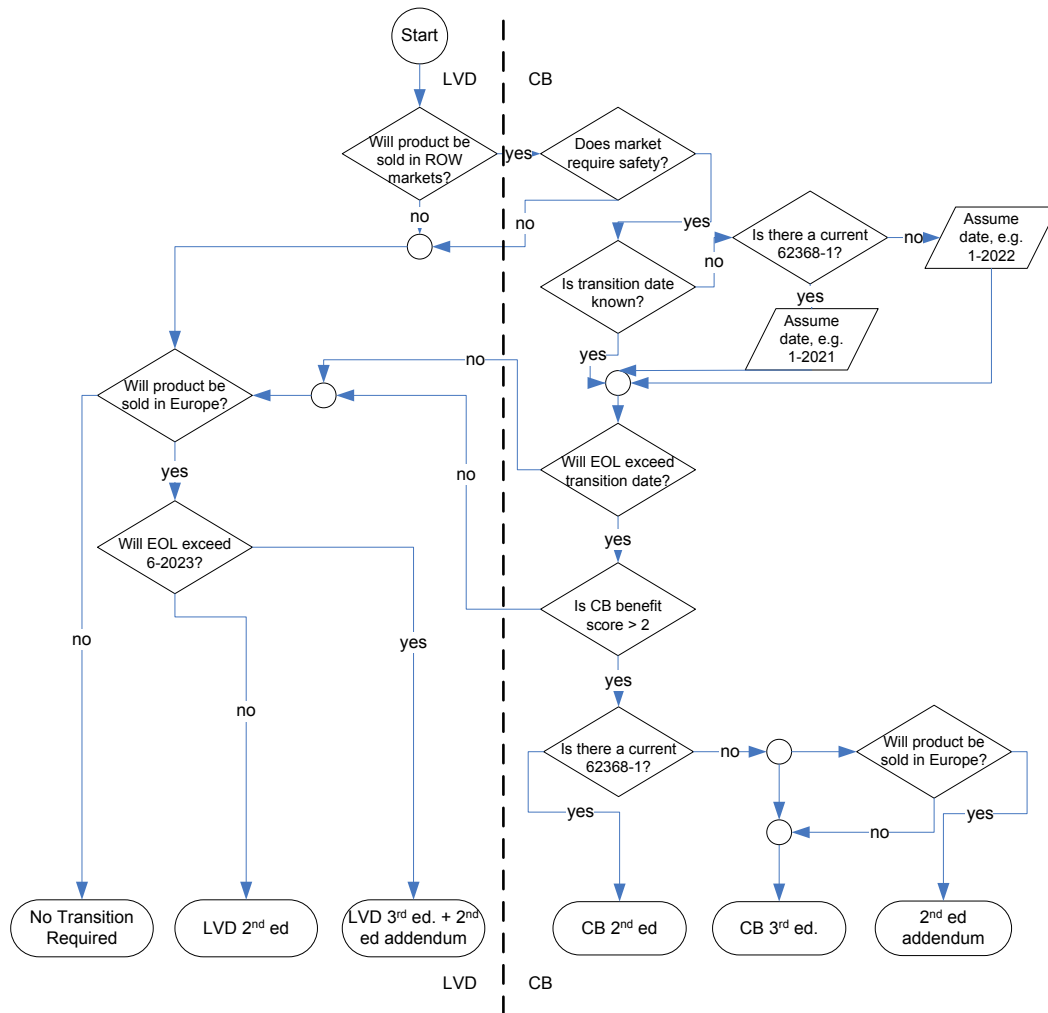
ESTABLISH A CB BENEFIT RATING -

- A CB report offers varying degrees of benefit
- Establish a CB benefit rating for each market taking into account cost and time savings along with the requirement to ship samples
- Example – using a 4 star rating system, one star being the lowest. Add a star for more than 25% cost savings, add a star for more than 25% time savings, and add another for saving the cost of shipping a sample

Country/Safety Certification Scheme	A/V Safety Required	ITE Safety Required	*CB Benefit Rating:	*Benefit analysis of submitting CB Scheme Report
China/CCC	Yes	Yes	** - ****	China will waive most safety testing with a valid CB. They will also waive some component requirements that would otherwise require CCC.
Russia/EAC	Yes	Yes	*	Negligible cost or time savings vs LVD report. Russia has 2 main safety procedures for EAC: CoC and DoC. CoC is starting to require submission of samples.

Notes:

- International compliance rules are ever changing. The chart above is a snap-shot in time given current conditions
- The information in the chart above is based on the authors experience and may not be indicative of all experiences in the same region.
- Different product types, such as audio/video or other office equipment, may yield different results; for this reason, it is recommended that similar analysis be conducted for other product types and countries



SAMPLE DECISION TREE

-ORIGINAL LEGACY
PRODUCT-

COST ANALYSIS CB VS LVD TRANSITION

- Assuming existing CB
Scheme reports are available
for legacy products
- Certification body costs for CB upgrade projects vary
- CB pricing for 62368-1 in general is higher than CB pricing for old standards
- LVD report option does not require certification body, less invasive, lower cost
- Upgrading directly to 3rd ed could save cost in the long run

CONCLUSION

- There is no transition required for U.S. and Canada
- Europe will accept either CB or LVD, and certifying directly to the 3rd ed could be an option
- The key to deciding CB or LVD is transition dates, and CB benefit analysis of ROW markets
- For ROW markets transitioning past the current lifespan of certified products or with a low CB benefit rating, transitioning using an LVD report method covers requirements and is the most cost-effective
- For ROW markets transitioning soon and are shown to have a high CB benefit, pursue CB to the edition that will be relevant in those countries
- Different methods can be used for different products
- G&M can aid with the analysis portion and the transitioning process.

QUESTIONS AND ANSWERS

- Thank you for attending
- Please contact us with any additional questions

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