Low Voltage Directive

{ PSES & EMCS August 19, 2014

Joint Meeting

- Late 90's, early 2000's, the Commission found a consensus for a review and update of the regulations for a common base
- Regulation (EC) No 765/2008 and Decision No 768/2008/EC brought together, in the New Legislative Framework (NLF), all the elements required for a comprehensive regulatory framework

New Legislative Framework (NLF)

The core laws included in NLF are

Regulation (EC)765/2008

- Figure 2 Established the legal basis for accreditation and market surveillance,
- © Consolidated the meaning of the CE marking

№ Decision No768/2008/EC

- provided a common framework for the marketing of products.
- Updated, harmonized, and consolidated the various technical instruments
 - a Common definitions
 - ষ Common conformity assessment procedures
 - ষ Obligations of economic operators
 - ষ Rules for CE marking
 - Notification criteria for conformity assessment bodies

Core of NLF

NLF considers the entire product life

- © Operators in the supply chain manufacturer, authorized representative, distributor, importers and relation to product
- Mational authority responsibility regulatory authorities, notification authorities, national accreditation entities, market surveillance, authorities controlling imports recognition of the various activities

Core of NLF

- The purpose of the recast of these directives is to:
 - Clarify the definitions and obligations of economic operators on the EU market
 - ষ especially for the manufacturer and importer.
 - A Manufacturer has the sole duty of conformity assessment of the product.
 - Use of a more comprehensive measure to trace the product supply chain
 - ষ Both manufacturers and importers shall be identified easily.
 - Fig. Enhance the market surveillance activity to prohibit a non-compliant product or a product which presents a risk.

Recast Purpose

In order to align with the EU New Legislative Framework (NLF), 8 EU directives listed in the "alignment package" were recast and published in the Official Journal of the European Union on March 29, 2014.

- Directives enter into force on April 18, 2014
 - Member States have until April 20, 2016 to amend their national regulations
- Old Directives are repealed on April 20, 2016

NLF – New directives

Directive		Supercedes
Explosives for civil users	2014/28/EU	93/15/EEC; Amended by 2004/57/EC
Simple pressure vessels (SPVD)	2014/29/EU	2009/105/EC (amended)
Electromagnetic Compatibility (EMC)	2014/30/EU	2004/108/EC
Non-automatic weighing instruments (NAWI)	2014/31/EU	2009/23/EC (amended)
Measuring Instruments (MID)	2014/32/EU	2004/22/EC (amended)
Lifts & safety components for Lifts	2014/33/EU	95/16/EC (amended)
Equipment & protective systems for explosive atmospheres (ATEX)	2014/34/EU	94/9/EC (amended)
Low Voltage Directive (LVD)	2014/35/EU	2006/95/EC

New Directives

- The Low Voltage Directive (LVD) 2006/95/EC is one of the oldest Single Market Directives adopted before the "New" or "Global" Approach.
 - © Conformity assessment procedure applied to equipment before placing on the Market
 - Essential Health and Safety Requirements (EHSRs) the equipment must meet either directly or by means of harmonized standards.
- The **Directive 2006/95/EC** was published in the OJEU on December 27, 2006.
 - It entered into force on the 20th day following that of its publication, i.e. on **16 January 2007**.

The old Directive 73/23/EEC was repealed on the same date.

Electrical Safety: Low Voltage Directive (LVD)

№ New Low Voltage Directive 2014/35/EU

On March 29, 2014, the recast of the Low Voltage Directive was published in the EU Official Journal L 96 under number 2014/35/EU.

Compared to the previous version 2006/95/EC, manufacturers and economic operators who place products on the European market face a number of changes.

There is a transitional period until April 20, 2016.

Until then, electrical products may still be placed on the EU market under the old Low Voltage Directive 2006/95/EC.

New Low Voltage Directive

- The Low Voltage Directive covers electrical equipment with a voltage between **50 and 1000 V** for alternating current and between **75 and 1500 V** for direct current.
- Applies to equipment when placed on the market
 - Mew electrical equipment made by a manufacturer established in the Union
 - Electrical equipment, whether new or second-hand, imported from a third country
- Voltage ratings refer to **the voltage of the electrical input or output,** not to voltages that may appear inside the equipment.
- For most electrical equipment, the health aspects of emissions of Electromagnetic Fields are also under the domain of the Low Voltage Directive.

LVD Scope

- Electrical equipment for use in an explosive atmosphere
- Electrical equipment for radiology and medical purposes
- Lectrical parts for goods and passenger lifts
- 🔈 Electricity meters
- ▶ Plugs and socket outlets for domestic use
- Electric fence controllers
- Radio-electrical interference
- Specialized electrical equipment, for use on ships, aircraft or railways, which complies with the safety provisions drawn up by international bodies in which the Member States participate.

Products Not Covered

- ▶ Divided into 5 Chapters, each covering a topic
 - 7 General Provisions
 - 7 Obligations of Economic Operators
 - © Conformity of the Electrical Equipment
 - Union Market Surveillance, control of electrical Equipment Entering the Union Market, and Union Safeguard Procedure
 - Committee, Transitional, and Final Provisions
- ▶ Additional 6 informational annexes

Organization

▶ Defines each economic operator

- **Manufacturer**
- 7 Authorized representative
- Importer
- publication

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Activities

- Making available on the market
- Placing on the market
- Withdrawal
- **g** Recall

Marking by which the manufacturer indicates that the equipment is in conformity

Chapter 1 - Article 2 – New Definitions

- ♠ Any economic operator
 - Who places the equipment on the market under his own trade name or trade mark or
 - Modifies the equipment where compliance may be impacted
- Manufacturer is responsible for the compliance and to issue the EU DoC

Who is the manufacturer?

- **Manufacturers**
 - Requirements for series production
 - Register of complaints
 - Register of non-conforming equipment and recalls
 - 🛪 Inform distributors
- ▼ Technical documentation kept for 10 years by each responsible operator

Chapter 2 – Obligations of Economic Operators

- Articles 6 11 Extended obligations for manufacturers, representatives, importers and distributors to improve traceability of products:
 - 7 Type, batch or serial number or other element of identification
 - Name, registered trade name or trade mark and postal address of manufacturer
 - For imports, name, registered trade name or trade mark and postal address of importer
 - Note that (8), encourages the use of a website address in addition to a postal address

Obligations

Specified requirements on the conformity assessment procedure

- First, apply the harmonized standards which have been published in the OJ
- In case of absence of harmonized standards, safety requirements of IEC standards
- If for the product no IEC standards are available, application of suitable national standards
- Harmonized standards must take into account the United Nations Convention on the right of Persons with Disabilities

- (9); Articles 16 & 17 Removed the requirement of support from notified body
 - Motes that no conformity assessment procedure requires the intervention of a Notified Body
- EU DoC shall be translated into each Member State language where the equipment is placed on the market

- More detailed requirement of market surveillance
- Exchange of information on non-conforming product among Member states
- Compliant equipment which still presents a risk to the health or safety persons, or to domestic animals, or to property must be made to prevent that risk

Chapter 4 – Market Surveillance

- **©** Committee Procedure
 - Festablishes a Committee on Electrical Equipment
- **Repropriet** Penalties
 - **7** Defers to Member States
- **№** Entry into force
 - 7 20 days after publishing
- **L** Transition
 - Allows current Directive to be used until April 20, 2016
- - Directive 2006/95/EC repealed on April 20, 2016

Chapter 5 - Provisions

& Annex I −

Resistant to non-mechanical influences to not endanger persons, domestic animals, and property

Annex II - Equipment outside of the scope

© Custom built evaluation kits destined for professionals to be used solely at research and development facilities for such purposes are now *exempt* from the Low Voltage Directive

Annex

- & Annex III
 - Additional requirements for preparation of technical documentation for "adequate analysis and assessment of the risk(s)"
- Annex VI Correlation Table
 - © Correlates between 2006 and 2014 Directives

- Europa − LVD
- **№** Europa <u>Blue Guide</u>
- UL − Recent Changes
- ⊌ UL <u>Gap Analysis Table</u>
- ▼TUV SÜD The New Low Voltage Directive
- SLG Prüf- und Zertifizierungs GmBh <u>New Low</u> <u>Voltage Directive</u>
- CE Marking Net <u>Eight CE Marking Directives</u> <u>Get New Reference Numbers</u>

Resources