

# Standardisation and PLC

Attempt at classification of standards:

- ◆ Between « product » standards and « network » (=system) standards,
- ◆ Or between International standards and European standards.

➔ (*first approach to be considered*)

- ◆ But, today no standard has been developed yet...

# But, the full landscape

## 1 - Product EMC standard

- At international level: WG 3 of **CISPR / I**
- ◆ To prepare an amendment to **CISPR 22**
- ◆ **Importance** :essential when endorsed in Europe, because this will be the harmonised standard for CE marking

....

and...

## 2 - The « network » standard

- Mandate M 313 from the European Commission (accepted by CENELEC and ETSI)

◆ Work undertaken by the  
JWG CLC/ETSI

## 3 – ETSI

- ETSI PLT

# And.. links with other organisations

- ◆ PLC Forum
- ◆ PUA
- ◆ EURELECTRIC
- ◆ ....

# PLC and CENELEC's TC / SC

- ◆ **TC 205** «Home and Building Electronic Systems (HBES)» and more particularly the **SC 205 A** «Mains communicating systems » with 4 WG.
- ◆ **TC 210** «EMC» real mirror of CISPR
- ◆ And, it is necessary to remain aware of the work actually done in any TC possibly linked to PLC.
  - For instance, any TC dealing with EMC

# Scope of SC 205 A

- ◆ « To prepare harmonized standards for communication systems using low voltage electricity supply lines or the wiring of buildings as a transmission medium and using frequencies above 3 kHz and up to 30 MHz.
- ◆ This includes the allocation of frequency bands for signal transmissions on the mains. »

# The WGs of SC 205A

◆ **WG 02**- test methods and limits for immunity.

◆ **WG 04**- filters and associated components.

◆ **WG 09**- revision of EN 50065-1:1991 (*completed*)

◆ **WG 10**- define standards for high-frequency power-line. The frequency range will be limited below 30 MHz.

# Review of Work Program

## ◆ Ratified, being finalized

**EN 50065-4-6** : Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148.5 kHz – Part 4-6 : Low voltage decoupling filters – Phase coupler

# Review of Work Program

## Vote launched

1. Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148.5 kHz and from 1.6 MHz to 30 MHz - Part 4-7: Portable low voltage decoupling filters - Safety requirements (**prEN 50065 – 4 – 7**).
2. Immunity requirements for power line communication apparatus and systems used in low-voltage installations in the frequency range 1,6 MHz to 30 MHz -- Part 1: Residential, commercial and industrial environment (**prEN 50412 – 1**).

# Review of Work Program

## Approved for Vote

1. Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz -- Part 2-1: Immunity requirements for mains communications equipment and systems operating in the range of frequencies 95 kHz to 148,5 kHz and intended for use in residential, commercial and light industrial environments. (**EN 50065-2-1:2003/prA1:200X**)
2. Signalling on low-voltage electrical installations in the frequency range 1,6 MHz to 30 MHz -- Part Z: Low voltage decoupling filters - Generic specification. (**prEN 50412-Z:200X**)
3. There are also 3 amendments