

Multimedia EMC Standards, CISPR 32 and 35 (a Hursley EMC Services Guide)

Once upon a time, we had products, appliances, tools and gadgets which would perform a simple, single, well-defined function. For thousands of years we humans would provide names for these many simple devices. We had “hammers” (used for knocking nails in walls), “beds” (used for sleeping in) and “refrigerators” (used for keeping our food chilled and fresh).

Many of these items still exist today of course, but then it's also true that many products have evolved to perform much more than a simple, single, well-defined function for us. The manufacturing industry seems to have driven the idea that if their products offer more than one function then it's somehow better for us, we'd perhaps need less space, it could be cheaper, there's less wastage and there's more convenience. So to fulfil our lives we went out and bought these Combination Boilers, Sofa-beds, Microwave/Convention Oven/Grills, TV/Monitors, Mobile Phones with built-in Cameras, etc.



EMC product family standards are normally slow to develop, written in reaction to manufacturing developments, after changes to our environment, time used up by industry Experts to discuss/agree/resolve appropriate protection measures, test methods, etc. We have standards in place for many different types of products and we have generic standards for where a specific standard did not yet exist. These multi-functional products were finding themselves subject to not just one set of EMC standards, but many. The TV/Monitor would need to meet CISPR 13, 20, 22 and 24, maybe more.

In 2003, CISPR set up their Working Groups for dealing with such products with the aim of producing one set of standards for their multi-functional, multimedia operations. It's not until now that these standards have become/are becoming published for use across the World. Internationally we have CISPR 32 and CISPR 35, which are EN 55032 and EN 55035 for Europe, KN32 and KN35 for Korea.

But BEWARE! There is a different mind-set that comes with these standards compared to other product family EMC standards. Due to the reason behind their development and the expectations of their role and purpose, **these standards have a fixation with the functions of products, and are not concerned with the names of products.**



- If it's got a display or audio output function -
- If it's got a data-processing, storage or retrieval function -
- If it's got a data transfer or receiving function -
- If it's got a broadcast reception function -
- If it's got a networking, print or scan function -

It's MULTIMEDIA EQUIPMENT!

A different approach is needed to establish the primary functions of a product, to generate a test plan to properly address those functions and the needs of the standards, to streamline testing such that it does not overburden the manufacturer. Hursley EMC Services are fully able and capable of dealing the multimedia EMC standards. Are you?

If you have any queries or concerns about the above, Hursley EMC Services are offering a one day training programme available on the multimedia EMC standards, provided by someone who has worked within in IEC CISPR Sub-Committee-I on the development of these standards for many years. Contact Julian Jones on jules@hursley-emc.co.uk or call +44 23 8027 1111.