# Technical Files for RoHS Directive 2011/65/EU

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#### Disclaimer

- \* This presentation has nothing to with my current employer and its internal practices
- \* I will try to avoid sharing names and internal practices of my previous companies during my presentations (unless they no longer exist)
  - \* All of the companies I worked for or with were successful companies in their respective fields

# CE Marking

- \* You all are familiar with CE marking
  - \* EMC
  - \* Safety
  - \* Machinery
  - \* IVD, MDD, etc...
- \* Now RoHS 2 is a CE marking directive
  - \* Requirements are fairly different

# Types of EU Legislative Acts

#### \* EU is comprised of 28 EU member countries

There are several countries those are not the member but comply with EU requirements e.g. Turkey

#### \* Legislative acts:

#### \* Proclamation:

\* A formal announcement made by the crown e.g. Declaration of War, State Emergency etc.

#### \* Regulation:

 Directly applicable in all member states without the need for legislation in the nation

#### \* Directive:

- \* Are not self-executing. The member states are left with leeway to decide which rules are to be adopted
- \* Directives, unlike regulations, need to be transposed into national laws before adoption in principle.

# Product Groups Affected by CE Marking Directives

- \* Active implantable medical devices
- \* Appliances burning gaseous fuels
- Cableway installations designed to carry persons
- Eco-design of energy related products
- \* Electromagnetic compatibility
- \* Equipment and protective systems intended for use potentially explosive atmospheres
- Explosives for civil uses
- \* Hot-water boilers
- \* In vitro diagnostic medical devices
- \* Lifts
- \* Low voltage
- \* Machinery

- Measuring Instruments
- \* Medical devices
- \* Noise emission in the environment
- Non-automatic weighing instruments
- Personal protective equipment
- \* Pressure equipment
- \* Pyrotechnics
- Radio and telecommunications terminal equipment
- Recreational craft
- Safety of toys
- Simple pressure vessels
- \* Restriction of the use of certain hazardous substances RoHS 2

#### RoHS: EU Directive 2011/65/EU

- \* Free down load using Yahoo or Google search function
- \* The directive references CE marking as per
  - \* EU decision 768/2008, Annex II, Module A
    - \* But that was not clear enough
  - \* EN50581 guidance document was released to clarify Technical Files requirements related to RoHS directive 2011/65/EU

#### Who can request for Technical File?

- \* Regulatory Authority also known as Competent Authority (CA)
  - In member country has this government agency responsible for transposition of directive into national laws and enforcement
- \* Port of Entry customs
- \* Customer
  - \* Legally our customer (Importer) e.g. dealer, distributor, retailer, is responsible to place (buy) compliant products

### Steps for Technical File for RoHS

- \* It can be a separate Technical file for RoHS compliance purposes, or
- \* Can be made a part of the existing technical file

## Why Separate File?

- \* My professional recommendation is to keep it separate:
  - RoHS directive does not require audit by notified bodies
    - \* It is regulated/enforced by the Competent Authorities (CA) of the respective member countries
  - \* You do not want to include notified bodies when they come to audit for other CE marking directive compliance audit
    - Scope would be humongous

## Technical file key requirements

- Declaration of Conformity
- General Description of the product
- \* Controls related to RoHS
  - \* Brief Description with reference procedures
    - \* Engineering, Procurement, Incoming, Production, Shipping, Field Service (Repair and Refurbishing), Auditing, Corrective and Preventive actions related to non-compliance (notification, recall, corrections, stop ship etc.)
- Compliance Assessment procedure
  - Based on parts assessments, testing, audits, procedures, repositories

#### **EC Declaration of Conformity**

- 1. No ... (unique identification of the product):
- 2. Name and address of the manufacturer or his authorized representative:
- \* 3. This declaration of conformity is issued under the sole responsibility of the manufacturer (or installer):
- 4. Object of the declaration (identification of product allowing traceability. It may include a photograph, where appropriate):
- \* 6. References to the relevant harmonised standards used or references to the specifications in relation to which conformity is declared:
- \* 7. Where applicable, the notified body ... (name, number) ... performed ... (description of intervention) ... and issued the certificate: ...
- \* 8. Additional information:
- \* Signed for and on behalf of: ......
- \* (place and date of issue):
- \* (name, function) (signature):

### Compliance Assessment

- Objective evidence of RoHS compliance of every part that is
  - Integral and essential part of the system
    - \* Electrical, Electronic, Mechanical, Plastics, Cables, Labels, Paint, Ink, ... etc.
  - \* Recommended Objective evidences:
    - \* Certificate of compliance from the Manufacturer (Minimum Required)
      - \* Letter Head, signatures, date, exemptions, etc.
    - \* Materials Declaration (e.g. concentration of all RoHS substances; High Level or at Homogenous Level
      - \* Industry is heading fro full declaration
    - \* Test/Analytical Data
- Most Importantly declaration should be trustworthy
  - \* You are responsible as the producer: Consider audits, Testing

### EN50581

#### **Proposed Title:**

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

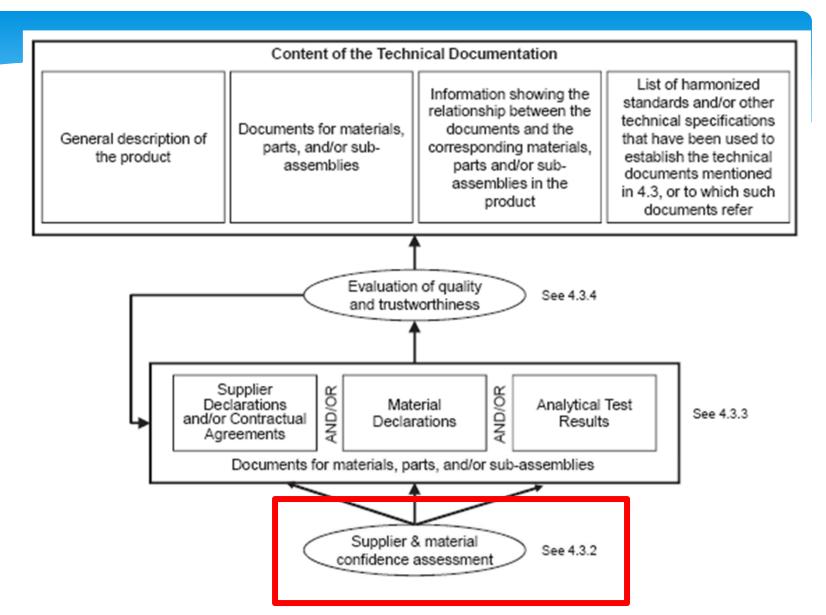


Figure 1 — Process followed by the manufacturer to create the technical documentation

### Technical file key requirements

- \* Controls related to RoHC

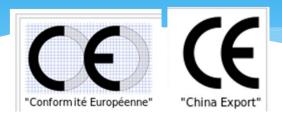
  \* Brief Description with reference procedures

  \* Angineering, Procurement In Carried Service (To Courement In Carried Service (To Coureme furbishing), Auditing, Corrective s related to non-compliance corrections, stop ship etc.)
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#### **Additional Comments**

- \* Technical file is required from the enforcement date
  - \* It is OK to have it ready as soon as possible but legally required on or after the enforcement date
  - \* You can ship a RoHS compliant product before the enforcement date
    - \* But there is no legal requirement for Technical file
- \* It must be retained for a minimum of 10 years
  - \* From the date product is placed on the market

#### **Additional Comments**



- \* CE stands for
  - Communauté Européenne (European Community)
  - Conformité Européenne (European Conformity)
  - \* CE Marking is like an passport symbol of free marketability in the EU member countries
    - Product must be compliant to fully or partially of the all directive as applicable

# Questions