XP Power

RoHS Statement

European Union RoHS I & II Directive
The RoHS (I) – Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (EEE) – directive (2002/95/EC) has applied to certain categories of EEE since July 1st 2006. The new revised RoHS II directive (2011/65/EU) will replace RoHS I on January 2nd 2013.

RoHS I Directive (2002/95/EC)
The directive specifies the maximum concentrations of lead, and of five other hazardous substances, that can be present in products that include electronic sub-assemblies and systems. The scope of the directive applies to EEE that is dependent on electric or electromagnetic fields to work properly.

The substances to which the RoHS I (and RoHS II) directive applies are (including the maximum concentration values):

- Lead (Pb) – 0.1%
- Mercury (Hg) – 0.1%
- Cadmium (Cd) – 0.01%
- Hexavalent chromium (Cr(VI)) – 0.1%
- Polybrominated biphenyls (PBB) – 0.1%
- Polybrominates diphenyl ethers (PBDE) – 0.1%

The maximum concentration values listed above are 'by weight in homogeneous materials'. A homogeneous material cannot be mechanically broken down (by cutting, grinding, crushing etc) into different materials – examples would be plastic, ceramic, glass, metal etc. This definition does not relate to a percentage of the equipment mass. It doesn't even necessarily refer to a component. For example a semiconductor consists of many homogeneous materials. Its lead frame, gold bonding wires and plastic case must each individually comply with the requirements of the Directive.

The 8 categories of product to which the RoHS I directive scope applies has been taken from the Waste Electrical and Electronic Equipment (WEEE) Directive. These are:

1. Large household appliances
2. Small household appliances
3. IT and telecommunications equipment
4. Consumer equipment
5. Lighting equipment (including light bulbs and luminaries in households)
6. Electrical and electronic tools (except large scale stationary industrial tools)
7. Toys, leisure and sports equipment
10. Automatic dispensers

Categories 8 (medical devices) and 9 (monitoring and control instruments) will be included in the scope of RoHS II discussed later.

Under the RoHS I directive 'producers' of equipment are responsible for ensuring that their products do not contain the six restricted substances. A 'producer' is defined as any person/organisation who:
i. manufactures and sells electrical and electronic equipment under their own brand;
ii. resells under their own brand equipment produced by other suppliers; or
iii. imports or exports electrical and electronic equipment on a professional basis into a member state.

A list of exemptions is also included in an annex of the directive. These exemptions are specific to an application, subject to change and may include an expiry date. There are no exemptions that affect XP Power products as a whole, but some components within the product may have an exemption.

Under RoHS I there was no specific requirement on how products will be identified as RoHS Compliant'. Many producers adopted their own logos with XP using the following logos on our standard product where applicable:

 Lead free logo (RoHS 5 of 6)

 RoHS compliant logo (RoHS 6 of 6)

RoHS II Directive (2011/65/EU)
The new revised RoHS II directive (2011/65/EU) will replace RoHS I on January 2nd 2013. The main changes from the RoHS I directive are:

- Scope and scope exclusions
- Definition of EEE
- Restricted substances
- Exemption procedure
- Conformity assessment and CE marking – "Goods Package"

Scope and scope exclusions
The RoHS II directive will have an open scope with a list of exclusions. So in addition to the categories listed above, the following new categories will be included and phased in as indicated:

8. Medical devices (phased from 2014)
9. Monitoring and control instruments including industrial (phased from 2014)
11. All other EEE not covered by categories 1-10, unless specially excluded (from 2019)

The following products are excluded from the scope:

- Military equipment
- Equipment designed for use in space
- Equipment designed and installed as part of another type of equipment not within scope
- Large-scale stationary industrial tools (LSIT)
- Large-scale fixed installations
- Means of transport
- Non-road mobile machinery for professional use
- Active implantable medical devices
- Photovoltaic panels
- R&D equipment only available on a business to business basis

The change to the scope of the directive does not have any impact on our current RoHS compliant product.

Definition of EEE
Previously the RoHS scope applied to EEE that is dependent on electric or electromagnetic fields to work properly. Under RoHS II this now applies to EEE that is dependent on electric or electromagnetic fields to fulfil at least one of its intended functions. An often quoted example of how this definition change now impacts equipment is that of the talking toy teddy bear – under RoHS I the talking teddy bear falls outside the definition of EEE and therefore outside of the scope, but under RoHS II the talking teddy bear falls within the scope. The change to the definition of EEE does not have any impact on current RoHS compliant product.

Restricted substances
While the list of restricted substances remains the same as RoHS I, four hazardous substances (BBP, DBP, DEHP & HBCDD) have been identified for priority assessment and possible future ban. There is no immediate impact on our product, but as and when new substance bans come into place, we will ensure that all the required compliance activities are completed in advance of any restrictions.

Exemption Procedure
A new annex (VI) has exemptions specific to the new product categories 8 and 9 (medical devices and monitoring and control instruments). The 4-year review has been replaced by automatic expiry of all exemptions unless they are renewed. The automatic expiry period has a maximum of five years for categories 1-7 and 10 and up to seven years for categories 8, 9 and 11. Applications for exemption renewal must be made at least 18 months before expiry.

This exemption renewal will be driven by manufacturers of products and components and should have no impact on XP as none of our products are covered by exemptions.

Conformity Assessment and CE Marking
RoHS II is a CE marking directive and from 2nd January 2013 and all product within scope must meet the following requirements:

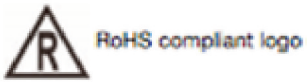
- CE mark finished products
- Declarations of Conformity (D of C) to include RoHS directive
- Technical files to be retained for 10 years

This new requirement will affect manufacturers, importers and distributors and will mean that, the whole of the products EU supply chain will have a legal responsibility for compliance.

As a manufacturer XP has a responsibility to complete the following activities for all products within scope:

- Compile technical documentation
- Prepare Declarations of Conformity
- CE mark the products
- Mark products for traceability
- Retain technical documentation for 10 years
- Work with national authorities to demonstrate compliance or help to ensure compliance
- Keep a register on non-conforming EEE

XP Power's RoHS Policy
RoHS I Directive (2002/95/EC):
XP Power products placed on the market from July 1st 2006, and within scope, will be compliant to the RoHS I Directive (2011/65/EC). XP Power will be marking RoHS compliant products and/or packaging as follows:



RoHS II Directive (2011/65/EU):
XP Power products placed on the market from January 2nd 2013, and within scope, will be compliant to the RoHS II Directive (2011/65/EU). XP Power will be marking RoHS compliant products and/or packaging with a CE mark. Declarations of Conformity will be available for products.

The 'R' in the triangle logo used for RoHS I Directive will no longer be used for new product but may appear on products released before January 2nd 2013.

Signed:

Duncan Penny
Chief Executive
Date: 24th October 2016