

How is the electronics industry changing in terms of technology, operations, business models, etc?

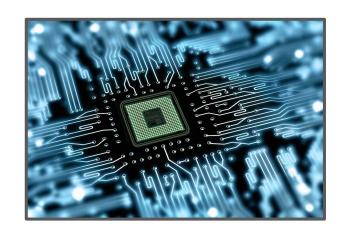
The Electronics Industry

Market Facts

 Development of the sector over the past 50 years has entailed continuous change, continuous innovation, continuous challenge!

 The global market for electronic components will grow at a compound annual growth rate (CAGR) of almost 5% between 2020 and 2025

• This market is expected to reach a value of somewhere in the region of 500,000 million US dollars in the next five years



The European Commission recently published the final report on the evaluation of the Restriction of Hazardous Substances (RoHS) Directive in April, so what are the important points that manufacturers/suppliers/retailers need to know about this Directive?

RoHS Evaluation Report

Prepared for the EC by consultants Ecorys & Ramboll

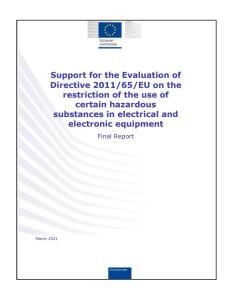
- **1. Effectiveness**: Did the directive achieve its objectives? Yes, the directive did achieve a 67 percent reduction in the levels of hazardous substances used in the manufacture of EEE since 2002.
- **Relevance**: Were the objectives in line with the needs (protection of human health and environment) of the European Union? Yes, but the directive needs to be more flexible in its response to new issues.
- **3. Coherence**: How does RoHS fit with other EU legislation (REACH, WEEE, Ecodesign, POPs)? RoHS was judged to contribute well to the circular economy and the functioning of the single market.
- **4. Efficiency**: Are the costs justified against the benefits? Yes, stakeholders agreed that the environmental and health benefits outweighed the compliance and enforcement costs.
- **5. EU Added Value**: Would the same outcome have been achieved without harmonized action? No, individual member state laws would have disrupted business activities.

RoHS Evaluation

Conclusions

"The directive has been **successful in reaching the objective** of reducing hazardous substances in EEE in the EU. The reduction of hazardous substances has contributed to the protection of human health and the environment, at different stages of the value chain (production, consumption and disposal). **It has also contributed to the harmonisation and functioning of the internal market**, by setting clear standards and providing a level playing field for manufacturers of EEE.

... A few areas of **possible improvement** have been **identified** . . ."



Source: https://op.europa.eu/en/publication-detail/-/publication/5b807311-9d93-11eb-b85c-01aa75ed71a1/language-en#document-info

RoHS 3

Potential Content of the Proposals?

- Additional Substances: Going beyond the current RoHS 10? Consultation exercises undertaken in 2018 and 2019, and a workshop held in April 2020. Seven new substances proposed, but only two recommended in the final report: TBBP-A and MCCPs.
- 2. **Scope**: Exclusions to be reconsidered? LSIT, LSFI, solar panels, etc.
- 3. **Form**: Directive or Regulation? Interface with other legislation, e.g. REACH? Merge with other legislation?
- 4. **Review of the Technical Exemption Process**: New exemption methodology published by the EC in **June 2020**. Address issues around timelines for approvals/expiries/amendments? Synchronize timelines?

How can companies comply with regulations about Electronics and Electrical Waste (e-waste)?

The Waste Electrical & Electronic Equipment (WEEE) Directive

Directive 2012/19/EU, as amended

- Unlike RoHS, WEEE is a 'minimum requirements' Directive all EU-27 Member States must fully comply with its requirements **but** can impose further obligations
- WEEE introduced 'producer responsibility' those that place products and equipment on the market should take full responsibility for the ways in which those products are disposed of and/or recycled at the end-of-life stage.
- Subsidiary aim to promote the circular economy.
- Companies must: -
 - join a Producer or National Compliance Scheme;
 - put a 'crossed-out wheeled bin' symbol on the products;
 - make information about recycling & disposal options available at end-of-life stage; and
 - maintain relevant documentation.

How can retailers and distributors minimize

counterfeiting & ensure the products they buy from their suppliers are what they claim to be?

Question 4

The Counterfeiting of Goods

A global problem

- OECD estimates that trade in counterfeit goods accounts for over 5% of total world trade.
- Parts, components, and sub-assemblies as well as the final goods can be counterfeit.
- Suggested approach to fighting this: -
 - put IP in place;
 - scrutinise documentation from suppliers;
 - monitor suppliers closely;
 - use technology (unique marking, etc); and
 - have response plans in place.

What is the role of supply chain data management?

Supply Chain Data Management

Essential for all Manufacturing Sectors

- Supply chains can run very deep/many tiers.
- Management of the data from those supply chains is a tremendous challenge taking key employees away from their 'day job'.
- 88% of companies expect to spend more time & money on compliance over the next three years than ever before.
- Many now look outside their organisations for specialist support.
- Global product legislation growing and constantly changing.
- The best supply chain data management partners monitor developments & have secure supplier and component part data libraries.
- Focus increasingly turning to ESG (Environmental, Social & corporate Governance) issues and the need for additional data.





THANK YOU

