IBM

Speed time to market with environmentally compliant products.

Highlights

- Help ensure continuity of sales in the European Union by collecting data to assess products' compliance with new regulations related to hazardous substances

- Streamline processes used to verify compliance by promoting collaboration and enabling integrated work environments

- Enhance product information and supply chain management with a rich, multifunctional product catalog built on compliance-related parameters

- Get environmentally friendly products to market faster by producing industry-standard reports and declarations

Prepare to meet fast-closing deadlines for compliance with new environmental regulations

Environmental issues have broad implications for society. As a result, regulators around the world are intimately aware of the need to reduce damage to the environment caused by the short life cycles of electrical and electronics products and components that are frequently discarded and replaced. The need for action is pressing, because products like cell phones, PCs and household appliances often contain unacceptably high levels of environmentally unfriendly substances such as lead, mercury, cadmium, hexavalent chromium and polybrominated biphenyls (PBBs).

To protect human health and the global environment, the European Union's

Restriction of Hazardous Substances (RoHS) for electronics directive restricts the amount of certain hazardous materials that can be included in new electrical and electronic equipment placed on the European Union (EU) market starting in July 2006. While electronics companies know the deadline is close at hand, many global original equipment manufacturers (OEMs) are not fully prepared.

Failure to comply by the deadline puts OEMs at risk of facing fines, product quarantines, recalls and additional transportation costs — not to mention massive reworking, legal action, lost sales and lowered productivity. OEMs are also aware of the potential negative impact to their image and brands if they don't comply. And not being prepared by the deadline could undermine ongoing environmental and "green" supply chain commitments.

Compliance is a challenge because environmental regulations impact design, procurement, manufacturing and supply chain processes for potentially thousands of players, from component manufacturers to retailers. In a globally disparate supply chain that includes large and small participants from many different countries, certifying the compliance of every component in a product is a daunting task.

Complicating the issue, some individual member states of the EU and OEMs will impose even stricter requirements than those established by the base guidelines. In addition, other countries like Japan and China — plus individual states within the United States of America, such as California — are implementing similar regulations. To stay a step ahead of your competitors and speed time to market for new, environmentally friendly products, turn to the Restriction of Hazardous Substances solution.

Leverage IBM's electronics industry expertise to transform your compliance efforts

IBM solutions for the electronics industry bring together the extensive IBM portfolio of hardware, software and high-value services — and its wide network of Business Partners — to address the most prevalent challenges for clients in the industry. IBM solutions and electronics industry experience

help each client accelerate its progress in becoming an On Demand Business — so it can respond with flexibility and speed to virtually any customer demand, market opportunity or external threat.

Creating business processes with a *service orientation* has emerged as the best way to achieve that flexibility and speed, as well as agility and resilience. Service orientation takes everyday business applications and breaks them into individual business tasks, called services. These services can then be shared with other departments within your company, integrated with your trading partners and exposed directly to customers to create new or modified business processes. As a result, you have the flexibility to easily respond to changing market requirements. And because these services can tie together existing enterprise resource planning (ERP), human resources (HR), customer relationship management (CRM) and supply chain systems from leading vendors such as SAP, Oracle, Siebel and JD Edwards, there is no "rip and replace" required. Furthermore, these services can be used across multiple processes — rapidly, easily and consistently — to help drive improved time to value and reduced costs.

IBM software, a key building block of the IBM solutions for the electronics

industry, is vital to employing a service orientation strategy. It helps our clients achieve business flexibility by enabling them to model, assemble, deploy and manage business processes for today's on demand business environment.

With the RoHS solution — part of IBM software for electronics value chain management — you can develop a solution to help maximize compliance of individual suppliers, products and components, while using special tools to report appropriate information to regulators. The RoHS solution addresses a full range of end-to-end functions required for compliance.

Collect ongoing material composition data from suppliers to assess compliance

Your ability to assess compliance with the new EU directive is only as good as the techniques you use to gather information from global suppliers and third-party material testing services. Component suppliers and third-party testers vary in their levels of IT sophistication and ability to utilize business-to-business (B2B) portals. Many small suppliers, for example, lack the budgets and infrastructures required to develop a robust B2B solution. While larger suppliers may adapt readily to a new B2B process for collecting material composition data, smaller ones may find it overwhelming to incorporate a new process.

The RoHS solution leverages IBM WebSphere® Partner Gateway and RosettaNet standards to help you build a single solution that fits all types of users — uniting a variety of enterprise standards, protocols and transportation methods for your B2B gateway. Integration with back-end systems and processes will be the same, regardless of which partner is involved and how they interact with you.

Using WebSphere Partner Gateway software, you can utilize open-standards technology from the nonprofit consortium RosettaNet to build a B2B gateway with the latest, customized RosettaNet Trading Partner Implementation Requirements (TPIR) Partner Interface Process schemas (PIPs). By using PIPs designed to accommodate material composition information, you can more easily manage components in the product you're creating.

The solution extends RosettaNet connectivity to Web interaction — so even smaller suppliers without a B2B hub can use a basic Web browser, Adobe reader software and e-mail to participate. You benefit from a single integration strategy for both large and small suppliers — and can assess compliance of suppliers from around the world.

Validate supplier data to quickly identify noncompliant products

When trying to determine whether products and components comply with regulations, work processes can become long and complex. For example, some suppliers may send incomplete information or data that is not semantically consistent with what you requested. You could easily miss these errors if you relied on manual techniques to verify the information.

To help you streamline work processes involved in verifying compliance, the RoHS solution includes IBM WebSphere Portal software. This component combines people and applications at a process level so employees can be more productive and processes can execute faster. Through personalization technology, portal users get a unique experience based on their roles and relevant business rules. Users are presented with all the tasks they need to complete, along with all the applications and information they need to make an informed decision or complete the task at hand.

Enrich product information and improve supply chain management

Without an integrated, customized solution, many OEMs rely on product information residing in multiple back-end systems. These systems often don't link with product compliance information. Such an approach not only places undue burden on staff, it also leaves OEMs vulnerable to fines, recalls and the like.

"WEEE and RoHS risks are being managed too low in the organization. Material revenue, cost, and brand implications are at risk."

— Eric Karofsky, AMR Research, "RoHS and WEEE: It's an Executive Problem," January 14, 2005

Rather than trying to pull part material composition information from disparate sources and make time-consuming, manual connections with compliance requirements, the RoHS solution includes IBM WebSphere Product Center software. Using this software, you can build a product information management catalog based on an accurate, consistent central repository that includes compliance parameters.

Once you receive material composition information from suppliers and third-party testers, the data is transformed, enriched and stored in your product information database. From there, you can retrieve all levels of compliance information details across different dimensions — such as for specific products or product categories, time of manufacture or channel. You can also utilize advanced search, import and export functions to help you manage compliance data.

Speed time to market for new "green" products by releasing timely, industry-standard reports

Clearly, before placing new products on the EU market after July 2006, you must report appropriate information to regulators to prove that your products comply with the new directive. But first, you have to determine what information each entity needs and in what format it must be created. Next, you'll need to extract appropriate information from your product information management database and create output documents. You'll also need to version and track delivery of documents, then distribute them to recipients in an appropriate format.

You'll need to be able to quickly create, version, archive and deliver timely compliance reports a customer or authority requests about any product — located anywhere in the world. Fortunately, the RoHS solution includes IBM DB2® Content Manager software as a part of the WebSphere Portal component. This software helps you send the right information to the right entities at the right time — leveraging industry-standard data formats and transport mechanisms.

Business Partners help further leverage IBM software capabilities

The RoHS solution is complemented by applications and services provided by our IBM Business Partners — including the hundreds of Business Partners specializing in service orientation — helping to make this solution a world-class foundation for successful product compliance for RoHS. Working in partnership with our clients, IBM and IBM Business Partners can help meet the needs of today's electronics industry organizations.

For more information

IBM is unique in its combination of unmatched electronics industry experience, deep service orientation skills, unparalleled Business Partner network, and software and technology product excellence — and as a result is a clear leader in service orientation. We can help you get started with service orientation, whether for the enterprise, a departmental initiative or a single project. IBM is the ideal partner for the electronics industry organizations seeking to meet the challenges of enhancing customer loyalty and brand equity to combat customer defection; managing the increased complexity of the enterprise, including processes that extend to collaborations with business partners; and growing businesses in new and innovative ways.

To learn more about the RoHS solution and other electronics industry–specific offerings, contact your IBM representative or IBM Business Partner, or visit
ibm.com/software/industries/electronics

G507-1395-00