

# Establishing a sophisticated system for the entire group to manage chemical substances contained in our products utilizing OKI's cutting-edge technology



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General Manager  
Global Environment Division

Now that people have become more and more conscious of environmental protection and safety, it is very likely that they will be more interested in chemical substances used in the products they purchase. Chemical substances have to be strictly controlled and managed throughout production processes. Furthermore, manufacturers must consolidate information on all chemical substances to be used, properly manage such information, comply with different laws and regulations, and promptly meet requests for information disclosure. The OKI Group developed a system to manage information on chemical substances contained in products before other manufacturers started addressing this issue. We will continue to make every effort to meet all applicable laws and regulations utilizing our advanced information technology.

### Pioneering the Management of Chemical Substances in Products

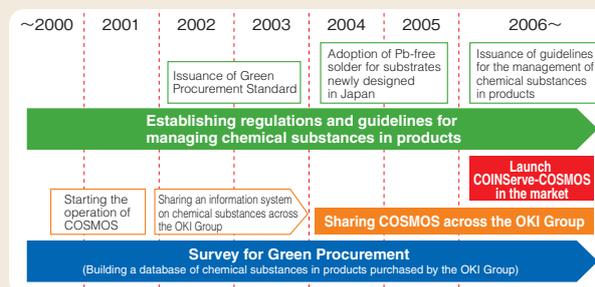
Various laws and regulations concerning chemical substances, such as EU's RoHS Directive and REACH\*, have recently been enacted across the world. OKI started addressing the management of chemical substances in products and the elimination of toxic chemical substances as one of its important challenges before the establishment of these regulations. In 1995, it established a production assessment system that was followed by a survey for green procurement in the late nineties. OKI completed the survey of its 107 suppliers (that offered approximately 20,000 components and materials) by 1999.

\*REACH is a EU regulation to be applied to all companies manufacturing or importing materials or articles (products, components, molded pieces, and so on) in the European Union. The regulation requires companies to evaluate the safety and risk of chemical substances contained in their products, and register them with the European Chemical Agency.

### Establishing a System to Manage Information on Chemical Substances in Products

"How should we utilize the data obtained from the survey for green procurement?" The OKI Group's answer to this question was to establish a system to manage information on chemical substances in products (called COSMOS within the group) by combining a database of chemical substances and its product design systems. COSMOS was designed to automatically calculate the amount of chemical substances in each product and verify conformity with customer requests and applicable regulations, utilizing OKI's advanced network technology. OKI started implementing the system in 2000, and collected data on 40,000 components

● The OKI Group's Efforts for the Management of Chemical Substances



and materials offered by 250 suppliers at the end of the same year. In 2004, the system was implemented across the OKI Group. The results of each verification can be output as a report in the industry standard format.

### Enhancing the Management of Chemical Substances to Meet Increasingly Strict Regulations

The REACH regulation, put into effect in June 2007, places responsibility on manufacturers of articles for evaluating the safety of their products. It means that the traceability of chemical substances in products has become increasingly important. The Japanese manufacturing industry has also become very active in following this trend by establishing some organizations to promote the proper management of products and articles containing chemical substances. In order to address this issue, the OKI Group has implemented three measures: 1) the efficiency of management procedures; 2) the improvement of accuracy of chemical substance information and 3) the establishment of management operation

### The Efficiency of Management Procedures

In order to meet various regulations and requirements concerning chemical substances in products, the OKI Group has built and implemented a system to manage them. The system stipulates all detailed processes to be carried out from the designing phase to the manufacturing phase.

The group has also defined the Green Procurement Standard to check up on its suppliers, their systems and efforts for environmental protection, and the chemical substances contained in their products, in order to further reflect the requirements from customers and fully meet the demands of applicable laws and regulations.

Green Procurement Standard  
<http://www.oki.com/en/eco/greenprocure/>



## The Improvement of Accuracy of Chemical Substance Information

As regulations concerning chemical substances have become more sophisticated, information on such substances we have to deal with has increased and become more complex. In order to consolidate and manage such information properly, OKI developed a new system called COSMOS-M and started implementing the system across the group in June 2008.

While the previous generation of COSMOS handled information of the design phase only, COSMOS-M enables us to consolidate and manage information of the design, purchase, manufacture and shipment phases. It ensures the traceability of chemical substances in products and allows the prompt provision of information to customers.

## The Establishment of Management Operation

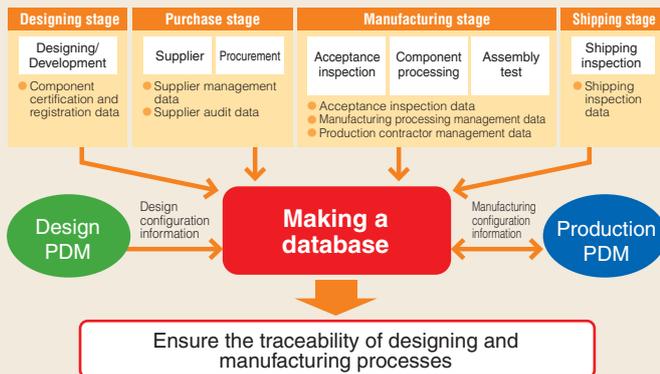
In order to properly and effectively manage chemical substances in products, understanding and cooperation from the people directly involved in its processes -- those working in design, manufacturing and other related business units -- are indispensable. Thus, OKI holds briefing sessions on regulations concerning chemical substances, industrial guidelines, procedures of the OKI Group's system to manage chemical substances, the operation of COSMOS-M, and other related topics at the member companies of the group inside and outside Japan.

The OKI Group has also introduced a new in-house recognition system that addresses conformity, and conducted internal audits into the management of chemical substances of main designing and manufacturing sites in Japan and other countries. In this way, the group constantly checks that member companies are meeting its standards.

The OKI Group plans to roll out the implementation of its system to manage

chemical substances in products to not only its member companies but also to its suppliers so that it can create products that fully meet global regulations dealing with chemical substances.

● Management of Information on Chemical Substances Using IT Systems



## Employee Perspective



**Tomohisa Takanuki**

Environmental Division  
OKI Engineering

As the OKI Group has strengthened its component recognition standards, it has conducted chemical analysis of components when they are registered. The Environmental Division of OKI Engineering is responsible for such analysis.

We test all products and components in terms of chemical substances subject to applicable regulations. These include small parts like chip resistors, components like circuit substrates, and finished products. The levels of chemical substances are analyzed using various instruments such as fluorescent X-ray analyzers and ICP mass spectrographs.

We will continue to offer accurate and reliable analysis services to meet increasingly sophisticated regulations concerning chemical substances contained in products.

## Column

### COINServe-COSMOS – Commercialization of OKI's System to Manage Information on Chemical Substances

When OKI unveiled COSMOS, its system to manage information on chemical substances in products, there were a great number of inquiries from outside companies about the availability of the system. In order to meet their requests, OKI developed COINServe-COSMOS, the commercialized version of COSMOS. This product features the aggregation and management of information on chemical substances in products, the automatic generation of reporting formats, the assessment of conformity with applicable laws and regulations, and

information search. OKI is currently localizing the product in different languages in preparation for a global market launch.

It is not easy to properly manage chemical substances in products to meet increasingly sophisticated domestic and global laws and regulations. Based on the system OKI uses everyday for updating and managing information on chemical substances, COINServe-COSMOS is highly regarded for its versatility and flexibility.