Eco Products Development

Based on the lifecycle concept, Anritsu is promoting environmental efforts across the product lifecycle, from product design, parts procurement and manufacturing to shipment, customer use and recycling. To accelerate the provision of environmentally conscious products as a pillar of environmental management, Anritsu is actively pursuing efforts whereby it utilizes its own technologies to comply with environmental regulations around the world and conducts high-quality product assessment from the early design stage of every product’s development.

Complying with Product Environmental Regulations Worldwide

The European Union (EU) enacted the WEEE Directive in 2005, the RoHS Directive in 2006, the REACH regulations in 2007 and the ErP Directive in 2009. Environmental regulation of products centered on the EU has been expanding throughout the world. Moreover, product environmental regulations now require prompt response. Communication, information sharing and the unified response of Group companies outside Japan are facilitated by the Global Environment Management Meeting, for example.

Global Product Assessment Implementation Guidelines

The development of environmentally conscious products has been conducted separately as product assessment in Anritsu Group companies in Japan and as DfE (Design for Environment) in Anritsu Company (U.S.A.). Anritsu established global product assessment standards and global product assessment implementation guidelines to integrate these methods so that Anritsu Group companies could develop environmentally conscious products within a unified, global standard in 2008. In fiscal 2012, we responded to environmental regulations and customer requirements by revising the product assessment criteria for the Anritsu Group in Japan.

Operational Procedure

Global product assessment (target setting, design review, and evaluations) is incorporated into the product development process (including target setting, test production and evaluation) prior to commercialization. To ensure objective and responsible product assessment, Anritsu conducts third-party evaluation by the Quality Management Department and other entities, and initiates follow-up actions if targets have not been achieved.

Evaluation Items

Evaluation items in the global product assessment cover basic factors such as improvements in volume, mass and power consumption against a reference product. Additional items for evaluation include resource savings and the reduction of harmful substances and overall environmental impact throughout production, physical distribution, use and disposal.
### Eco Product Program

**Environmentally Conscious Products**
Anritsu Group certifies the Excellent Eco Product and Eco Product as environmentally conscious products based on the results of global product assessment.

- **Excellent Eco Product**: Product that meets Excellent Eco Product requirements
- **Eco Product**: Product that meets Eco Product requirements
- **Assessed Product**: Product that meets Assessed Product requirements

**Major Environmentally Conscious Criteria for Excellent Eco Products**
- Top industry ranking for environmentally conscious properties
- Environmental information ready for disclosure
- CO₂ emission evaluated by Life Cycle Assessment (LCA)
- Environmental management system in place at the relevant business entity and main production site

In the Excellent Eco Product, environmental information on the mark and the product is described in parallel in the catalog etc.

### Saving Space and Electricity by Measuring Four Test Modules Simultaneously

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The universal wireless test set MT8870A is a measuring instrument developed specifically for mass manufacturing communication modules. It can accommodate up to four transmitter/receiver test modules, enabling the simultaneous measurement of four test devices, such as mobile phones, smartphones and modules assembled into phones. By doing this we contribute to raising the productivity of terminal manufacturers.

There is demand from customers who want to measure as many terminals as possible within a short span of time. We therefore developed a product that is capable of simultaneously measuring four test devices packed into the same size unit as our conventional products, which required significant downsizing. We were able to reduce the number of circuits by limiting the functionality of the product to production-line adjustments and mobile terminal inspection. We also managed to significantly reduce the number of parts and power consumption by using the latest FPGA to integrate the digital circuits. As a result, we reduced volume by 50%, mass by 50% and power consumption by 60% compared to conventional products.
Excellent Eco-Products Recognized in Fiscal 2012

The KLS5421A Solder Paste Inspector is installed in the latter portion of cream solder printers on the mounting line for electronic components. The system conducts pass-or-fail inspection by quantitatively measuring aspects of the cream solder on printed circuit boards (height, volume and area). It offers highly accurate measurement by spot-irradiating targets using laser beams from two angles to scan the printed cream solder while accurately reproducing even minute solder shapes as a 3D profile.

To convert it into an environmentally conscious product, we worked to streamline the assembly process by reducing excess parts and maintaining a simple structure while also cutting costs. Concrete actions included integrating multiple circuit boards, reducing the length of excess cable after reviewing parts configuration and cable wiring, optimizing structural parts by using thinner sheets and simplifying the shape of parts while also satisfying strength requirements, and using fewer parts to reduce weight and size. This enabled us to reduce mass by 6%, volume by 46% and power consumption by 11% compared with conventional products. Moreover, a more efficient use of space made it possible to extend the measurable size of the circuit boards by 50 millimeters in length and width within the same-sized housing.

Promotion of Supply Chain Management

The provision of environmentally conscious products requires the use of parts and materials that reduce environmental impact. Within the framework of its Green Procurement Guidelines, Anritsu is working on green procurement to preferentially procure environmentally conscious parts and materials across the company.

Green Procurement

Anritsu undertakes green procurement in accordance with its Green Procurement Guidelines established in June 1999 to promote the provision of environmentally conscious products by our suppliers. Since Anritsu Corporation's environmental partner company certification system was launched in 2001, the company has been evaluating the status of Anritsu suppliers' environmental management systems (EMS) and product assessment procedures in order to procure environmentally conscious products from greener suppliers and to encourage environmental activities in our supply chain.

In fiscal 2009, we incorporated into the system a means for assessing the management status of chemical substances in products to strengthen and improve the efficiency of supplier evaluation.

In fiscal 2011, we introduced the concept of preserving biodiversity to our activities and began implementing initiatives to deepen supplier understanding of biodiversity preservation.

Management of Chemical Substances Contained in Products

Ensuring no harmful substances are in our products requires proper and continuing chemical substance management by suppliers and companies further upstream. To this end, the Anritsu Group in Japan has been visiting domestic and overseas suppliers since fiscal 2006 to review their systems for controlling chemical substances.

In fiscal 2012, we strengthened our incoming inspection system and revised our method for assessing suppliers to enhance efficiency.