



NTT Communications Guidelines for Green Procurement

Second Edition

January 2006

Contents

Main

1	OVERVIEW	3
2	SCOPE	3
3	DEFINITIONS	3
3.1	TERMS.....	3
4	GUIDELINES	3
4.1	SUPPLIER ATTITUDE TOWARD ENVIRONMENTAL CONSERVATION.....	3
4.1.1	<i>Environmental Policy</i>	3
4.1.2	<i>Environmental Management System</i>	4
4.2	REDUCTION OF PRODUCT IMPACT ON ENVIRONMENT	4
4.2.1	<i>Materials</i>	4
4.2.2	<i>Conservation of Resources</i>	4
4.2.3	<i>Easy Disassembling</i>	4
4.2.4	<i>Marking</i>	4
4.2.5	<i>Energy Conservation</i>	5
4.2.6	<i>Packaging Materials</i>	5
4.2.7	<i>Easy Disposal</i>	5
4.3	RECYCLING AND DISPOSAL METHOD.....	5
5	SUPPLEMENTARY INFORMATION	5
1	OVERVIEW	7
2	SCOPE	8
3	SUPPLIER REQUIREMENTS	8
4	SPECIFIC REQUIREMENTS	9
4.1	SUPPLIER ATTITUDE TOWARD ENVIRONMENTAL CONSERVATION	9
4.1.1	<i>Tackling Environmental Management (Essential)</i>	10
4.1.2	<i>Promoting Environmental Management at Manufacturing Base (Green procurement as a dealer, etc.) (Essential)</i>	10
4.1.3	<i>Cooperation with NTT Communications for Green Procurement (Essential)</i>	11
4.1.4	<i>Other Actions for Environmental Conservation (Release of environmental information, etc.) (Preferable)</i>	11
4.2	REDUCTION OF PRODUCT IMPACT ON THE ENVIRONMENT	11
4.2.1	<i>Presenting Information about Harmful Substances Contained in Products and about Environment-friendly Products (Essential)</i>	11
4.2.2	<i>Product assessment (Preferable)</i>	20
5	SUPPLEMENTAL INFORMATION	21

<<Main>>

1 Overview

The NTT Group shall procure products taking into account their impact on the environment (green procurement). These guidelines represent the NTT Group's basic stance toward green procurement and a general approach to environmental issues for the NTT Group and its suppliers to work toward on a continuing basis.

Specific requirements from NTT Communications to suppliers are given in the details part of this document.

2 Scope

The NTT Group applies the guidelines in the main part of this document to products to be procured by the NTT Group (excluding office supplies).

NTT Communications applies the guidelines to supplier actions for environmental conservation and to all products to be procured.

3 Definitions

3.1 Terms

The definitions of terms used in this document are either given below or taken from JIS Q-14001 and/or ISO 14001.

Product assessment: Process implemented to reduce the environmental impact of a product by assessing the environmental impact in the phases of parts and materials procurement, production, distribution, consumption, recycling, and disposal at design and also modifying the design as required

4 Guidelines

The supplier requirements are given as guidelines below.

4.1 Supplier Attitude Toward Environmental Conservation

Based on the common recognition that tackling environmental problems is the most important subject for companies, the supplier is requested to keep improving environmental measures by creating an environmental policy and constructing an environmental management system.

4.1.1 Environmental Policy

The supplier shall create an environmental policy.

4.1.2 Environmental Management System

The supplier shall establish an environmental management system by consulting JIS Q 14001 and ISO 14001.

4.2 Reduction of Product Impact on Environment

The supplier shall perform product assessment by considering the issues given below. In addition to the issues, the supplier shall voluntarily consider design and other to reduce product impact on the environment.

4.2.1 Materials

Uniformity of materials

Wherever possible, the supplier shall unify materials for products.

Selection of materials

When selecting materials for the product, the supplier shall avoid composite materials difficult to recycle wherever possible.

Restriction of use of harmful materials

As a rule, the supply shall not use substances or compounds that require special disposal processes, such as industrial waste materials specifically designated as harmful.

If a harmful material is used, the supplier shall clarify its name, amount, and content part and, at the request of NTT Communications, explain the methods of leakage prevention during use, separation from the product, transportation, recycling, and disposal.

4.2.2 Conservation of Resources

Use of recycled materials

Wherever possible, recycled materials shall be used for the product.

Weight reduction

The product weight shall be minimized.

Life extension

The lives of the product and its replacement parts shall be extended.

4.2.3 Easy Disassembling

Wherever possible, the product shall have a structure that can easily be disassembled into reusable parts and materials.

4.2.4 Marking

Wherever possible, the product and its parts shall be marked indelibly with information necessary for recycling and optimum disposal.

4.2.5 Energy Conservation

The energy consumption (power and fossil fuels) of the product shall be minimized.

4.2.6 Packaging Materials

Wherever possible, the supplier shall consider the following items about packaging materials. To reduce the environmental impact of packaging materials, the supplier shall also take into account the product structure (design).

Structure

Packaging materials shall have structures for repetitive use.

Materials

Recycled materials shall be used for packaging and their amount of use shall be minimized.

Marking

Packaging materials shall be marked indelibly with their names.

4.2.7 Easy Disposal

Wherever possible, the supplier shall design the product for no impact on the disposal facilities or on the environment surrounding such facilities at the intermediate and final disposals of the product, including its packaging.

4.3 Recycling and Disposal Method

The supplier shall devise a recycling and disposal method for the product and, at the request of NTT Communications, explain that procedure.

5 Supplementary Information

The guidelines in the main part are subject to revision as required according to change in the social conditions, new information, or other factors.

The main part of this document shall replace the corresponding part of NTT Communications Guidelines for Green Procurement established in September 1999.

In the main part of this document, the NTT Group refers to the following companies:

Nippon Telegraph and Telephone Corporation

Nippon Telegraph and Telephone East Corporation

Nippon Telegraph and Telephone West Corporation

NTT Communications Corporation

NTT Mobile Communications Network, inc.

NTT DATA Corporation

NTT Power and Building Facilities, Inc.

<<Details>>

1 Overview

The details part of this document gives specific supplier requirements from NTT Communications, based on the main part that described the NTT Group's policy on green procurement.

To encourage the procurement of environment-friendly products from suppliers who are actively tackling environmental conservation, NTT Communications will, when selecting partner suppliers, also consider environmental conservation based on the details part of this document and promote green procurement together with suppliers.

In order to select partner suppliers, NTT Communications requests suppliers to report their current and planned actions concerning the specific requirements given in the details part of this document. NTT Communications will then review and evaluate the reports. If your environment-friendly stance cannot be confirmed, business dealings with you may be discontinued in the future.

If a product function, performance, or standard not conforming to these guidelines becomes necessary under certain circumstances, NTT Communications will state it in separate specifications or elsewhere.

Through actions for green procurement, NTT Communications wishes to further contribute to society by enhancing environmental conservation efforts in partnership with suppliers. Your understanding and cooperation would be appreciated.

2 Scope

The guidelines in the details part of this document apply to all guidelines covering suppliers' environmental conservation efforts and to all products to be procured.

The products to be procured are classified in the table below.

Table 1 Product categories

Category No.	Description
Product 1	Telecommunications equipment and facilities based on the unique specifications of NTT Communications (Specification-based products)
Product 2	Business-use telecommunications equipment and related products (Routers, hubs, etc., including PC and other office equipment)
Product 3	Other general electrical equipment and related products (Refrigerators, TVs, etc.)
Product 4	Office articles and equipment of own brand (Stationary, office furniture, etc., excluding electrical equipment)
Product 5	Office articles and equipment of other brands (Stationary, office furniture, etc., excluding electrical equipment) (For retailers)
Product 6	Other (Software, etc.)

3 Supplier Requirements

When selecting partner suppliers, NTT Communications attaches importance to the following two points:

- Actively tackling environmental conservation as a supplier
- Reducing the environmental impact of products

Regarding these two requirements, NTT Communications requests each supplier to report its current and planned actions. NTT Communications will then review and evaluate the reports, and the evaluation results will be seriously considered when selecting suppliers.

To report the current and planned actions, each supplier is requested to answer the questions listed on the green procurement website specified by NTT Communications.

The requirements are classified into essential and preferable ones in the table below. The suppliers are requested at least to address the essential items.

Table 2 Outline of requirements

Point of Requirement	Category	Outline of Requirement	Applicable Suppliers (See Table 1)
1. Environmental conservation as a supplier	Essential	Tackling environmental management (See 4.1.1)	All suppliers
		Promoting environmental management at manufacturing base (Green procurement as a dealer, etc.) (See 4.1.2)	Suppliers of Products 1, 2, 3, 4, and 6 Excluding suppliers of software only for Product 6
		Cooperation with NTT Communications for green procurement (See 4.1.3)	All suppliers
	Preferable	Other actions for environmental conservation (Release of environmental information, etc.) (See 4.1.4)	All suppliers
2. Reduction of product impact on the environment (based on domestic laws)	Essential	Presenting information about harmful substances contained in products and about environment-friendly products (See 4.2.1)	All suppliers Excluding suppliers of software only for Product 6
	Preferable	Product assessment (See 4.2.2)	All suppliers

4 Specific Requirements

This chapter gives details about each item listed in Table 2.

4.1 Supplier Attitude Toward Environmental Conservation

4.1.1 Tackling Environmental Management (Essential)

The supplier shall construct and operate an environmental management system certified by a third party (ISO14001, EMAS, KES, Eco Action 21, Eco Stage, etc.) or undertake unique environmental management.

The unique environmental management must include the following items. The supplier shall take actions by referring to the environmental management system of JIS Q 14001/ ISO 14001:

- Establishing an environmental conservation policy
- Appointing a person in charge of environmental management and establishing an environmental management system
- Being familiar with environment-related laws and checking compliance therewith periodically
- Promoting environmental conservation with specific objectives (E.g.: Reducing the in-house consumption of copy paper, sorting waste, setting PCs to energy-saving mode, etc.)
- Holding environmental training for employees
- Performing audits periodically under an environment audit system

4.1.2 Promoting Environmental Management at Manufacturing Base (Green procurement as a dealer, etc.) (Essential)

The supplier shall request its partners (final assembling factories for devices and apparatuses) or own manufacturing division to tackle environmental management and shall monitor the environmental management status during product manufacturing.

This does not apply to suppliers who deliver Product 5 or only software for Product 6.

Some examples of specific actions are:

- Having guidelines for green procurement and requesting partners to tackle environmental management and checking their actions at any time
- Not having formal guidelines but requesting formal partners in writing to tackle environmental management
- Requesting the in-house manufacturing division to construct an environmental management system; having all of the main factories certified by ISO14001 and receiving periodic reports at the main office
- Having an audit department in the head office and auditing main factories periodically
- Knowing that main partners are tackling environmental management (acquisition of ISO14001 certificate, etc.)

4.1.3 Cooperation with NTT Communications for Green Procurement (Essential)

Regarding the requirements given in this document, the supplier shall report the current and planned actions at the request of NTT Communications.

4.1.4 Other Actions for Environmental Conservation (Release of environmental information, etc.) (Preferable)

The supplier shall actively release environmental information.

4.2 Reduction of Product Impact on the Environment

The requirements in this section shall basically follow the latest domestic laws.

4.2.1 Presenting Information about Harmful Substances Contained in Products and about Environment-friendly Products (Essential)

(1) Supplier for one of Products 1 to 4 listed in Table 1

At the request of NTT Communications, the supplier shall present information about harmful substances contained in the product.

Classification of harmful substances

Harmful substances shall be those designated in the latest domestic laws. NTT Communications shall classify harmful substances into the following three levels:

- Prohibited substance: Substance that must not be contained in a product
This substance, which is clearly harmful to the environment and human health, is legally prohibited from production and is designated by NTT Communications.
- Restricted substance: Substance whose content in a product should be restricted
This substance, which is clearly harmful to the environment and human health, is under legal restriction and is designated by NTT considering the social situation and technical trends.
- Controlled substance: Substance that should be controlled voluntarily
This substance, which is clearly harmful to the environment and human health, is used under legal control and is designated by NTT Communications.

Table 3 lists the categories of harmful substances and their applicable laws and Tables 4 to 6 list the designated substances for reference. The supplier shall try to avoid even those substances not listed in Tables 4 to 6 if they are obviously harmful (inhalation or oral chronic toxicity, carcinogenicity, reproductive toxicity, etc.).

Presentation of information about harmful substances

Regarding harmful substances in products for NTT Communications, the supplier shall obtain and manage information, and provide it at the request of NTT Communications.

- Whether a harmful substance is contained or not
- Amount of harmful substance contained in the product or per unit
- Purpose and place of using a harmful substance
- Possibility of harmful substance leaking from the product during use (operation) or at disposal
- Method of isolating where a harmful substance is contained
- Recycling and disposal method
- Method of restricting harmful substance (use of alternative substance)

(2) Supplier for one of Products 5 and 6

At the request of NTT Communications, the supplier shall present information on the environmental friendliness of the product (Eco Mark, etc.). This does not apply to suppliers who deliver only software for Product 6.

Table 3 Harmful substances and applicable laws

Prohibited substances	Class 1 designated chemical substances prescribed in Clause 2, Article 2 of the Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances	Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances
	Production-prohibited substances prescribed in Article 55 of the Industrial Safety and Health Law	Industrial Safety and Health Law
	Harmful substances prescribed in Article 14-3 of the Water Pollution Control Law, whose cleansing standard is "No detection" in a list annexed to its enforcement regulations	Water Pollution Control Law
	Substances prescribed in the Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures and also in a list annexed to its enforcement regulations, excluding Group I in Annex C of the Protocol	Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures
	Substances prescribed in Clause 1, Article 2 of the Law Concerning Special Measures against Dioxins	Law Concerning Special Measures against Dioxins
	Substances prescribed in Article 1 of the Law Concerning Special Measures against PCB Waste	Law Concerning Special Measures against PCB Waste
Restricted substances (Managed under the above rules if also designated as prohibited substances)	Metals, chemical substances, and others that may become designated harmful industrial wastes prescribed in Clause 5, Article 2-4 of the Waste Management and Public Cleansing Law and also prescribed in Annex Table 1 of the enforcement regulations	Waste Management and Public Cleansing Law
	Substances prescribed in Clause 3, Article 2 of the Law Concerning the Promotion of Measures to Cope with Global Warming and also in Article 2 of the enforcement regulations, to which Clause 2, Article 2 of the law applies	Law Concerning the Promotion of Measures to Cope with Global Warming
	Harmful substances prescribed in Article 14-3 of the Water Pollution Control Law,	Water Pollution Control Law

	excluding those whose cleansing standard is "No detection" in a list annexed to the enforcement regulations	
	Substances prescribed in Article 2 of the Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures and also in a list annexed to the enforcement regulations as Group I in Annex C of the Protocol	Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures
	Designated harmful substances prescribed in Article 2 of the Soil Contamination Countermeasures Law and also in Article 1 of the enforcement regulations	Soil Contamination Countermeasures Law
	"Plastic containing halogen compounds" that the NTT Group specifies in view of the social situation and technical trends	
Controlled substances (Managed under the above rules if also designated as prohibited and restricted substances)	Substances of Categories 1 and 2 in the list annexed to the enforcement regulations of the Industrial Safety and Health Law	Industrial Safety and Health Law
	Substances prescribed in Clause 2, Article 2 of the Law Concerning Reporting, etc. of Release of Specific Chemical Substances to the Environment and Promotion of the Improvement of Their Management (PRTR Law), to which Article 5 (excluding Items 3 and 4) of the enforcement regulations applies, and also prescribed in Clause 3, Article 2 of the PRTR Law, to which Article 6 (excluding Items 3 and 4) of the enforcement regulations applies	PRTR Law

References

Table 4 Prohibited substances

	Substance	Source
A-1	Polychlorinated biphenyl of PCB	Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances, Water Pollution Control Law and Law Concerning Special Measure against PCB waste
A-2	Polychlorinated naphthalene (more than 3 chlorides)	Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances
A-3	Hexachlorobenzene	
A-4	Aldrin	
A-5	Dieldrin	
A-6	Endrin	
A-7	DDT	
A-8	Chlordane	
A-9	Bis (tributyl Tin) = Oxide	
A-10	N,N`-ditolyl-p-phenylenediamine, N-tolyl-N`-xylyl-p-phenylenediamine and N,N`-dixylyl-p-phenylenediamine	
A-11	2,4,6-tri-tert-butylphenol	
A-12	Toxaphene	
A-13	Mirex	
A-14	Yellow phosphorus match	
A-15	Benzidine and its base	
A-16	4-aminodiphenyl and its base	
A-17	4-nitrodiphenyl and its base	
A-18	Bis (chloromethyl) ether	
A-19	Beta-naphtylamine	
A-20	Benzene glue (containing 5% or more benzene)	
A-21	Asbestos	
A-22	Cyanide	Water Pollution Control Law
A-23	Organophosphorus compound (limited to Parathion, Methyl parathion, Methyl demeton and EPN)	
A-24	Alkyl mercury compound	
A-25	CFC	Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and
A-26	Halon	
A-27	Carbon tetrachloride	
A-28	Trichloroethane	

A-29	HBFC	Other Measures
A-30	Bromochloromethane	
A-31	Methyl bromide	
A-32	Polychlorinated dibenzofurans	Law Concerning Special Measures against Dioxins
A-33	Polychlorinated dibenzo-p-dioxin	
A-34	Coplanar Polychlorinated Biphenyl	

Table 5 Restricted substances

	Substance	Source
B-1	Mercury or its compounds	Waste Management and Public Cleansing Law, Industrial Safety and Health Law, Water Pollution Control Law and Soil Contamination Countermeasures Law
B-2	Cadmium or its compounds	
B-3	Lead or its compounds	Waste management and Public Cleansing Law, Water Pollution Control Law and Soil Contamination Countermeasures Law
B-4	Organophosphorus compounds (excluding prohibited substances)	Waste management and Public Cleansing Law, and Soil Contamination Countermeasures Law
B-5	Chromium hexide compounds	Waste management and Public Cleansing Law, Industrial Safety and Health Law, Water Pollution Control Law and Soil Contamination Countermeasures Law
B-6	Arsenic or arsenic compounds	
B-7	Trichloroethylene	
B-8	Tetrachloroethylene	
B-9	Dichloromethane	
B-10	Dichloroethane	
B-11	Dichloroethylene	
B-12	Dichloropropane	
B-13	Thiuram (Thiram)	
B-14	Cimazene	
B-15	Thiobenkalb	
B-16	Benzene	Waste management and Public Cleansing Law, Industrial Safety and Health Law, Water Pollution Control Law and Soil Contamination Countermeasures Law
B-17	Selenium or its compounds	Waste management and Public Cleansing Law, Water Pollution Control Law and Soil Contamination Countermeasures Law
B-18	Carbon dioxide (limited to those related to total emission volume evaluation)	Law Concerning the Promotion of Measures to Cope with Global Warming
B-19	Methane	
B-20	Dinitrogen monoxide	

B-21	Hydrofluorocarbon as a greenhouse gas	
B-22	Perfluorocarbon as a greenhouse gas	
B-23	Sulfur hexafluoride	
B-24	Boron and its compounds	Water Pollution Control Law and Soil Contamination Countermeasures Law
B-25	Ammonia, ammonia compounds, nitrous acid compounds, and nitric acid compounds	Water Pollution Control Law
B-26	HFC	The Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures
B-27	Plastic containing halide	Substances designated by NTT Communications

Table 6 Controlled substances

	Substance	Source
C-1	Dichloro-benzidine and its salt	Industrial Safety and Health Law
C-2	Apha-naphthylamine and its salt	
C-3	O-tolidine and its salt	
C-4	Dianisidine and its salt	
C-5	Beryllium and its compounds	
C-6	Benzotrichloride	
C-7	Acrylamide	
C-8	Acrylonitrile	
C-9	Ethyleneimine	
C-10	Vinyl chloride	
C-11	Chlorine	
C-12	Auramine	
C-13	Ortho-phtalogi-nitrile	
C-14	Chloromethyl ether	
C-15	Vanadium pentachloride	
C-16	Coal tar	
C-17	3.3` -dichloro-4.4` -diaminodiphenyl-metane	
C-18	Tolylene diisocyanate	
C-19	Nickel-carbonyl	
C-20	Nitroglycol	
C-21	Para-dimethyl-aminoazobenzene	
C-22	Para-nitro-chloro-benzene	
C-23	Hydrogen fluoride	
C-24	Beta-propiolactone	
C-25	Pentachlorophenol (or PCP) and its sodium	
C-26	Magenta	
C-27	Manganese and its compounds (excluding basic manganese)	
C-28	Methyl iodide	
C-29	Hydrogen sulfide	
C-30	Dimethyl sulfate	
C-31	Zinc soluble compounds and other 354 substances	PRTR Law (Class 1 chemical substances)
C-32	Acetamide and other 81 substances	PRTR Law (Class 2 chemical substances)

4.2.2 Product assessment (Preferable)

(1) Supplier for one of Products 1 to 4 in Table 1

The supplier shall assess the product (including the packaging materials) to be delivered. (Also if the assessment is made at a main manufacturing base or the supplier's partner and its information can be obtained at any time)

(2) Supplier for either of Product 5 or 6 in Table 1

At the request of NTT Communications, the supplier shall provide information about the assessment of the product (including the packaging materials) to be delivered wherever possible. This does not apply to suppliers who deliver only software for Product 6.

Wherever possible, individual products (including packaging materials) shall be assessed in terms of the items listed in Table 7.

Table 7 Product assessment

Item	Description
(1) Conservation of energy and resources	① Materials used for the product shall be minimized. Regarding a device using power, the following items shall be reduced: - Average power consumption: Average power consumed under the presented conditions - Heat: Heat generated in the device under the presented conditions - Maximum power consumption ② Apparatuses designated in the Law Concerning the Rational Use of Energy shall have performance conforming to the law. If the International Energy Star Program applies, the product shall have performance conforming to the program.
(2) Long life	Wherever possible, long-life materials and parts shall be used. In addition, repair and replacement of parts shall be made easy.
(3) Use of recycled parts and materials	Wherever possible, recycled parts and materials shall be used.
(4) Easy to recycle	① Wherever possible, the product shall be structured so as to facilitate disassembly into recyclable parts and materials. ② Wherever possible, plastic for the product shall be selected from the following four types: - Polyethylene - Polypropylene - Polystyrene - Polyester

	<p>③ Wherever possible, plastic for the product shall not be treated as follows:</p> <ul style="list-style-type: none"> - Surface coating or plating - Labeling, except when the base material of the label is the same as the plastic and the label can be affixed without adhesive (melting, etc.) - Mixing of a filler, such as tempered glass
(5) Marking of plastic name	Wherever possible, plastic casts for the product and parts shall be marked with the plastic name according to JIS K 6899-1, JIS K 6899-2, and JIS K 6999.
	<p>① In principle, labeling shall be avoided except when the base material of the label is the same as the plastic and the label can be affixed without adhesive (melting, etc.).</p> <p>Recommended:</p> <ul style="list-style-type: none"> - Casting with an engraved mold - Embossing - Melt-in printing
	② The plastic name shall be marked where it can be identified easily at the time of disposal or disassembling.
	③ If plastic is used for the packaging materials, the plastic name shall be marked in the same way.
(6) Avoidance of harmful substances	① It shall be confirmed that no prohibited substances are used.
	② Not only restricted and controlled substances but also other harmful substances shall be avoided wherever possible. If harmful substances are used, they shall be minimized or replaced with substitutes.

5 Supplemental Information

The guidelines in the details part of this document are subject to revision as required according to changes in the social situation, new information, or other factors.

The details part of this document shall replace the corresponding part of NTT Communications' Guidelines for Green Procurement established in September 1999.

<For Inquiries>

NTT Communications Corporation

Procurement Office

Phone : (03) 6701-2765

Fax : (03) 5798-4075

Email : po-green@ntt.com