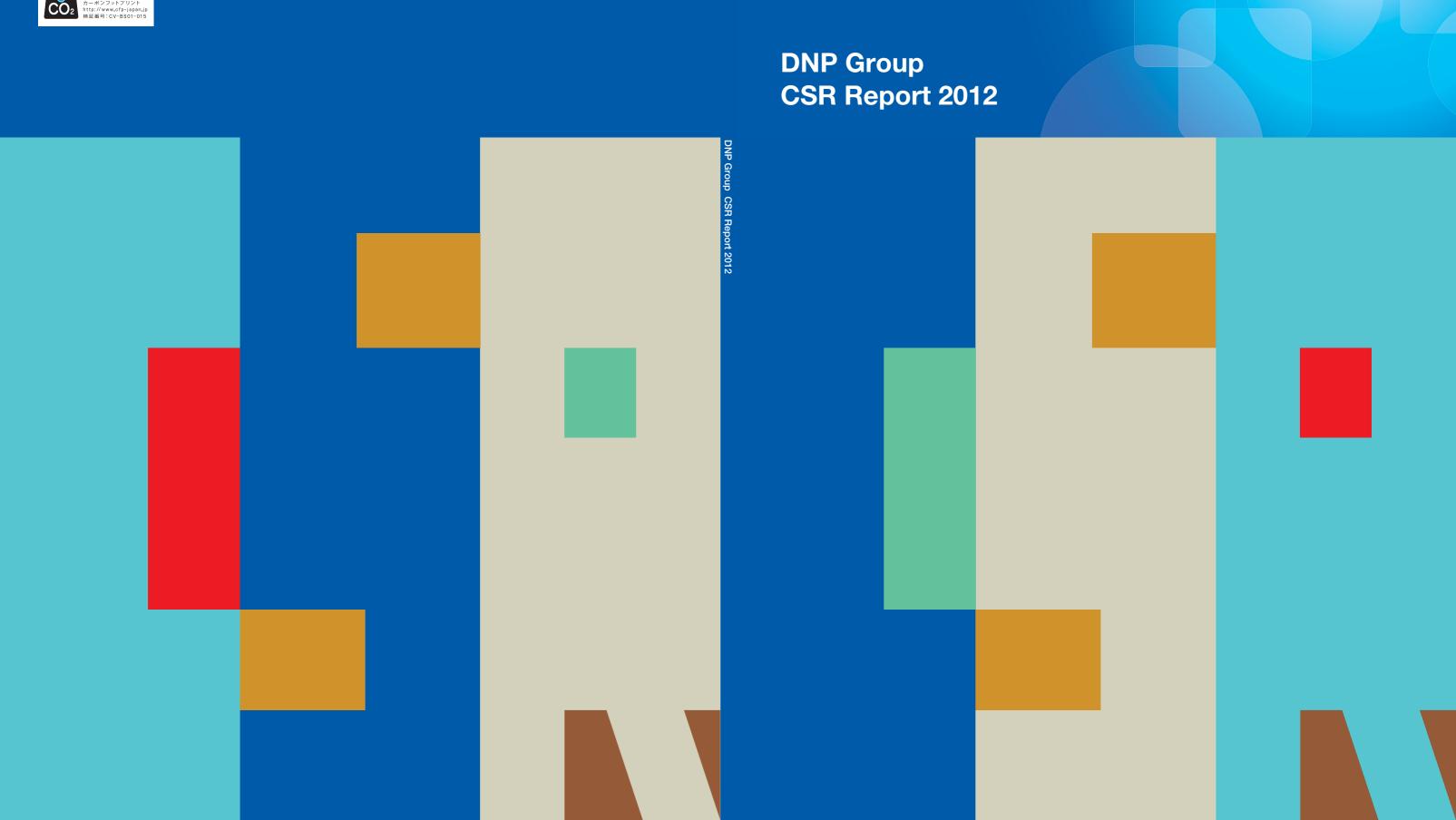
# Dai Nippon Printing Co., Ltd. Corporate Social Responsibility Office, Corporate Communication Division 1-1, Ichigaya Kagacho 1-chome, Shinjuku-ku, Tokyo 162-8001, Japan Tel: +81-3-3266-2111 Fax: +81-3-5225-8083 URL: http://www.dnp.co.jp/eng/ Next issue scheduled for release in June 2013 Published: June 2012 © 2012 DNP



DNP



### Going Beyond Society's Expectations, Creating What Everyone Will Take for Granted in the Future



President

J. Listafima Yoshitoshi Kitajima More than one year has passed since the Tohoku-Pacific Ocean Earthquake in March 2011, but many issues remain unsolved, and it will take much more time to achieve a complete recovery. DNP has provided various types of support with the aim of aiding the people and restoring the area affected by the disaster.

At DNP Tohoku—our Group company in charge of business in the Tohoku region—we have established a Recovery Support Office. We are directly addressing local issues to further the recovery, and making efforts such as providing solutions, and engaging in volunteer activities. Going forward, DNP will continue to ascertain the conditions and needs in the affected area, and provide continuous support with a long-term perspective.

The effects of this disaster extended beyond the Tohoku region, and had a major impact on the entire economy of Japan. An extremely difficult management environment has continued, with impacts experienced such as interruptions in supply chains, an atmosphere of selfimposed restraint in corporate advertising campaigns, sluggish personal consumption, and shortages of electricity. There have also been other impacts—such as flooding in Thailand, the economic slowdown overseas, higher crude oil prices, and a strong yen—and the outlook for the Japanese economy remains uncertain. DNP has also been affected by these events, and there was a major drop in our operating income for the fiscal year ending in March 2012. Furthermore, we booked a large impairment loss for manufacturing equipment, primarily in the Electronics segment, and as a result we posted a net loss. In the fiscal year ending in March 2013, we expect this severe management environment to continue, and we aim to improve our results at DNP through approaches such as actively developing products and services to flexibly adapt to a rapidly changing market.

Therefore, we are focusing our efforts in particular on product development and innovation from the consumer's standpoint. At our Social Innovation Institution, which began operation in April 2011, we are identifying various social issues, and taking steps to resolve them by combining our original R&D with DNP's various business "seeds." Our primary research themes at present include the environment/energy, education, the super-aging society, and universal design. We will anticipate future changes in society, and actively propose the best approaches to the products and services needed under the conditions of tomorrow.

Printing technology serves as our foundation for pioneering new business sectors, and developing innovative new products and services. It has a broad scope of application, and has previously given rise to products in the fields of packaging, decorative lifestyle materials, and electronics. Today, printing technology is being used in energy related applications such as components for solar cells and lithium ion batteries, and in the field of life sciences. There are high expectations, in both academia and industry, that printing technology will contribute to resolving future issues in society. Faithfully meeting these expectations and contributing to the development of society are the realization of our Management Concept of contributing to the emergently evolving society.

Our highest priority in the DNP Group is to always take action to meet the expectations of society. We understand compliance not in the narrow sense of complying with the law, but rather as ensuring we behave in accordance with social norms, and in line with social expectations. Therefore, we address a broad range of issues, including corporate ethics, information security, and environmental protection. Over many years we have built up a track record of reflecting on our daily behavior, and constantly checking whether the expectations of society are being

Together with this corporate approach, it is also important to ensure that the thoughts and behavior of

all our employees can meet the expectations of society. At present we are engaged in activities based on the theme of "Workstyle Innovation." This involves having our employees fundamentally reexamine their previous approaches to work, improve themselves in the time freed up by greater efficiency, and hone their sensibilities by deepening contact with society. In the future, we will strive through these activities to deepen the involvement of each employee with society, and ensure that the expectations of society are met at a higher level.

In our ad campaign, which we launched in 2012, we are using the catch-phrase "Creating What Everyone Will Take for Granted in the Future." For example, today it is taken for granted that everyone has a mobile communication terminal, such as a smartphone, but these use many of DNP's products and technologies, including: color filters and functional surface films for high-definition displays, 3-axis acceleration sensors for changing the orientation of images or text according to terminal movement, and smart cards for identifying individuals.

No one can accurately predict the future, but it is possible to participate in forming it and sketching its blueprints. Each of our employees continuously engages in *TAIWA*\* with our many stakeholders, quickly perceives the issues facing consumers, companies, and society, and solves those issues by applying our technology and knowhow. That is DNP's mission, and we believe it will lead us to "Creating What Everyone Will Take for Granted in the Future." Previously we have been involved in the creation of numerous things that have come to be taken for granted as part of everyday life and going forward, we will tenaciously continue these efforts, and strive to be a company which can always enjoy a high degree of trust from the public.

\* TAIWA is a Japanese word describing process for identifying problems and finding solutions through the exchange of viewpoints and ideas.

### **Editorial Policy**

We report on the CSR activities of DNP in the "DNP Group CSR Report 2012" and on our website. More detailed information on our environmental activities is provided in the "DNP Group Environmental Report 2012," available as a PDF on our website.



**DNP Group CSR Report 2012 FY2011 CSR Activities** 



**DNP Group Environmental Report 2012 FY2011 Environmental Activities** 



#### Website

Provides information not listed in reports (CSR related policies, organization charts, systems, and activities not listed in reports, etc.)



### **About the DNP Group CSR Report 2012**

### Period covered by this report

April 1, 2011 to March 31, 2012

However, the report is not confined to this period regarding some important

#### Scope of report

This report applies to all companies and divisions in the DNP Group. In this report, "DNP" indicates the DNP Group, as distinguished from Dai Nippon Printing Co., Ltd. The designation "DNP Group" shall be used in contexts where we wish to emphasize the Group as a whole.

#### About the data provided in the environmental section

Since FY2011, we have tabulated data for Dai Nippon Printing and all domestic Group companies subject to consolidation in our financial accounting. Until FY2010, data was tabulated for 37 domestic manufacturing companies, and 1 domestic distribution company, and starting in FY2011 we added the nonmanufacturing sites of Dai Nippon Printing and all domestic Group companies subject to consolidation (e.g., 2 development centers, office buildings, sales offices). As part of this change, we have retabulated data for FY2010 and previous years.

#### Report content

In addition to the important themes of CSR (see page 10) that are within the scope of DNP's management, this report includes a special report on business activities DNP is focusing on that generate high social expectations.

The theme reports provide a general overview of activities, and discuss DNP's approaches. Coverage of more specific efforts is provided in each Focus

#### Stakeholder comments

Stakeholder comments are included in order to provide objectivity in evaluation of activity content for each theme, and to introduce activities in an easy-tounderstand way. We have also solicited the opinions of a third party-Mr. Saburo Kato, Co-Chair of the Japan Association of Environment and Society for the 21st Century (an NPO)—regarding the entire report.

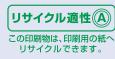
### Independent review

The environmental section (see pages 49-52) has been independently reviewed by Ernst & Young Sustainability Co., Ltd. It has also been certified with the Environmental Report Assurance and Registration Symbol by the Japanese Association of Assurance Organizations for Sustainability Information.

### Reference guidelines

- GRI (Global Reporting Initiative) "Sustainability Reporting Guidelines Ver. 3.1"
- Ministry of the Environment "Environmental Reporting Guidelines (2012 edition)"
- ISO 26000, JIS Z 26000

### FSC certified paper, forest thinning support paper (Forest Neighborhood Association) Forest Neighborhood Association A2 matte FSC certified MX (Mitsubishi Paper Mills Limited) Printing plates Filmless system using CTP output Perfect binding using recyclable hot melt adhesive Spine glue: Asahimelt K1217 (Asahi Chemical Synthetic Co., Ltd.) Side glue: Asahimelt RPS310 (Asahi Chemical Synthetic Co., Ltd.) Ink which does not interfere with recycling: NS PVF K (DIC Graphics Corporation)



### Calculating and indicating the carbon footprint of this CSR Report



The Carbon Footprint of Products (CFP) mark indicates the total amount of greenhouse gas (converted to amount of CO2) emitted in the product's entire lifecycle, from materials procurement to disposal and recycling. DNP has participated from the beginning in CFP System Trials conducted by the Ministry of Economy, Trade and Industry and other related agencies. We calculate and indicate the CRP of our own publications, and promote the growth of the CFP

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#### About the cover design



We believe the social contributions stemming from CSR at DNP are highly diverse. The cover reflects this by combining various shapes and colors to read "CSR," giving a simple yet powerful typographical design.

### Art Director: Kenjiro Sano

Born in Tokyo in 1972. After working at Hakuhodo, Sano became president of MR\_DESIGN. Some of his main works include: TV commercials and graphics for "ReBORN Doraemon" (Toyota), "Zero Summit" (Suntory Boss), and "Green Dakara" (Suntory); character design for "LISMO!" (KDDI), "T Bu! S" (TBS), and "Nyanmage" (Edo Wonderland); and package design for "Toromame" (Mizkan).

#### www.mr-design.in

### **DNP Corporate Profile (as of March 31, 2012)**

Company Name Dai Nippon Printing Co., Ltd.

**Head Office** 1-1, Ichigaya Kagacho 1-chome, Shinjuku-ku,

> Tokyo 162-8001, Japan Tel: +81-3-3266-2111

URL http://www.dnp.co.jp/ Established October 1876

Incorporated January 1894 ¥114.464 billion Capital

**Sales Offices** 

**Employees** 10,812 (Non-consolidated)

> 39,986 (Consolidated) 48 locations in Japan

25 locations overseas (including local affiliates)

**Main Plants** 58 domestic plants

12 overseas plants (including affiliates)

**R&D Facilities** 13 locations in Japan **Net Sales** 

¥1,507.2 billion (down 5.2% over the previous term)

¥34.0 billion

(down 49.8% over the previous term)

**Ordinary Income** ¥36.8 billion

**Net Operating** 

(Net Loss)

(down 41.3% over the previous term)

**Net Income** (¥16.3 billion)

(in previous term, net income was ¥25 billion)

### FY2011 Financial Data (FY ending March 2012)

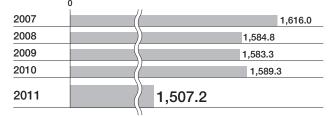
At the base of our printing operations lies the Business Vision of P&I Solutions. DNP is working to provide solutions to customers by fusing the printing technologies cultivated since our founding with the information technologies that have rapidly advanced through digitalization.

In FY2011, in addition to actively developing our business and offering products and services corresponding to customer needs, we worked hard to maintain our business results through our Group-wide "Production 21" efforts, which are aimed at

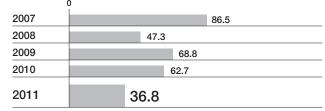
establishing a solid production system in areas such as quality, cost, and delivery.

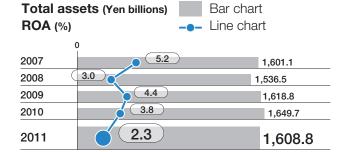
As a result, consolidated sales for the term were ¥1.507.2 billion, with consolidated net operating income of ¥34.0 billion. and consolidated ordinary income of ¥36.8 billion. However, an impairment loss of ¥24.7 billion was booked on fixed assets, primarily in the Electronics segment, and thus the consolidated net loss for the term was ¥16.3 billion.

#### Net sales (Yen billions)



### Ordinary income (Yen billions)



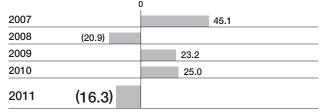


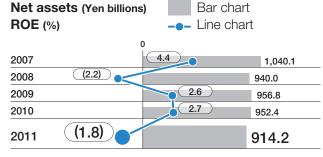
<sup>\*</sup>ROA (Return On Assets): Calculated using ordinary income.

### Net operating income (Yen billions)

2007	87.1
2008	46.1
2009	66.5
2010	67.8
2011	34.0

### Net income (net loss) (Yen billions)





\*ROE (Return On Equity): Calculated using net income.

### **Segment Results** (FY ending March 2012)

The business of DNP is made up of our Printing Operations and Beverages Operations.

### Printing:

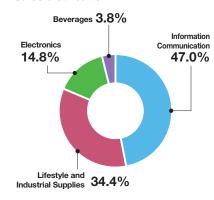
We are developing our printing business across a broad range of applications.

These include the Information Communication segment, made up of operations such as publishing/commercial printing, smart cards, and network businesses; the Lifestyle and Industrial Supplies segment, which includes packaging, lifestyle materials, and industrial supplies; and the Electronics segment, which includes display products and electronics devices.

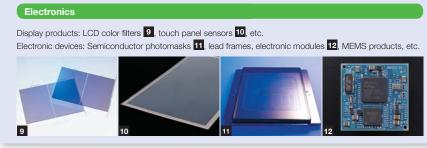
### Beverages:

We produce and market carbonated beverages, coffee, tea, and other beverage products, mainly through Hokkaido Coca-Cola Bottling.

#### Sales distribution



### **Printing** Information Communication Publication printing: Magazines, books, e-books, e-publishing 1, etc. Commercial printing: Catalogs, pamphlets, posters, flyers, POP, digital signage 2, etc. Business forms: Passbooks 3, smart cards 4, IPS (services for printing and dispatching mail to individuals Packaging: Container packaging materials 5 and sterile filling systems for food, beverages, confectioneries, daily necessities, medical, and other products. Lifestyle materials: Exterior and interior finishing materials 6 (flooring, decorative sheet metal, etc.) for home, office, rail cars, etc. Industrial supplies: "PrintRush" self-service printing systems 7, ink ribbons, softpacks for lithium ion batteries



### **Beverages**

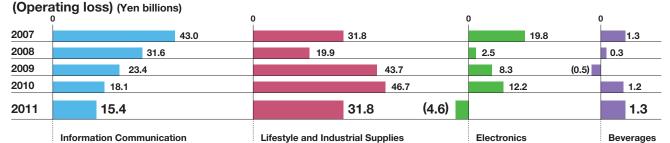
Production and marketing of beverages 13 through Hokkaido Coca-Cola Bottling.



### Net sales by business segment (Yen billions)



### Operating income by business segment



# For Realizing a Sustainable Society -CSR at DNP

The essential mission of CSR at DNP is the realization of our Management Concept. We aim to achieve a sustainable society by broadly understanding social changes and needs, and contributing to the solution of problems society faces together with employees who have shared values.

### **Key Policies for Achieving Sustained Growth**

Under today's rapidly changing social conditions, DNP itself must grow in a sustained fashion in order to continue contributing to society.

Based on our Business Vision of P&I Solutions, we promote the following key policies for achieving sustained growth.

Strengthening Business to Solve Social Problems We will stress the "social perspective" wherein we focus our business on what society needs in order to address the problems which are multiplying inside and outside Japan. Our main themes include the environment/energy, education, the super-aging society, and universal design, and we will actively suggest solutions which combine our unique R&D with DNP's business "seeds."

Promoting R&D
Focused on
Business Creation

In developing the products and services which will serve as the pillars of our future management, we believe it is crucial to engage in R&D that leads to the creation of new businesses in a quest to accurately solve problems from the consumer's standpoint.

We will innovate in terms of products, services, and business models, and properly manage the results as intellectual property.

Expanding Our Global Business As markets become borderless, and corporations accelerate their advance overseas, we are actively expanding our own global business. For almost half a century we have been engaged in global business, but in order to deploy more quickly and effectively, we established a new organization in April 2012 for supervising overseas business at our head office and in each region. With this new structure, we will formulate a global strategy from a company-wide perspective, improve competitiveness by strengthening collaboration between segments, and provide general oversight of business operational risks and legal compliance issues.

### **DNP's Approach to CSR (Three Corporate Responsibilities)**

While CSR stands for "Corporate Social Responsibility," at DNP we define this to mean "being a company which is trusted by society."

At DNP we will simultaneously fulfill the following "Three Corporate Responsibilities," meet the expectations of society, and continue to be a trusted company.

### 1. Value Creation

Providing new value to society

The first and most fundamental responsibility of a corporation to society is "providing new value to society." We must make a connection between the offering of products and services necessary to the sustainable development of society and the growth of the company. DNP will continue to provide high value which contributes to the solution of social problems through our P&I Solutions Business Vision.

### 2. Integrity in Conduct

Practicing fairness and impartiality in the value creation processes

The second responsibility is practicing fairness and impartiality in value creation processes. No matter how superior or useful to society the value produced is, value is compromised if, for example, environmental damage occurs or laws are broken during the value creation process. Therefore, DNP seeks to fulfill this responsibility by ensuring that all employees always conduct business with integrity in accordance with the DNP Group Code of Conduct.

## 3. Transparency (Accountability) Being a company that is accountable and highly

transparent

Finally, the third vital corporate responsibility is providing accountability to society and being a company with high transparency. DNP achieves accountability by encouraging all employees, during the course of their regular duties, to engage in TAIWA with stakeholders, listen to their opinions, and provide correct information themselves.

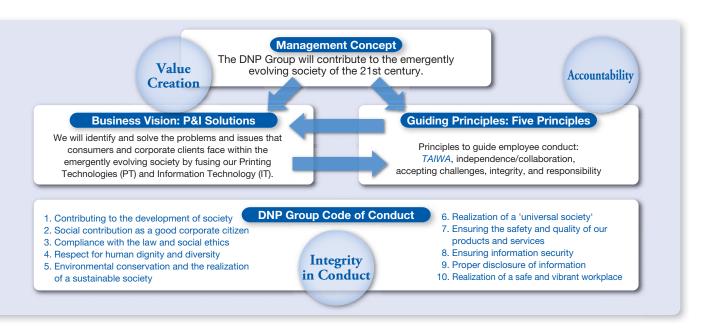
### The DNP Group Vision for the 21st Century and the DNP Group Code of Conduct

The DNP Group Vision for the 21st Century is an expression of our basic philosophy of co-existence and co-development with society and the environment.

It consists of our Management Concept, Business Vision, and Guiding Principles.

We have established the DNP Group Code of Conduct as the set of principles upon which our efforts toward realizing our Management Concept are based. The Code of Conduct ensures that we continue to conduct ourselves with integrity based on strong ethical principles.

Our Vision for the 21st Century and our Code of Conduct are closely related to the Three Corporate Responsibilities of DNP, and serve as the basis for all of our employees in carrying out CSR activities.





### **Endorsement of the Global Compact**

DNP announced its endorsement of the United Nations Global Compact in July 2006. The Global Compact covers 10 principles in four categories: Human Rights, Labor Standards, Environment, and Anti-Corruption. Corporations endorsing the Global Compact engage in voluntary efforts to advance these 10 principles, with the goal of achieving a society capable of sustainable growth. DNP will contribute to the sustainable growth of global society by incorporating the 10 principles of the Global Compact into our group management.

### **CSR Management**

### **Corporate Governance**

We at DNP regard good corporate governance as an important management issue for fulfilling our social responsibility as an emergent company adapted to the 21st century.

We are building and operating a system to enable correct management decision-making, proper and prompt execution of business operations based on those decisions, and oversight/auditing of those operations. We are also raising compliance awareness among all our employees through diligent training and education, and working to improve corporate governance, including internal controls.

### **CSR Promotion System**

We have established a department specifically in charge of CSR. In collaboration with the main departments of the Head Office, this department engages in tasks such as identifying themes and formulating policies/goals relating to CSR, and exchanging information with stakeholders. The gathered information is fed back

to the CSR Committee\* and the main departments to be incorporated into our management. Various special committees have also been established to deal with key themes relating to CSR such as corporate ethics and the environment.

\* Persons in charge: Executive Vice Presidents Chairman: Managing Director

Committee members: Directors in Charge at Head Office, Corporate Officers

### Important Themes for CSR Activities

At DNP, we conduct materiality analysis between "themes important to DNP" and "themes important to society," and thereby select the CSR activity themes to be promoted. "Themes important to society" are identified from a global perspective by verifying the opinions of stakeholders (via report questionnaires, etc.), core issues of ISO 26000/JIS Z 26000, the 10 principles of the United Nations Global Compact, relevant international treaties/agreements, and social issues regarded as important in terms of socially responsible investment. For important themes, we establish annual goals (see pages 11-15),

and work to improve our activities by checking results and goals for the next fiscal year in the CSR Committee at the end of the fiscal year.

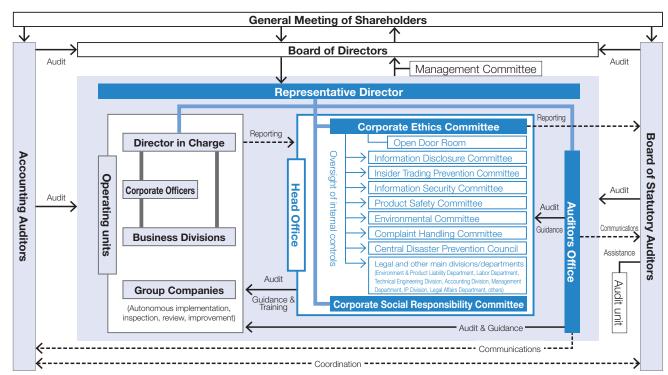
### ■ Activities to Educate Employees

In promoting CSR, it is crucial to ensure that all employees understand CSR at DNP, and can apply it in their daily work. We are providing training and education on CSR and each important activity theme by making use of training opportunities such as group training and network learning. We are also creating more opportunities to come into contact with CSR-related information by using our intranet to notify employees of CSR topics, and distributing CSR reports to senior executives.

### DNP Stakeholders

The foundation of DNP's business activities is building relationships of trust with our stakeholders—shareholders, clients/consumers, suppliers, the local community, and employees. It is crucial for our employees to constantly engage in *TAIWA* with the stakeholders they encounter day to day, listen to their opinions, and then take the initiative to provide them with correct information. We believe that by faithfully meeting the expectations of society, which have been learned through *TAIWA*, we can win the trust of society, and ensure the sustainable development of both society and DNP.

### Diagram of the Corporate Governance and Internal Control Systems



### Reference: Content of Report on Important Themes, and Core Topics of ISO 26000/JIS Z 26000

CSR activities of DNP	CSR Report 2012	ISO 26000/JIS Z 26000
Important Themes	Content of "Focus" section	Corresponding Core Subjects
Contributing to the Development of Society	DNP Solutions for Expanding the Possibilities of the "Culture of Intellectual Knowledge"	Consumer Issues, Community Involvement and Development
Development of a System for Business Continuity	IT Network Redundancy	Consumer Issues
Compliance with the Law and Social Ethics	Strengthening of Anti-Organized Crime Measures	Fair Operating Practices, Human Rights
Ensuring Information Security	Delivering Joy and Peace of Mind in Collaboration with Client Companies	Consumer Issues
Promoting Social Responsibility through the Supply Chain	Enhancing TAIWA with DNP's Proprietary Systems	Fair Operating Practices, Human Rights, Labor Practices, The Environment, Consumer Issues
Proper Disclosure of Information	"Get to Know DNP" Information for Employees	Labor Practices, Fair Operating Practices
Realization of a 'Universal Society'	The UD Perspective Is Needed for Digital Textbooks	Consumer Issues
Ensuring the Safety and Quality of Our Products and Services	Achieving Safety and Quality in Collaboration with Client Companies	Consumer Issues
Respect for Human Dignity and Diversity	Generating Synergy from Interaction between Employees with Diverse Backgrounds	Human Rights, Labor Practices
Realization of a Safe and Vibrant Workplace	All Employees Striving to Realize Ideal Goals	Human Rights, Labor Practices
Social Contribution as a Good Corporate Citizen	Congratulations, ggg     Support for Victims Affected by the Tohoku-Pacific Ocean Earthquake	Community Involvement and Development
Environmental Conservation and the	The Response of 36 DNP Business Sites Supplied by TEPCO to Electricity Use Restrictions     Creation of Green Spaces at Business Sites	The Environment
Realization of a Sustainable Society	Energy-Efficient Drying System Using Heat Pump Technology     Improvement of Material Procurement Practices	The Environment, Consumer Issues

### **Evaluation Targets**

- Target achieved or making steady progress toward target
- Ffforts insufficient

	★ Efforts insufficient						
	Target	·····	Result		Evaluation	FY2012 Targets	
Contributing to the Development of Society	in response to the the Lehmann Sho Ocean Earthqua solutions to the is cultivate human re	IP Vision for the 21st Century changes (predicted) due to ock and the Tohoku-Pacific ke. Continue to provide sues facing society and to sources who can contribute at of the emergently evolving	Solution Busine personnel who	rsonnel in level-specific training and less Practical Training so as to cultivate can contribute to the development of evolving society.	Ο	<ul> <li>Hold more practical seminars and exhibitions which provide new value to society through TAIWA and collaboration with customers.</li> <li>Improve the annual Next Generation Communications Fair directed at people</li> </ul>	
	TAIWA with cust	conduct Solutions are issues in the course of tomers, and contribute to at of society by providing tomer issues.	Fair directed a held twice ann	nual Next Generation Communications t people outside the company, and ual "Biz Support" sessions which are consultation meetings for people inside	0	outside the company, and continue to provide at least twice annual "Biz Support" sessions which are exhibition and consultation meetings for people inside the company.	
	and information develop and exp segment, include and digital medi	inting technologies (PT) in technologies (IT) to cand businesses in every ing energy, life sciences, ia, so as to help achieve sciety and improve quality	Management S  We helped e commercializati biomass plastic  We created a business pron (e-Book Interco	and began operating an Energy Saving Total ystem to improve efficiency of energy use. expand the biomass market through ion of packaging material employing c. and verified operating guidelines as a noting dissemination of the ebformat thange Format) established to enable titon of e-books.	0 0	Solve problems from our unique DNP perspective, using printing technologies (PT) and information technologies (IT), to meet social needs in fields such as the environment/energy and life science.	
	perspective, ar issues, to wh business-based	world from a social d seek out significant nich we will propose solutions that exceed current operations.	Innovation La to society's ne  • As electricity to the recent signage production.	and started operations of our Social boratory in order to provide solutions seds through our business.  conservation gains momentum due earthquake, we are developing digital ucts which achieve beautiful, colorful low power consumption.	0		
			A.II				
Development of a Sy Business Continuity	Proceed deliberately at all operations and Group companies with response measures based on Disaster Response Work Plans and Business Continuity Plans (BCPs). Conduct self-checking, and enhance the PDCA Cycle.		on Disaster Ro Continuity Plans for a manage	ns took preventive measures based esponse Work Plans and Business s (BCPs), and established a foundation ement system to confirm progress ecking, and reviewing plans.	O	Work to firmly establish the management system relating to Disaster Response Work Plans and Business Continuity Plans (BCPs) which was started in FY2011, and continue taking individual disaster response measures and conducting education and training at each site.	
f a Syst	Group response Ocean Earthqua	s concerning the DNP e to the Tohoku-Pacific ake, and revise planning ge in actual enhancement	improvement n electricity, netw	susiness continuity, we promoted neasures such as measures to save ork redundancy, integrated production and standardization of materials. As	0	Strengthen disaster response capabilities of the entire Group Incorporate the latest disaster response measures into	

		Target	Result	Evaluation	FY2012 Targets
Compliance with	Compliance with the Law and Social Ethics	We believe in the importance of the accumulated effects of study, along with daily efforts for adherence to and thorough understanding of corporate ethics. Therefore, we encourage activities in which all Group employees return again to our fundamental principles and consider the meaning of the "integrity in conduct" to which we aspire. Part of this effort is to include the revision of training methods and materials.	We conducted training in a discussion format taking actual case studies as the subject matter. We also revised training material content to facilitate understanding, and added new information to keep up with changes in society.	0	Steadily continue to hold training for ensuring thorough establishment and dissemination of corporate ethics and take measures relating to risk management, while continuously conducting reviews to accommodate conditions inside and outside the company.
	the Law and Soc	Strengthen programs for creating internal control systems and structures to further establish and disseminate corporate ethics at all domestic and overseas affiliates – particularly new companies.	We provided improvement guidance relating to internal controls and corporate ethics to new companies such as Oguchi Book Binding & Printing, DNP Fotolusio, DNP ID System, DNP Field Eyes, and 2Dfacto. We conducted a survey and ascertained current conditions at overseas Group companies relating to efforts to comply with corporate ethics, implementation of training, and the status of key risks and responses. This will be used to support future activities.	Ο	corporate ethics education activities at overseas Group companies.  • Firmly establish the "proper transactions" and "environment" evaluation categories revised in the Compliance Assessment System in FY2011.
	ial Ethics	Revise and improve management content so as to enhance internal controls and risk management effectiveness.	In order to improve the Compliance Assessment System which is the heart of risk management, we have newly added "proper transactions," and in the "environment" segment we have also added evaluation items including biodiversity, lifecycle assessment, and green energy.	0	
		Enhance the activities of the Corporate Ethics Committee in each of our business operations.	We made it mandatory for all organizations to hold Corporate Ethics Committee meetings, and had each organization check effectiveness of internal controls in its own operations.	0	
	Ensuring	Engage in goal-sharing through repeated <i>TAIWA</i> in the course of maintaining our personal information protection systems and information security control systems, as well as in executing the PDCA Cycle.	Guidance was provided by the Chairman 56 times. Inspection and guidance were performed in 73 departments (a total of 186 times). <i>TAIWA</i> was conducted repeatedly, and goals were shared.	0	Engage in goal-sharing through repeated <i>TAIWA</i> in the course of maintaining our personal information protection systems and information security
Ensuring Information Security	Information	Revise and maintain autonomous checking and improvement structures at all operational bases so as to respond to new risks stemming from new business or new technologies.	Autonomous checking was carried out at 118 organizations. We conducted Internet vulnerability inspection.	0	control system, as well as in executing the PDCA Cycle.  Increase the number of times inspection and guidance are performed to at least 110% of the 2011 level.
	n Security	Implement education and training so as to improve the security awareness of all employees, and enhance the content of training for overseas operations.	We created one new English pamphlet relating to information security (for a cumulative total of 3 pamphlets). We provided general and specialized education for all employees (including part-time and temporary employees).	0	<ul> <li>Prepare new education content in 5 languages for improving efforts to deal with globalization.</li> <li>Provide and improve education inside and outside Japan in</li> </ul>
		Implement physical security measures employing our own solutions and knowhow.	We introduced new access security equipment that uses employee smart cards at 11 business locations, including 1 overseas operation site (for a cumulative total of 129 business locations).	0	order to increase awareness of information security.

### **FY2011 Awards & Evaluations**

measures.

for

### Sponsor

management, such as review of

damage estimates and response measures of government agencies based on the Tohoku-

Pacific Ocean Earthquake.

2011	April	10th Keinosuke Sato Award, Corporate/Group Division (Shueitai Development Department, Dai Nippon Printing) (For development of DNP original typeface "Shueitai")	Japan Typography Association
	May	35th Kinoshita Prize New Creation Award (Award shared with Meiji Co., Ltd., and Oji Packaging Co., Ltd.) (For development of packaging for Meiji Step Rakuraku Cube)	Japan Packaging Institute
	September	2011 "Great Place to Work" Ranking/Overall ranking: 27th	Nikkei Inc.
	November	Carbon Disclosure Project 2011 Ranked 11th out of 214 companies in Japan in terms of information disclosure relating to climate change issues	Carbon Disclosure Project
2012	January	15th Japan Environmental Management Survey/Overall ranking: 23rd	Nikkei Inc.
		SAM Corporate Sustainability Assessment 2012 "Sustainability Leaders 2011/2012"	Sustainable Asset Management
	February	2011 Energy Conservation Grand Prize for excellent energy conservation equipment,	The Energy Conservation Center,
		Jury's Special Prize (For reducing power consumption in the photomask manufacturing process)	Japan
	March	Trends in CSR Management at Japanese Businesses 2011 (Company which made progress in socially responsible management efforts)	The Japan Research Institute, Ltd.
		11th Annual Integrex Survey: "Survey of Corporate Honesty and Transparency (Ethical and Social)"/Overall ranking: 15th	Integrex Inc.

measures to ensure safety of employees, we checked

buildings and equipment at all business locations,

improved disaster response equipment and stockpiles, distributed the Disaster Preparedness Handbook, and

conducted various types of disaster response training.

### Received Special Prize of the Energy Conservation Grand Prize for excellent energy conservation equipment for reducing power consumption in the photomask manufacturing process

Photomasks act as the original plate when forming semiconductor circuits on silicon substrates. At our Kamifukuoka Plant (Saitama Prefecture), we have developed an energy conservation system for the laser writing process on this photomask production line, and thereby dramatically reduced power consumption.

This system can properly maintain precision of the optical axis when writing resumes, while minimizing laser current during writing standby. As a result, annual power consumption was reduced by 6% compared to that for 2010. We have also achieved a reduction of 42% of that for 2010 in our power consumption rate by practically applying technology for reducing the number of writing iterations from 4 times to 2 times, while still maintaining precision. As commendation for these efforts, we received the 2011 Energy Conservation Grand Prize for excellent energy conservation equipment, Jury's Special Prize, sponsored by The Energy Conservation Center, Japan.





	Target	Result	Evaluation	FY2012 Targets
Promoting Social Responsibility through the Supply Chain	In regard to our application of the CSR Procurement Criteria to contractors which started in 2010, expand the coverage and continue with the program.	We expanded the number of business sites covered. We held explanatory meetings to ask contractors to cooperate with efforts to implement CSR Procurement Criteria.      We amended provisions in the Basic Business Agreement signed with contractors. A clause was added regarding the CSR Procurement Criteria. We also started issuing the CSR Procurement Criteria in writing when signing agreements with contractors.	0	<ul> <li>Continuing in FY2012, we will promote activities by expanding coverage of CSR Procurement Criteria to subcontractors.</li> <li>Deepen understanding of CSR activities at DNP and stimulate efforts at suppliers.</li> <li>Conduct questionnaire survey</li> </ul>
	In conjunction with the revision of the CSR Procurement Criteria, after reconsidering the content of the CSR Procurement Criteria Compliance Survey, conduct continuous, regular surveys.	We began regular surveys at the end of March 2012. We also reviewed the content of the regular survey form (questionnaire) and updated to a system of using the Internet for the questionnaire response system.	0	and measure degree of understanding by comparing against past questionnaire results.  • Review applicable suppliers, and hold explanatory meetings
	Broadly expand the number of suppliers subject to the explanatory meetings for small and medium-size suppliers, and conduct a number of CSR Activity Promotion Explanatory Meetings.	CSR Activity Promotion Explanatory Meetings have yet to be held, but an e-mail system has been developed to enable smooth bidirectional communication with suppliers.	Δ	to promote CSR procurement.  Undergo 5th regular survey, and conduct on-site inspection of key suppliers.  Develop and improve bidirectional
	Obtain the results of the 4th DNP Group CSR Procurement Criteria Compliance Survey, and conduct an on-site inspection of key suppliers.	On-site inspection has not been conducted yet due to the impact of the Tohoku-Pacific Ocean Earthquake.	×	communication system (e-mail system) for prompt and effective mutual exchange of information when issues arise (up to 50% on
y Chain	With the goal of maintaining the supply chain, request that suppliers draw up business continuity plans (BCPs), and confirm that they are in place.	A supplier questionnaire was administered regarding the existence of BCPs (February 2012). Another request was made to draw up BCPs, when evaluation results were sent regarding regular survey results (March 2012).	0	a number of transactions basis).
Proper Disclosure of Information	2011, in addition to marking the 135th anniversary of DNP in October, is the 60th year since we began expanding business through the "expansion printing" concept, and the 10th year since we established our Vision for the 21st Century. Over the course of the year we will establish important themes, increase our supply of information to the mass media, hold theme-based study meetings for institutional investors, and develop content for a variety of communications tools.	We developed and provided optimal content suited to stakeholder needs, with the aim of stimulating communication.  [Key results] News releases: 130 (123 in FY2010), about 170 responses to individual interviews by mass media companies (213 in FY2010), 216 IR meetings (209 in FY 2010), 4 seminars/tours for investors (3 in FY2010)	0	<ul> <li>Provide a diverse range of information desired by stakeholders, so that there is no inequity between stakeholders in useful information. Do this by editing information on the intranet and announcing it outside the company.</li> <li>Broaden opportunities for stakeholders to come into contact with DNP information</li> </ul>
	Engage in deeper communication with stakeholders, collecting their expectations and opinions and reflecting them in conducting business.	We gathered stakeholder evaluations and comments regarding communication tools – such as the CSR Report, Annual Report, and in-house publications – and used those in establishing policies for the future. We summarized shareholder/investor opinions, analyst reports, and other materials, provided appropriate feedback to the management team and related departments, and supported efforts to improve corporate value.	0	using approaches such as social networking services and digital signage.  Promote corporate brand strategies so DNP is more correctly and deeply understood.
	Enhance the information we provide both within the company and externally about DNP's efforts overseas.	We strengthened communication with overseas operations, confirmed current and future business strategies, and focused on local reporting. Reports were actively announced both inside and outside the company through in-house video news, the Annual Report, shareholder communications, and in-house publications.	Ο	
	Conduct more thorough controls over important information both inside and outside the company, and enhance our efforts for timely disclosure and insider trading prevention.	We carried out thorough information control regarding important undisclosed information, through efforts such as having relevant persons inside and outside the company submit confidentiality agreements. We promoted use of organizations such as the Information Disclosure Committee and the Insider Trading Prevention Committee, education based on network learning, and timely disclosure.	0	

	Target	Result	Evaluation	FY2012 Targets
Realization of a 'Universal Society'	Contribute to realizing a Universal Society through development of our business throughout the company.	We positioned Universal Design (UD) as an important theme at our Social Innovation Laboratory, which was established in April 2011, and strengthened promotion activity.	0	<ul> <li>Strengthen the foundation for promoting UD efforts through company-wide deployment.</li> <li>Improve employee knowledge regarding UD by providing seminars and training</li> </ul>
	Offer society more products and services based on the UD concept.  Develop generally applicable UD evaluation methods that are suited to DNP's business domains.  Share knowledge across business segment boundaries.  Actively provide information both within and outside DNP about our efforts.  Cultivate next-generation human resources.	We felt it would be more effective to develop UD evaluation methods suited to individual business domains rather than attempting to apply one-size-fits-all UD evaluation methods, and we have promoted these efforts. In order to share knowledge on UD, we launched a research group cutting across in-house business segments and continued to hold research sessions. We participated in various events outside the company relating to UD, such as the project activities of the International Association for Universal Design (IAUD), and announced information on our efforts. We promoted acquisition of external qualifications in order to develop our human resources.	0 0 0	programs for all employees.  • Develop new UD services and merchandise.
Ensuring the Safety and Quality of Our Products and Services	Execute onsite inspections and monitoring of quality indicators for prevention of product accidents stemming from the manufacturing process.	We held onsite inspections (Product Safety Practices Committee) based on monitoring of quality indicators such as product yield and occurrence of quality trouble (held 4 times). In FY2011 we started a Practices Committee relating to Overseas Contracted Production (held 1 time).	0	<ul> <li>Take the following measures in order to prevent accidents relating to product safety.</li> <li>Continue quality indicator monitoring, and conduct onsite inspections (Product Safety Practices Committee) based on the results. Also provide thorough employee</li> </ul>
y and Quality nd Services	Continue to implement thorough employee education concerning product safety.	We conducted employee education concerning product safety through group learning and network learning conducted by our head office, and practical training at our operations and Group companies.	0	education onsite.  Expand departments subject to the Product Safety Practices Committee to departments handling overseas contract production.
Respect for Human Digr	Strengthen diversity promotion efforts.  Continue with Female Employee Active Support Meetings. Focus on employees (female employees and their superiors) in the Group who have not yet taken the course.  Continue with concrete measures concerning matters related to diversity promotion at each Group company.  Continue with the mentoring program for female employees in the sales units, and implement measures aimed at increasing the retention rate for female employees in the technical units.	We continued Female Employee Active Support Meetings. The total number of course attendees was 441 (238 female employees, 203 male and female managers).  We continued the mentoring program. As a measure to improve the retention rate for female employees in technical units, we plan to carry out activities to develop mentors for all units starting in FY2012.	O	<ul> <li>Strengthen efforts to promote diversity</li> <li>Make efforts to increase the number of leadership class female employees in all segments.</li> <li>Improve the employment rate of persons with disabilities by expanding the job categories they can work in (employment rate in FY2011 1.91%).</li> </ul>
Human Dignity and Diversity	Promote creation of an environment that enables work-life balance support measures and systems to be effective.  Look into measures for promoting use by male and female employees of the childcare leave system, implement such measures, and increase the use of the system by male employees.  Continue to hold "DNP Family Friendly Day" when children can visit the workplace at five or more worksites so as to gain 2012 Next-Generation Childrearing Support Action Plan certification.	We continued seminars (the Kangaroo Group) for balancing childrearing and work for persons currently taking childcare leave, returnees, and their spouses.  (Usage rate of childcare leave by male employees: 34.4%)      We held the "DNP Family Friendly Day" at 10 operation sites. There were 344 participants (298 in 2010).	0	

#### ...... FY2012 Targets **Target** In level-specific training, selected training for sales Continuously discuss the Vision for the o ensure that our employees clearly 21st Century and Code of Conduct planning, and new staff training, i.e. at key turning understand our Vision for the 21st during training and at meetings, so that points in employees' career paths, we provided Century, and can make efforts to each employee understands the goals multiple opportunities for all employees to learn about, ization of a Safe and Vibrant Workplace achieve transformation, we will provide and the meaning of both, and is able to and discuss their involvement in our Vision for the 21st repeated opportunities for education, Century and Code of Conduct. contribute autonomously to society. at important times in each employee's career path, and improve the education We are conducting intensive courses on rich media completion rate. Cultivate creative human resources who can plan and develop new services, such content for sales and media production staff taking We will continue efforts toward as digital publishing and SNS (social them from basic knowledge up to the point where "workstyle innovation" and achieve networking services). they can propose applications. We are also holding seminars on social media regarding its possibilities and productive utilization of time risks. (Students attend the seminars at business sites resources. (We will work to improve throughout Japan via video conferencing systems.) each employee's job satisfaction and promote efforts to support each During what will be the final year of the Through labor-management collaboration, we held the • We will hold the Productive Time DNP Group Productive Time Resource Productive Time Resource Project two times in 2011. Resource Project two times in 2012, Project 1st Basic Plan, make "workstyle Average non-scheduled working hours: We achieved and follow up efforts in each unit. innovation." which is at the heart of the goal of 35% or less of the 2008 benchmark. Average non-scheduled working these efforts in each operation and Group hours: 35% or less of the 2008 company, part of the corporate culture, so that each employee makes effective use of time resources. We will formulate a 2nd Work Accident Prevention Basic Plan (3 years: 2012-Continue to aim for the 1st Work The Work Accident Occurrence Rate in 2011 was 0.39 2014), and promote activities to reduce Accident Prevention Basic Plan Work (80% of that for 2008). We did not achieve the target of risk in order to attain the final target of Accident Occurrence Rate target of 0.30 0.30 (61% of that for 2008). a Work Accident Occurrence Rate of or less (61% of 2008) by promoting risk 0.30 or less (77% of that for 2011). reduction. We will formulate a 2nd Health Reach the targets of the 1st Health We did not achieve the targets. The rate of employees Maintenance Promotion Plan, and Maintenance Promotion Basic Plan target receiving regular physical checkups was 99.8%, promote a heath improvement plan rate for regular physical checkup rate for and the rate of persons found to have health issues with the goals of ensuring that 100% employees of 100%, and implement a increased by 0.4% from 2011. of employees receive regular physical health improvement plan to reduce the percentage of those found to have health checkups, and reducing persons found to have health issues We used the CSR Report not only at the announcement Foster employee consciousness of good Strengthen activities of the entire meeting, but also featured it in executive trainings and corporate citizenship. group by making the social Hold a meeting announcing the at other opportunities. contributions of operations FY2011 CSR Report. After FY2011, the activities of various organizations and Group companies visible. Introduce the social contribution efforts were introduced on the intranet, but the target of Achieve an implementation rate of all DNP Group organizations on the doing this for all organizations was not achieved. of 80% (of all operations and Group companies) for social Also on the intranet, introduce external The activities of 10 organizations were introduced on contribution efforts in the status social contribution organizations whose survey at the end of FY2012. activities can serve as a reference for • In July, we held an in-house seminar on the theme in-house activities (6 organizations). Conduct the "Dispatch Lecturer of recovery support for the Tohoku-Pacific Ocean Hold lectures by experts, NPOs, etc. Earthquake Science Lesson: The Mysteries of Color" as a "Just Like DNP" Develop DNP's own social contribution We conducted the "Dispatch Lecturer Science Lesson: social contribution program programs and conduct them horizontally The Mysteries of Color" at the "DNP Family Friendly in Shinjuku, Tokyo where our across the Group. Day"—an event held for the families of employees. We head office is located. We will used the acquired knowledge to develop our business also conduct this lesson at in the field of education support services events for the families of Group employees

### SRI indices in which DNP is included

#### Socially Responsible Investment (SRI):

This is investing that includes a company's CSR efforts along with financial analysis among investment criteria.





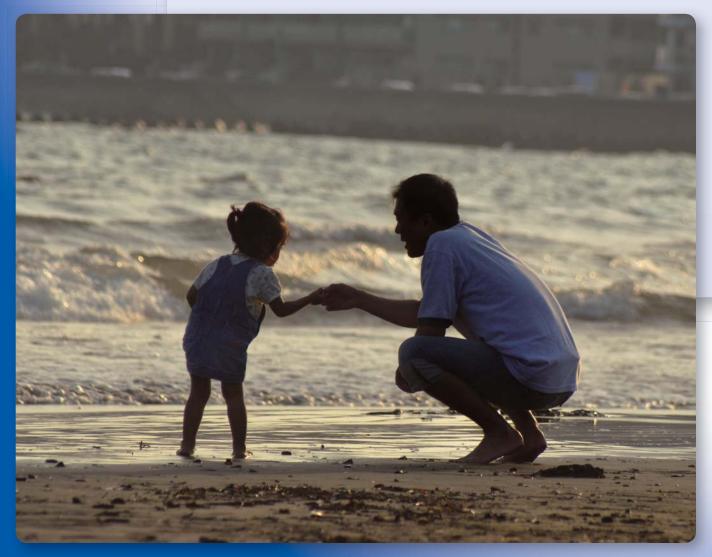




This index, developed by Morningstar Japan K.K., tracks the share performance of 150 selected Japanese companies based on their commitment to CSR.

DNP's CSR Efforts

### Social Responsibility Report



### "Father and Daughter"

Submission to Company Photo Contest (2011) sponsored by the Information Media Supplies Operation Group Photo: Kaori Tabuchi, IPS Operation Group

# Special Report

### **DNP Solutions for** Expanding the Possibilities of the "Culture of Intellectual Knowledge"

### Printing supports the development of society

The year 1876—in the early Meiji era, when the light of modernization had just begun to shine in Japan-saw the birth of Shueisha, later to become Dai Nippon Printing Co., Ltd., the oldest printing company existing in Japan. Among its principles, the new enterprise included "engaging in business befitting a modern civilized society." This phrase expresses the aspiration of Shueisha's founders to contribute to Japan's modernization by making Western ideas and technology broadly available using the then cuttingedge technology of letterpress. More than 130 years have passed since that time, but through the cultural business of printing, we are still actively fulfilling our social mission to serve the development of society by making a broad range of intellectual knowledge widely available.

### Responding to society's diverse demand for knowledge

DNP was founded as a specialist publishing printer. But today, our range of printing applications has grown tremendously, and we offer solutions in different fields. In particular, our Information Communication business includes the collection, analysis, processing, and transmission of information, and in collaboration with our customers, we have created a variety of new products and services. The key word for all of these businesses is "intellectual knowledge." Intellectual knowledge is information with value, and into the future DNP will strive to meet diversifying demand for knowledge through the expertise we have cultivated in our pursuit of information-centered businesses.

### The bestseller that made modern Japan

The year after Shueisha's founding, it published the first book manufactured completely in Japan using Western-style binding: a revised edition of Self-Help by Samuel Smiles translated into Japanese by Masanao Nakamura. It is said that this book, which begins with the words "Heaven helps those who help themselves," helped a generation of young people muster the

courage to devote themselves to national development, and it became a huge bestseller. The role of knowledge in the development of civilization is truly immeasurable.

> **Tatsuya Nishimura** Senior Corporate Officer



### DNP's "Culture of Intellectual Knowledge" Fields

Since its founding, DNP has engaged in the business of publishing printing. Beginning in 2007, we have made successive investments in booksellers such as Maruzen and Junkudo, establishing the Maruzen CHI Holdings and extending our business to bookstore related activities. The word CHI in the company's name means intellectual knowledge in Japanese, and expresses our commitment to serve the circulation of knowledge by invigorating the publishing distribution business. In 2010, the Bunkyodo Group joined the DNP Group, while "honto," which was established as a web-based provider of e-books, became a hybrid bookstore with the addition of printed books to its offerings in May 2012. Into the future, DNP will deliver knowledge in diverse ways that meet current needs.



- **美しき竹 の**月
- Hybrid Bookstore "honto"
   P19-20
- DNP Original Typeface "Shueitai" P21

### **Transmitting** Intellectual Knowledge

### Generating Intellectual Knowledge

In the creation of such tools as catalogs, pamphlets, and POP displays for advertising, PR, and sales promotion, the key factors are which products are to be sold, to which customers, in what manner, and with what information.

DNP has half a century of experience in market research, analysis of consumer preferences, and related areas. These research results are simply data, but the accumulation and analysis of such data yields information with value—that is, intellectual knowledge. Utilizing the knowledge created in this way, we offer products and services that society demands.



Neuromarketing Support Services

### Cultivating Intellectual Knowledge

Educational institutions are the frontline of the creation and cultivation of intellectual knowledge. DNP is engaged in a variety of businesses that benefit educational institutions. For example, the Maruzen CHI Group offers a range of academic publications, and Kyoiku Shuppan Co., Ltd. publishes textbooks and instructional materials.

In today's classroom, there is a trend toward application of ICT (Information and Communications Technology) to promote collaborative education in which children help each other learn, and study together. DNP is collaborating actively with schools, and offers educational solutions that maximize the merits of both paper and digital media.



• Digital Pen Learning Support System P23-24



"You're sure to find the book you're looking for"

"Books you want, in the format you prefer"

Encounter intellectual knowledge and enrich your life

Hybrid Bookstore "honto"



### http://honto.jp/

(honto bookstore is available in Japanese only)



2Dfacto was jointly established by DNP, NTT DoCoMo, and Maruzen CHI Holdings to operate "honto," an online e-book retailer. On May 17, 2012, honto was reestablished as a hybrid bookstore. honto is a total platform that integrates online sales of printed books, sales of e-books, and retail bookstore functions, and can now offer printed books and e-books through a single website.

honto is a new approach to the circulation of knowledge that keeps expanding the possibilities of human encounters with books.

### Books you want in the format you prefer

The Internet is unparalleled as a medium for searching for information, and online bookstores are an ideal sales channel for consumers who know what they are looking for. e-books offer the convenience of anywhere/anytime reading on a variety of devices. Furthermore, with the propagation of smartphones and tablet devices, the market for these publications is expanding. On the other hand, real world bookstores offer consumers a chance to encounter books. In these stores, consumers can not only search for books they have heard of; they can experience new encounters with books with the advice of sales personnel. Bookstores are part of people's lives; they are places that stimulate intellectual curiosity with each visit. DNP's goal is to create an environment where consumers can read the books they want, in the formats they prefer, in accordance with their reading style, by integrating all book formats and sales channels. DNP is expanding the possibilities of human encounters with books.

### Meeting diverse expectations for books

Consumers today have a choice of three ways to obtain books. They can purchase them at brick-and-mortar bookstores. They can order printed books from online booksellers. Finally, they can obtain the titles they want in electronic form from e-book sellers. DNP can offer books through any of these sales formats. By leveraging our strengths as a group, we can now offer books through honto, our new platform.

honto was launched in 2010 as an e-book provider with Japan's largest selection of comics, literature and nonfiction, business-related, and other publications in a wide range of genres. Now, by merging and linking the services of online and retail bookstores, we can serve the diverse needs of book lovers even better than before.

### Here's what's special about honto!

#### One-stop shopping for e-books and printed books

E-books and printed books are displayed on the same page, so consumers can choose the version they prefer. Searches can be carried out laterally for titles in e-book and printed formats as desired.

#### Start of common hybrid point services

Consumers accumulate points as they purchase e-books and printed books on the honto site. The honto Point Card service was also made available in retail bookstores\* beginning in late June 2012, allowing consumers to accumulate points at those stores as well. Points can be applied to purchases from each platform.

### Hybrid e-bookshelf automatically registers books purchased

Information about e-books and printed books purchased is automatically registered and displayed on the user's e-bookshelf\*\*.

The e-bookshelf can do more than just register information. Consumers can also post a variety of information, such as book reviews and ratings.

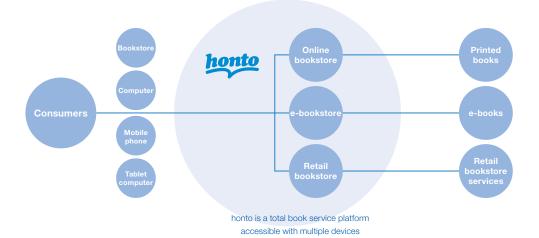
### Japan's most extensive "hybrid combined rankings"

honto's site displays combined top 100 rankings for all of its offerings. Separate rankings are also available by format, by retail store, and by genre. Users can track changes in rankings data over 24-hour, one-week, and one-month intervals.



My Bookshelf promotes social networking through books

- \* Centering on flagship stores in major metropolitan areas
- For printed books, bibliographic information only (title, etc.) will be registered/displayed. This applies only to books purchased at retail bookstores using the honto Point Card.



Maruzen Marunouchi Main Store

Maruzen's Book Museum concept positions books as "art through words." The store offers visitors a space to explore impressions and feelings through encounters with books.

Leveraging the merits of the Internet and electronics to pursue the potential of hybrid services

Takehiko Ogi President, 2Dfacto, Inc

honto is managed by 2Dfacto, Inc., a joint venture between DNP, NTT DoCoMo, and Maruzen CHI Holdings. On a per capita basis, Japan has

CHI Holdings. On a per capita basis, Japan has roughly four times as many bookstores as the US; one can't talk about reading without talking about bricks-and-mortar bookstores.

Online booksellers cannot simply be substituted for retail bookstores, and e-books cannot replace their paper counterparts. By offering a hybrid approach that leverages the merits of each sales environment and publication format, we are striving to create an even richer book experience for consumers.

### A typeface that has been transmitting intellectual knowledge for a century throughout changing eras

DNP Original Typeface "Shueitai"

### 美**美**美美美美美美 き **竹**竹 **の** の **の** の の の 月月月月月月月月月

Shuei MaruGo

KakuGo Gin (Silver) Kin (Gold)

KakuGo

Shuei Shuei-Mincho

In the fall of 2012, DNP's new Shueitai typeface family-Shuei KakuGo Kin (Gold), Shuei KakuGo Gin (Silver), and Shuei MaruGo-will be available from digital typeface

To promote even wider use of Shueitai, DNP has licensed the results of its project to update Shueitai for the 21st century to Morisawa Inc. for sale to designers and consumers. Now anyone will be able to use these fonts on their computers and other

### A commitment to text, the foundation of information transmission

DNP's predecessor company, Shueisha, was not only engaged in book printing, it also worked to create the typefaces used in printing. In 1912 it completed the development of a full range of original Ming typefaces, from #0 to #8\*, which it christened Shueitai. For more than a hundred years, it has continued to serve as a mainstream typeface in books and magazines and is widely recognized for its superior readability.

Over the last century, methods of information distribution have changed enormously, but text has only gained in importance as a means of sharing thoughts with others. Since the dawn of the e-book in 1995 down to today, Shueitai has continued to respond to digital and networked environments to display information that previously had been conveyed in book form.

DNP will continue to offer an evolving Shueitai as a mainstay tool to support rich information transmission not only for readers of printed books, but also for people accessing information in a wide variety of environments via a range of channels, including TV and movie subtitles, video games, computers, and mobile phones.

\* Cast metal letterpress sizes

### **Kojien Dictionary:** always in Shueitai

Masaaki Tanaka Editorial Committee, Editorial Department, Iwanami Shoten, Publishers



Since its first edition appeared in 1955, the Kojien Japanese dictionary has always been set in Shueitai. From letterpress typesetting to computerized typesetting, each new edition has used updated typesetting technology. Like other dictionaries, Kojien has its own unique typesetting rules, and requires a huge number of text elements that are not normally included in standard typesetting systems. With each edition, DNP has implemented these variant text elements in the system, and the accumulated fruits of this effort have become a major asset

What I like most about Shueitai is its well-balanced look when Chinese and kana characters are mixed in both vertical and horizontal typesetting, and even smaller point sizes are clear and easy to read. We have never even considered

using a different typeface. As the resolution of e-book readers approaches that of printed type, the need for Shueitai's quality should only increase.



### Shueitai's inherent beauty will create value

Masaaki Hagino President, Voyager Japan, Inc., Electronic Publishers\*

Work in electronic publishing led to a long involvement with issues of text

readability and appearance. My encounter with Shueitai came with the e-publication of 100 major titles from Shinchosha Publishing. The challenge was to find a typeface that could bridge the worlds of digital and printed books and display text correctly. As time went on, the answer became clear, because the universal principles of communication never change. The answer was Shueitai.

Still, the search for better typefaces will never end. The challenge will be to retain an appealing appearance. Shueitai's inherent beauty is sure to create value as time

goes on, because there will always be people who love text itself

Chiisana media no hitsuvo ("The Need for Small Media"), by Kaitaro Tsuno (.book

### Generating Intellectual Knowledge

### Generating intellectual knowledge of consumer preferences from brainwave data

### **Neuromarketing Support Services**

Neuromarketing aims to uncover hidden consumer psychology, preferences, and causes of behavior through neuroscience, using brainwave measurement of reactions to various stimuli. These results are then used to create more effective marketing. Neuromarketing is being applied to advertisement and product development, and offers promise in educational applications as well.



#### Brainwave plus page measurement

The length of time the subject looks at a given page in a

### "New" attention and interest factors stimulate consumer interest

Until recently, written surveys and group interviews were used as methods to evaluate consumer psychology, including their real attitudes and underlying desires. However, factors such as vanity, pride, a 'follow-the-others' mentality, and moral conformity can cause subjects to consciously control their responses, and this limits the ability of conventional methods to accurately profile consumer psychology.

DNP's neuromarketing support service utilizes headbandtype brainwave monitors to measure consumer brainwaves while they view various types of reading material such as magazines, etc. Viewing time data for each page is also collected, and by correlating these results with brainwave data, it is possible to get a more nuanced view of consumer interest and attention. One might discover, for example, that the subject was more interested in a particular page than she reported, or that a page she spent a long time looking at was not very interesting for her.

Discovering hidden consumer interest and attention factors is a representative example of "generating intellectual knowledge." The knowledge generated through these efforts will form the basis for new products and services creating new social value.



Brainwave measurement plus eye tracking (using display)

Where the subject looks and their level of interest can be

#### Brainwave measurement plus eye tracking (using glasses-type device)

By combining brainwave measurement with eye tracking that uses reflected infrared light to monitor facial, eyeball, and corneal movement, what the subject looks at, for how long, and at what level of interest can be determined

### Promoting R&D for promising applications in other fields, including education

#### Minako Miyama

General Manager, IT Development Division, Communication & Information Operations. DNP

DNP's experience in the creation of catalogs and other marketing materials led us to develop a method for investigating consumer interests and preferences using neuroscience. Take, for example, the act of viewing a painting. We discovered that if the



subject studies the work ahead of the viewing session, their brainwaves indicate higher levels of interest than those of someone with no previous knowledge of the work. If the subject experiences the painting process firsthand, our experiments show that interest levels rise even higher.

These methods show promise for further application in such fields as education. At the same time, large areas of neuroscience remain unexplored and are still at the R&D stage. Going forward, DNP will collaborate with research bodies and enterprises to generate even more knowledge.





# Combining "paper" and "digital" to cultivate intellectual knowledge and enrich the future

### Digital Pen Learning Support System

The use of Information and Communications Technology (ICT) in the classroom is spreading internationally. While the introduction of such ICT tools as electronic blackboards and tablet computers is progressing, DNP is applying its knowledge accumulated over many years to offer solutions that make paper notebooks interactive through the use of digital technology.

### ICT in education is spreading around the world

The use of ICT in the classroom to enhance student learning is accelerating internationally. Nations like the UK, South Korea, and Singapore are pushing forward with plans that include the introduction of electronic blackboards, construction of local area networks in schools, and the use of digital textbooks.

Japan's Ministry of Internal Affairs and Communications (MIC), and Ministry of Education, Culture, Sports, Science and Technology (MEXT) are promoting policies to enhance students' information literacy. These policies have a goal of introducing electronic blackboards, tablet devices, and digital textbooks in all classrooms by FY2020, and so far, trial programs including the Future School Promotion Project and Learning Innovation Project and the more recent effort by MEXT to assess student information literacy have been conducted. In the private sector, one consultative council includes more than 100 education-related companies, and numerous organizations and enterprises are offering opinions or conducting field testing for the introduction of ICT in the classroom.

It is hoped that the introduction of ICT will revolutionize school lessons by helping propagate individualized as well as cooperative learning, in which students teach each other and study together.

### Bringing the advantages of digital into the classroom

However, the use of ICT in education brings with it a number of challenges, including varying levels of instructor skill in operating equipment and school infrastructure; the ability of schools to manage these new tools; and the need to devise new models for instruction. It will take time for this technology to achieve wide use in classrooms, while the culture of "pen-and-paper" teaching is still very much alive. It is precisely because DNP has had a deep association with paper from its very beginnings and been involved in the digitalization of information from the earliest stages that we decided to offer a tool that would respond to these frontline challenges and enable teachers and students to enjoy the benefits ICT has to offer, without greatly changing the basic paradigm of pen-and-paper teaching.

DNP had already been involved in the development of digital pens to enhance operating efficiency in the private sector, and this enabled us to develop our Digital Pen Learning Support System. The system simultaneously displays on an electronic blackboard or other devices whatever students write with their digital pens on special sheets of paper, where their contributions can then be compared and discussed. Field testing began in FY2007, and in FY2011 tests were carried out at approximately 30 schools, from which repeated system improvements based on teacher evaluation and feedback were made. Currently the technology is in use in tens of schools, with some municipalities considering wholesale adoption.

### How are digital pens used in the classroom? Making lesson content easier to understand and assimilate

Draw or write something in a notebook, and a tiny camera in the pen tip senses its location. The information is sent wirelessly to a computer for display on the electronic blackboard. Teachers who have experienced the technology say that unlike with conventional lessons, the digital technology provides more exercise in thinking for students since simply by writing in their notebooks during the lesson, students can see and compare their answers with those of other students at a glance, and the system can make the writing (i.e., thinking) process visible.

Digital Pen Learning Support System website http://www.dnp.co.jp/opennote/index.html





As students write, their work appears on the electronic blackboard. Because students are using pen and paper, they can write large amounts of small-size text.



### Synergy between paper-and-pen and digital

ICT brings many benefits to the classroom. Examples include exercises in rapid location of information on the Internet and audiovisual learning through digital textbooks, as well as drills in which students input answers to a computer, then are immediately scored and can reattempt questions they failed to answer correctly.

At the same time, a considerable amount of field research indicates that some lessons are best conducted with paper and pen. These include lesson units in Japanese and social studies where students must be able to take a position and express it in writing, and units in which the steps in mathematical problem-solving must be laid out. In minor subjects as well, for example art, one new approach discovered through our field research is that students' learning is improved if the process of composing a picture is made visible

The fusion of ICT on the one hand and paper-and-pen on the other is extremely effective where the goal is development of students' ability to think and express themselves, since they can write what they have in their mind on paper and their writing can be immediately displayed and compared along with their thought processes. There are also schools in which students view materials on tablet computers and express their thoughts with digital pens and paper.

### The future for schools incorporating digital technologies

Testing to date has brought praise for the digital pen learning system. Since the system does not require complicated equipment, ICT can be introduced into the teaching process nearly seamlessly and very effectively.

DNP hopes to serve as a bridge toward the digitalization of the classroom through further enhancement of the benefits of this system via the development of worksheet instructional materials and testing using digital educational materials on tablet computers.

### The digital pen and printing: two critical technologies for knowledge cultivation

#### Yoshinori Higashibara

Professor, Faculty of Education, Shinshu University Member, MEXT Promotion Council for Learning Innovation

Gutenberg's letterpress technology brought revolutions in both science and religion through the transmission and sharing of information. The digital pen makes possible the transmission and sharing of thinking processes through the collation and recreation



of the process of expression, and is gradually bringing a revolution in education.

The impact on a person of the recreation of the process of expression is far greater than the impact of expression itself. Making thinking processes visible and shared helps stimulate thinking that might have been stalled within one's mind and enables one to understand how one's own way of thinking differs from that of others. This fosters respect for others as well as self-affirmation. Furthermore, it opens up a world of creation through collaboration with others.

The digital pen, like printing technology, is a critical technology in the cultivation of knowledge. Its contribution to society will be tremendous.

The digital pen promotes two-way communication and is changing the quality of lessons

#### Setsuko Sone

Principal, Aoyama Elementary School

Member, MIC Study Group for the Future School Promotion Project

Because use of the digital pen during lessons presumes showing others your work, the children learn to write carefully and legibly. And, because there is more opportunity for them to express themselves, they influence each other in a positive way and their expressive ability improves rapidly.



In addition, teachers allocate more time for the children to think, and because lessons become more interactive, the children's attitudes become much more positive.

The digital pen can truly be regarded as a tool that is changing the quality of lessons.

Using digital pens and tablet devices to facilitate mutual sharing and understanding of thinking

#### Nobuo Tanba

Teacher, Yanabe Elementary School (Panasonic Education Foundation Designated School for 2012)

We are using digital pens and tablet devices for collaborative learning. The tablets are used for photographs and video, while the digital pen is an output device for the children's thoughts.



Combining the use of these devices is proving more effective in

facilitating the exchange of thoughts than using the devices separately.

For children with limited ability to speak out, or with difficulty putting their thoughts on paper, the digital pen has a kind of "mind reset" effect. In addition, we are seeing students make more of an effort to visualize and organize their thoughts so they can present them within groups or before the entire class.

### Reinforcing Our Capacity to Respond to and Recover from Disaster by Learning from the March 2011 Earthquake

To protect employees and their families and ensure uninterrupted, secure provision of products and services to our customers at the time of a disaster, we have established Basic DNP Group Disaster Prevention Regulations and are continuously maintaining and reinforcing them.

### Structure and Basic Philosophy

Strengthening disaster preparedness from a management standpoint

DNP regards the formulation of disaster preparedness plans and the promotion of preparedness measures as of the utmost importance. We have established a Central Disaster Prevention Council, which enhances and promotes basic disaster preparedness for the Group as a whole; Operations and Group Company Disaster Prevention Councils that promote concrete disaster preparedness based on the characteristics of each division; and Regional Disaster Prevention Councils that promote coordinated disaster preparedness in each region.

In addition, the Tohoku-Pacific Ocean Earthquake has redoubled our awareness of the importance of our Business Continuity Plan (BCP). We are promoting disaster preparedness and maintenance of appropriate daily awareness of disaster risk, with the highest priority given to ensuring human safety at the time of a disaster and enhancing DNP's disaster response and recovery capacity.

### Update and Reinforcement

Creating firm structures and measures and reinforcing employee understanding and mental preparedness

After the Tohoku-Pacific Ocean Earthquake, DNP updated its level of preparedness in such areas as ensuring employee safety, securing access to electric power, and assuring business continuity. As a result, we made the following efforts over the course of 2011.

#### **Bolstered disaster emergency structure**

- Reviewed measures to establish disaster response headquarters
- Updated action plans for each disaster response headquarters
- Adopted satellite phones and other emergency communication methods and established a safety confirmation system

### Reinforced disaster response measures

- Inspection and reinforcement of buildings/facilities
- Stockpiling of helmets, food, drinking water, and other emergency supplies
- Preparation of emergency power supplies, promotion of emergency earthquake notification systems, etc.

#### **Enhanced orientation and training**

- Distribution of Disaster Preparedness Handbook for workplaces and residences
- Companywide safety confirmation training (Emergency Call system)
   Disease will fav each ward place.
- Disaster drills for each workplace
- Disaster-preparedness seminars (participated in by approx. 650 employees)



### Updating the BCP for our information system, a prerequisite for uninterrupted operations, and strengthening our IT foundation

### Tadashi Henmi

General Manager, Information Systems Division, DNP

In 2011, Tokyo Electric Power implemented planned blackouts in response to the effects of the Tohoku-Pacific Ocean Earthquake on power generating capacity. This new development prompted us to update our information system BCP. Previously, we had conducted our business impact analyses on a system unit basis and

were considering the use of a variety of backup power generation methods. However, the planned blackouts made it clear that our BCP had to be based on a larger framework (networks and data centers).

Information systems are a prerequisite for corporate operations, and new demands are being placed on these systems all the time, including the accelerating use of IT to revolutionize ways of working, as well as the use of strategic data to support management decision making.

In response, we are constantly striving to reinforce our IT base to provide stable system service.



### Providing a secure communications network to support business continuity

### Yoshihiro Saito

General Manager, Sales Dept. I, Fourth Sales Division, NTT Communications Corporation

The NTT Group carries out business activities based on its mission to provide disaster-resistant, secure communications networks.

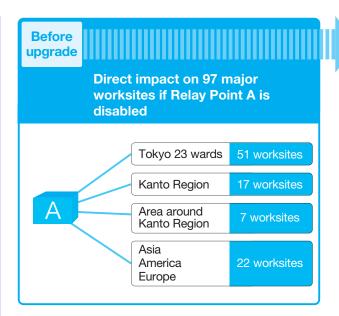
When the unexpected happens, businesses must ensure that they have a secure means of information transmission.

Immediately after the earthquake, the DNP Group carried out a risk analysis and built a reliable, highly available, robust IT network. Witnessing how DNP was able to develop and implement their network upgrade in less than two months—an unprecedented accomplishment—I was struck by their strong commitment to fulfilling their social responsibilities.

Going forward, the NTT Group will continue to fully back the DNP Group as it works to ensure business continuity.



**IT Network Redundancy** 



**After** Redundant connections for 97 upgrade major worksites If Relay Point A is disabled, the system automatically hands off to Relay Point B 51 worksites Kanto Region 17 worksites Area around 7 worksites Kanto Region В 22 worksites America Europe

After the Tohoku-Pacific Ocean Earthquake in 2011, the damage to Tokyo Electric Power's nuclear power station in Fukushima reduced generation capacity and resulted in a series of planned blackouts. The DNP Group's network system, which links approximately 230 locations, was also significantly impacted. As an emergency response, we obtained power generators and were able to restore service. However, the system was down intermittently for four days, and our internal network was also partially unusable, which greatly impaired our business continuity.

After this first disruption, we had very little time to prepare for the planned blackouts expected to begin in July. During the month of April, we carried out a review of

our communications infrastructure and decided to create a redundant system with switchable network backbones in two locations. Network switchover rehearsals took place on holidays and late at night, and by the end of May, we had constructed a redundant system so that if power was interrupted at Relay Point A, serving 97 major locations, we could immediately switch the network over to Relay Point B. Based on our BCP, we are now pushing ahead to create a completely reliable system that will protect the network system throughout the company, rather than protecting specific systems or locations.

### Continuous Operational Reviews Ensure Sustained Ethical Conduct

DNP believes that the trust of society is only possible through the accumulated actions of each employee, acting with integrity in accordance with high ethical standards.

To ensure that our corporate ethics are firmly established throughout the entire DNP Group, we promote the establishment of the proper structures and corporate culture, and make structured efforts in accordance with our operating environment.

#### Sustainability

Thoroughgoing effort is the key to inculcating corporate ethics

Based on its Corporate Ethics Promotion Policy, DNP conducts year-round programs to establish and inculcate its Corporate Ethics.

### **Corporate Ethics Promotion Policy**

- 1. Strict adherence to the PDCA management cycle
- 2. Self-directed efforts based on a strong desire to protect the organization
- 3. Positive efforts to maintain ethics as a natural prerequisite to gaining the trust of society
- Continuous review of activities from a standpoint of effectiveness, efficiency, and social change

### Establishing Major Objectives

Making our efforts effective in a changing society

To raise the effectiveness of its ongoing efforts, DNP establishes objectives for each fiscal year. Our Corporate Ethics Committee, which oversees the Group's corporate ethics programs, sets annual objectives from a risk management standpoint based on a summary of activity policies and challenges as well as principle corporate ethics trends. Each specialized subcommittee carries out activities on this basis and provides the Committee with periodic reports. This enables us to carry out activities in accordance with social change.

### Major objectives and activities, FY2011

### Risk management update

- Enhanced Compliance Assessment System
  - Commercial Transactions section added
  - Biodiversity subsection added to Environment section

### **Training content and methods update**

Introduction of case-study training

 Addition of discussion and presentation activities to training

### For new Group companies

- Carried out prioritized training on DNP thinking and policies
- Explained risk management activities

### For overseas Group companies

- Carried out surveys at overseas Group companies
   Draffled possible everseas risks and atoms of
- Profiled possible overseas risks and status of response capabilities

### Strengthened internal control management

 Carried out training for awareness needed for overall structure functioning

### Re-publicized internal reporting system (consultation, whistleblowing)

- Re-publicized the existence of the Group Open Door Room via the "DNP web" intranet
- Evaluated needs and method to re-publicize the Supplier Hotline, which in its second year is still not well known

### Response to social change

 Strengthened cooperation toward elimination of any associations with organized crime in conformance with legal ordinances

### Making continuous effort with sensitivity to social change a part of our culture

**Anti-Organized Crime Working Group** DNP

DNP's response to organized crime has always kept pace with social trends. However, in recent years, we have introduced more concrete policies in response to such trends (see timeline below).

When DNP began implementing supplier agreements in January 2008, it invested considerable time in fielding inquiries concerning the content of the agreements and DNP's stance. However, currently such inquiries have become much less frequent, reflecting DNP's response based on its prediction of emerging social trends in this area. Going forward, to ensure that we have absolutely no contact with organized crime, it will be important for each employee to practice vigilance and adhere strictly to corporate and social ethics.

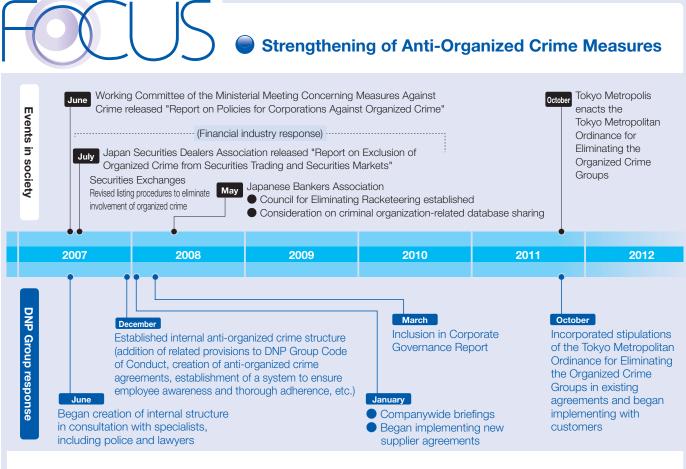
### Continuous review and enhancement of activities is the key to advanced corporate ethics

One Akiyama President, Inegrex Inc.

The DNP Group's high level of corporate ethics activities is supported by their efforts to establish and inculcate those values sustainably, autonomously, and positively, and enhance the effectiveness and efficiency of those activities

and their validity in changing social contexts by continuously reviewing them. DNP's continuous review of their activities to ensure integrity in everything they do is highly commendable.

Going forward, we hope to see DNP progress from an arm'slength relationship with society in which gaining trust is the goal, toward an organic unity between society and enterprise and between employee and enterprise, and where they can practice an even higher level of corporate ethics.



DNP is committed to identifying and responding promptly to social change. From an early stage, we have also been actively involved in anti-organized crime efforts.

In October 2011, in response to the enactment of the Tokyo Metropolitan Ordinance for Eliminating the Organized Crime Groups, and in line with the emphasis given in our Corporate Ethics to responding to social changes, we extended the scope of our management anti-organized crime activities from suppliers only to also include custom-

ers. We now stipulate that we have the right to terminate business relationships with customers and suppliers who prove to be part of criminal organizations or are associated directly or indirectly with organized crime.

Going forward, DNP will promote the establishment of systems to proactively prevent any dealings with organized crime, including gathering information needed to protect the enterprise on an ongoing basis.

### Building a Convenient and Abundant Society through Secure Information Management

It goes without saying that we are responsible for protecting personal information and the corporate information assets of customers acquired in the conduct of our business.

DNP regards information security and the protection of personal information as one of our most important management objectives, and to this end we are strengthening internal structures and educating our employees.

### Information Communication Operations Activities

### Secure control system enables productive use of information

In Information Communication Operations, DNP is principally engaged in printing of such commercial materials as posters and catalogs. Because this business division handles a wide variety of corporate customer information, it strives to implement and maintain a comprehensive information asset protection structure and stringent management practices. In addition, we leverage the expertise and technology we have accumulated through those efforts to offer corporate customers information security-related solutions.



ID gate (ID card verification)

Flapper gate at plant entrance





Surveillance cameras (monitoring plant status)

Education/training

### **Information Communication Operations information security policy**



### Fruits of activities taken from a customer and consumer standpoint

### Tomoyuki Natsume

Manager, Sales Division I, Information Communication Operations, DNP

Benesse Corporation offers a wide variety of products and services. DNP and Benesse worked closely together on all aspects of development for their Personalized Picture Book, beginning with the design of the overall production process. This project also provided the opportunity for us to develop a highly secure new service.

Our work with Benesse has been an opportunity to witness the joyful reactions of customers on receiving their books, and this has encouraged us to consider extensions of this concept.

We strive to continue to meet Benesse's expectations toward us and keep the needs of consumers firmly in view. Going forward, we hope to leverage DNP's range of solutions to provide even better service in collaboration with our client companies.



### A memento for parents on the birth of their child: Personalized Picture Book

Maki Takahashi

Regional Marketing Dept., Benesse Corporation



Based on Benesse's corporate philosophy, "Live well," we provide a wide variety of services to meet people's desire for self-improvement. Beginning in winter 2010, we introduced the Personalized Picture Book as a celebratory item for families on the important occasion of childbirth

Each Personalized Picture Book is a custom order, with the baby's name, date of birth, and birth facility integrated with pictures and text. The baby is the main character of the book. We hope that these books will also help parents and children communicate.

Stable, large-scale production of these picture books would not have been possible without DNP Group's on-demand printing technology, backed by strong security measures and meticulous information management. We intend to explore new projects utilizing this printing technology in the future.

### **Delivering Joy and Peace of Mind in Collaboration with Client Companies**

When Information Communication Operations receives a work order, we use our Personal Information Handling Confirmation Form to confirm in advance the nature of the client information we will be handling, how it will be received, whether all the information is actually necessary, and other confirmations from transport of data to its processing, return, and required method of destruction. Based on this information, we adopt the optimal approach.

Benesse Corporation and DNP collaborate in a wide range of areas, including educational materials, packaging, individual-order, on-demand textbook printing, and direct mail. Our companies work together on each project with a knowledge of each other's information security structures, and we have a highly secure, dedicated data transmission line in place. We cooperate with Benesse in their annual audits of personal information handling procedures at all of our locations holding information received from them, and comply promptly with any requests for improvement that the audit may generate.

DNP will continue to offer consumers the assurance that their personal information is secure and protected, as well as beneficial and useful information security systems in collaboration with our client companies.

### The One-of-a-Kind Personalized Picture Book

The Personalized Picture Book is a service developed by Benesse and DNP that embodies the joy accompanying a baby's birth. This is a one-of-a-kind book that has the baby's name, date of birth, and birth facility printed on the cover. This book tells the story of the baby from his or her time in the mother's womb until birth and the baby's name appears frequently in the text as well.

This service was made possible by DNP's secure personal information handling system and on-demand printing\* technology. We distribute order forms in gift packages given to mothers from birth facilities when they are discharged to go home. Reception has been extremely positive, and annual orders top 230,000 volumes.

\* On-demand printing: Digital technology for printing items as ordered, even in small volumes

From order through delivery Weekly Data receipt Plant A ..... Data input and transfer **Dedicated line (1)** Internal dedicated line nsert additiona Secure courie enclosures Data processing On-demand Plant B printing Binding Enclosure **DNP** 

# Creating Enhanced Value through Ongoing TAIWA with Partners

DNP aim is for the company and its entire supply chain to respond to changes in society and create enhanced value by strictly complying with applicable laws and engaging in socially beneficial activities, including but not limited to environmental preservation.

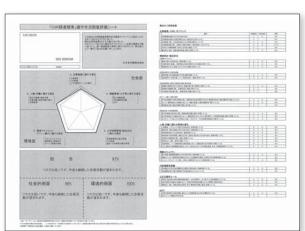
Consequently, DNP undertakes to maintain ongoing *TAIWA* to share its values with suppliers, including communicating its CSR vision clearly.

### Response to Social Change

Self-directed updating of activities in accordance with changes in society's expectations

As the activities of enterprises become increasingly globalized, society's expectations of enterprises with respect to the problems society faces are not only intensifying, but are becoming more diverse. In response, DNP revised its CSR Procurement Criteria in March 2011. In November of the same year, we issued an English-language version of the criteria to suppliers of DNP Indonesia.

In addition, our Basic Business Agreement, which sets the basic terms on which we do business with suppliers, was revised in November 2011. The agreement now includes a section calling for understanding and compliance with DNP's CSR Procurement Criteria, and makes it clear that DNP and its suppliers will work together to promote CSR.



CSR Procurement Criteria Compliance Survey Evaluation Sheet

### Promoting TAIWA

Ongoing CSR promotion—because it's win-win

DNP aims for a high level of value creation, as well as compliance with our procurement criteria. As such, we regard *TA/WA* with all of our suppliers as very important. We believe that a shared understanding of the significance of CSR creates a win-win situation for DNP and its suppliers and enhances the value of our entire supply chain. Consequently, since we established the DNP Group CSR Procurement Criteria in March 2006, we have been conducting a series of briefings to reach all of our work subcontractors.

We also conduct periodic surveys to assess supplier compliance with our CSR criteria. Our analysis of the survey results is fed back to each supplier via an Evaluation Sheet. We also help promote supplier CSR activities with on-site assessments and interviews.



Briefing for work subcontractors

### Enhancing CSR procurement by sharing values with partners

#### Mikio Yoshihara

General Manager, Purchasing Division, DNP

DNP not only carries out surveys to assess compliance with our CSR Procurement Criteria, but we also provide feedback to suppliers regarding their performance and provide them with other types of useful information. In recent

years, very rapid response to social changes and social needs has become increasingly important, and it is not always easy for DNP and its suppliers to share all useful information.

To address this issue we are utilizing our CSR survey system to make faster and more detailed information sharing possible.

Going forward, DNP and its suppliers will continue to share values and further enhance their CSR procurement activities.

The goal: Better CSR understanding and strengthened competitiveness through information sharing using new systems

Toshio Hasumi

President, DIC Graphics Corporation

Our company is pleased to do business with DNP in a range of fields that includes printing inks and adhesives.

Since our founding, we have participated in DNP's CSR Procurement Criteria Compliance

Survey, and we continue to receive feedback via the Evaluation Sheet

DNP has created a new system through which sharing of useful information promises to promote better understanding of CSR and enhance the competitive capabilities of both parties, in addition to ensuring compliance with procurement criteria.

Through the strengthening of our own supply chain, we are working to ensure secure provision of printing materials and the creation of new value.

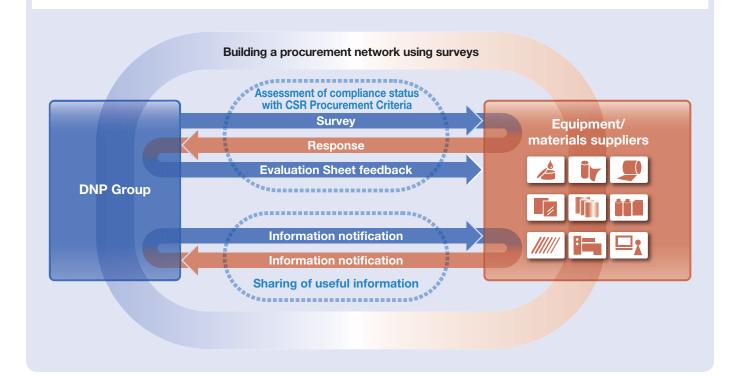
# FOCUS

### **Enhancing TAIWA with DNP's Proprietary Systems**

In 2011, to further extend the sharing of information between DNP and its suppliers, we updated our CSR Procurement Criteria Compliance Survey system to enable not only the solicitation and gathering of survey information, but also two-way exchange of useful information. We are also undertaking to update our survey by adding BCP-related content in light of experience gained after the Tohoku-Pacific Ocean Earthquake, when the printing industry was significantly affected (including procurement delays for printing materials such as paper, inks, and film,

as well as production and distribution disruptions caused by planned blackouts and fuel shortages). This experience demonstrated the importance of having a BCP that takes into account the entire supply chain.

For DNP and its suppliers to continue providing society with enhanced value, it is very important for both parties to communicate closely and cultivate a shared sense of value. Consequently, we will continue to deepen *TAIWA* across our entire supply chain.



# Enriching Communication with Regular Opportunities for TAIWA

Building trust with stakeholders is essential for DNP's continued development.

DNP strives to engage in active *TAIWA* with a broad range of stakeholders to deepen their understanding of our business and activities, and to accurately ascertain how we are perceived by stakeholders.

### Active Communication

Deepening internal and external *TAIWA*, and incorporating diverse opinion in company activities

DNP strives to expand the range of opportunities for communication with stakeholders and others through media contact, showroom and event planning and management, IR activities, and other means. We also promote the use of new communications tools compatible with social change and diversification.

Moreover, as we fulfill our corporate disclosure responsibilities through appropriate release of information, we gather information on stakeholder opinions and desires and make use of this information in evolving our corporate culture and improving the products and services we provide.

Annual Plan

Issuing a wide range of information based on annual communication goals

Each year, DNP defines an important theme in response to internal and external developments, draws up an annual plan, and carries out information management activities. The theme for 2011 was "Get to Know DNP," and we worked to reach our employees with information about the company. The goal of this effort was to encourage employees to focus their interest and attention toward DNP, improve their ability to provide accurate information about DNP to external audiences, and enhance their motivation. Going forward, DNP will work to create opportunities and tools that encourage active *TAIWA*, and will disseminate information with attention to important themes.

### **Annual information** management activities (FY2011) August September October November December January February March News gatherings: 170/year **News releases** Releases: 130/year IR meetings 216/year (principally directly after earnings announcements) Investor seminars, etc. 4/year (including technical seminars, factory tours, etc. in relation to high-profile topics **Corporate brochure** Updated as required Release Release Shareholder communication Annual Report Releas Regular publications CSR Report Release Company newslet Website (Japanese/English) Content updates as required (for timely and appropriate disclosure) Intranet Video news Video news programs, principally on important themes Other Timely internal and external release of CSR- and brand-related news, "DNP on This Date..." and other content

#### DNP IQ Check

### Well-informed employees make the best DNP ambassadors

#### Kavoko Kanao

Fukuyama Sales Office, DNP Nishi Nippon

The "DNP IQ Check" was a test created to help employees to assess their knowledge of the company. The goal was to get a perfect score, but there was no time limit. If I got stuck, groping for the answer took me to DNP sites I'd never

seen or materials I hadn't looked at recently, such as the Group Code of Conduct. It was good for me as an employee, and the test helped spur my interest in the company.

No matter which department we belong to, for our external audience we are all DNP employees.

Fortunately DNP has a full range of tools for disseminating information, including our in-house newsletter as well as the websites of each division and Group company. If each employee utilizes these tools skillfully to enhance their DNP-related interest and knowledge, they will then be able to convey lots of information about DNP's positive attributes to an external audience.

### VOICE

### Appropriate, timely information is highly useful in sales work

Toshiya Kitani

Sales Division 5, IPS Operations, DNP

I recently had the opportunity to bid on work for a music contents distribution company. The work involved Augmented Reality image processing (superimposing virtual computergenerated images on video footage) of popular

vocal groups. DNP's Internal Information Office introduced me to DNP Media Art, which was critical in helping DNP win this competitive bid against 20 other companies.

Previously, one had to try to get this information from coworkers or guess at which part of the Group might be able to handle the work. Now, with their help, it's easy to put your finger on the right part of the Group for a given service. As someone responsible for sales, I'm really thankful for this. Leveraging the power of the entire DNP Group is the key to sales success, and being able to access the information you need when you need it is enormously helpful.



### "Get to Know DNP" Information for Employees

"Get to Know DNP" was selected as the important internal information management activity for 2011, with the goal of strengthening communication with employees. A wide range of information was disseminated to employees in Japan and overseas to help them enjoy learning more about the company they work for.



This online test of DNP-related knowledge was created in response to suggestions from employees.

The test provided immediate scoring and detailed explanations, and proved a good

way to deepen employee understanding of the company.

The test included 30 multiple-choice questions divided into several topic areas, including Management, Principles & Systems; History; and Products & Services. The test was available for about one month, during which 23,023 employees participated in taking it. A total of 1,091 employees scored 100%.

### **Corporate Brand Office established**

We have worked to unify our corporate image by introducing consistency to our corporate logo, fundamental brand design format, and brand guidelines.



This service uses the intranet and workplace digital signage to convey information on past significant events in DNP history that took place on

the same date. Content consists of easily-grasped photographs and short text that can be absorbed even during short breaks.



This channel delivers video news via DNP's intranet and website. During FY2011, the channel presented a series of programs profiling DNP overseas companies.

Workplaces without access to the intranet are provided with content on DVD to ensure that it reaches all employees.

### Internal Information Office established

The Office was established as a point of contact for employees to share information regarding DNP products and services and deepen their cooperation.

# Reflecting Social Needs in Every Aspect of Design

DNP applies printing technology to a wide range of areas. Our products and services have spread to every aspect of daily life and support abundant, convenient lifestyles.

To realize the promise of a more abundant society for as many people as possible, DNP offers products and services incorporating universal design principles.

### Working Policy

We define secure, comfortable lifestyles in terms of maximum inclusiveness

Societies that recognize diversity must create environments where individuals with diverse characteristics and needs can live securely and comfortably. This makes universal design (UD) of increasing importance.

DNP emphasizes the implementation of UD in our Code of Conduct, and our Five Principles of Universal Design sum up our policy in this regard. To realize a society where everyone can live in security and comfort regardless of such factors as health, age, and disability status, DNP is working to develop and enhance its products and services from a user point of view.

### Value Creation

### Working with users to create socially responsive universal design

DNP's UD is aimed at making its products and services accessible to as many different people as possible by prioritizing safety and ease of use. Moreover, to establish a foundation for UD that meets social needs, we consider the people who are likely to use our products and services, examine individual and social needs as well as the structures and approaches we can use to meet them from a variety of angles, and act on that information.

By working continuously to ensure that no one is excluded from using our products and services and that we are meeting society's expectations, we are strengthening the foundations of our UD activities and creating new value.

### DNP Group Code of Conduct Realization of a Universal Society

"We shall work on the development and diffusion of easy-to-use functional products, services, and systems so that everyone can live in safety and comfort, and thus contribute to the realization of a 'universal society' in which all kinds of people can lead pleasant lives." (DNP Code of Conduct, 2007)

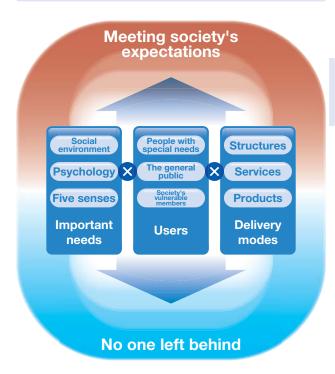
### **DNP Group Universal Design Declaration**

We established our Universal Design Declaration and Five Principles of Universal Design as expressions of our commitment to the development of easily used, secure, convenient products and services. (2008)

Five Principles of Universal Design

- Make it clear
   Make it intuitive
- 3. Make it flexible 4. Make it safe
- 4. Make it safe
- 5. Make it easy

### **DNP's Universal Design Scope**



### Making learning materials accessible to children everywhere

#### Katsuyuki Tano

General Manager, Digital Business Development Section, General Management Division, Kyoiku Shuppan Co., Ltd.

When we began working to incorporate color UD into our textbooks, we were committed to making the content of every textbook available to every child. The digital textbook is one way

of realizing DNP's UD principles "Make it clear" and "Make it intuitive" for textbooks.

Our digital textbooks for instructors, issued in 2011, allow touch-driven enlargement of images and diagrams. Text can be enlarged and underlined for emphasis. Our goal is to make it even easier to both teach and learn by offering textbooks that combine the advantages of paper and digital formats.

### VOICE

### Digital textbooks make for more effective lessons

Jun Takahashi
Associate Professor, Faculty of Human Development,

ICT is being utilized increasingly in the classroom. A typical example would be imaging textbooks and written notes with a visual presenter and showing them on a large display or projector.

This allows the instructor to focus on specific points or procedures in an immediately accessible way that engages student attention. This is an example of UD applied to classroom lessons.

With digital textbooks, embedded photos and diagrams can easily be made larger, which further facilitates concentration. Photos that can be blown up with no loss of resolution are sure to increase student interest and attention. Easily-used digital learning materials that thoroughly incorporate a UD perspective will support the development of lessons that will be easy for any child to understand, and we are working together to develop such materials.



### The UD Perspective Is Needed for Digital Textbooks

In recent years, education has been changing under the influence of advances in information technology and increasing international competition. At the same time, education's importance is only increasing. The current environment includes internationally standardized scholastic testing, and children's scholastic ability is being compared on a global scale. As a measure to improve scholastic performance in this context, the effective use of ICT in teaching is becoming widespread.

DNP Group company Kyoiku Shuppan leverages its expertise in the creation of digital learning materials. In April 2011, it issued its Digital Textbooks for Instructors for major primary school subjects, and in April 2012 began to offer them for middle schools. Digital pages

can be magnified and text can be made audible, both of which are UD attributes for information provision. The company is also involved in the development of digital learning materials for MEXT's Learning Innovation Project, and these materials are being used in primary schools participating in MIC's Future School Promotion Project. Digital learning materials are designed to be easy for a wide range of children to use. For example, black-on-white text can be changed to white-on-black.

Future digital textbooks and learning materials will incorporate an even greater degree of UD, and promise to become tools for information access appropriate to each child's abilities and unique capacities.

### Digital Textbooks for Instructors issued by Kyoiku Shuppan

	Primary school							dle so	hool
	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd
Japanese	•	•	•	•	•				
Arithmetic				•					
Science	_	_		•			_		
Social studies	_	_					_		
Geography			_	_					
History	_								
Civics		<u>—</u>							
English			_	_					

"Easy to use and see" is a prerequisite for all digital textbooks from Kyoiku Shuppan. These materials and their features can be used not only with digital blackboards, but with computer/projector setups and digital TV monitors. The tools are designed to be intuitive and easy to use.

In addition, we have employed color universal design to ensure that the materials can be used by individuals with limited color perception.

### Basic functions of "Easy to use and see" digital textbooks



THE STATE OF THE S



 Zoom-in display for ease of understanding Easy enlargement of photos, figures, and text



### Large amount of image and video content

Videos can be played back just by touching the screen, making it possible for digital textbooks to vividly convey almost any activity or operation.

### Safety and Product Quality is No. 1 at **Every Stage of Manufacturing**

DNP's quality and safety assurance and improvement efforts are guided by a consumer-standpoint view of products and services, where and how they will be used, what is expected of them, and what constitutes safety in each context.

The entire DNP Group coordinates to deliver products and services that satisfy consumers and help solve challenges facing society.

### **Energy-related Materials Development**

Highly functional, quality products manufactured with advanced processing technology in well-controlled environments

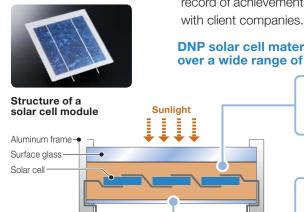
DNP's Energy Systems Operations develops materials for solar cells, fuel cells, and lithium ion batteries, which require weather resistance, durability, and moisture resistance, using expertise accumulated over many years, principally converting technology\* that designs new combinations of materials. In April 2011, we established a new plant in Kitakyushu, Fukuoka Prefecture, to manufacture softpacks, which are external packaging for lithium ion batteries, as well as back sheets and sealing material for solar cells. At this new plant, we succeeded in realizing an even higher-standard clean manufacturing environment than in previous plants, and at the manufacturing stage, impurities are reduced, which enables us to provide products with a higher degree of reliability.

\* Converting technology: Processing technology that produces highly functional materials by selecting and combining the best materials for a given application.

Distribution



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### **Product Quality Enhancement**

Further enhancing finished product quality through attention to treatment processes and conditions of use

In the field of energy-related materials development, by combining material production technologies that maximize material functionality, and processing technologies, including lamination technology, coating technology, and membrane extrusion technology, that draw out the maximum capabilities of each individual material and realize optimum combinations of multiple materials, we are striving further to enhance the required functionality of our materials. For example, these technologies have enabled us to create solar cell materials that are highly insulating and moisture resistant. Such materials are contributing to enhancing the weatherability of solar cells.

Our lithium ion battery softpacks also offer the best possible terms for customers to achieve a high degree of safety during their molding, sealing, and inspection processes for lithium ion batteries. This is possible thanks to our being first to develop softpacks, and our long record of achievements reached working in collaboration

DNP solar cell materials offer excellent flexibility over a wide range of temperatures

Sealing material

This sheet material protects the solar cell

from the external environment, including

rain, wind, snow, and temperature changes

**Back sheet** This highly insulating sheet material protects the solar cell, power distribution cables, and other system elements from the external environment, including rain, wind, snow, and temperature changes.

### Looking back on the "Capri-Sun battery"

#### Akira Yoshino

General Manager, Battery Materials Business Development Dept., Asahi Kasei E-materials Corp. Fellow, Asahi Kasei Corp.

I think it was back in 1983. The lithium ion battery was in the prototype stage, and producing test batteries was still a challenge. Around this time, the fruit juice drink Capri-Sun, which came in laminated film pouches, was making a splash with consumers. We bought a huge number of these pouches and recycled the packaging

material to create batteries that we used for demonstrations in the company and elsewhere. We called them "Capri-Sun batteries." Looking back, I think this was around the time that a revolution in materials technology took place, which allowed laminated film to finally be used in fresh food packaging. Now a second revolution is under way. Laminated film for batteries is even more challenging than film for food packaging, but it is now in practical use and transforming the battery industry. We're very thankful for DNP's pioneering promotion of technical development and commercialization in this area.



### Pursuing better softpacks with DNP to meet market requirements

Hiroshige Kajii

Director, Global Procurement Center Energy Company, Sanyo Electric Co., Ltd. Energy Company of Panasonic Group

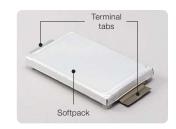


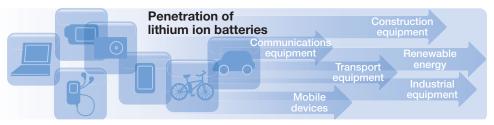
The Panasonic Group manufactures and markets a wide range of batteries for every need. The lithium ion battery has represented the industry's cutting edge, contributing to lighter weight and extended operating times for mobile devices. In recent years, there are new demands for thinner and lighter laptops and

slimmer mobile phones with larger screens. To respond to these demands, batteries now have softpack external packaging, and we are seeing a huge increase in consumer demand for these batteries. For more than 15 years, we have worked closely with DNP in softpack development, with product stability, reliability, and elimination of environmentally harmful constituents as our top priority. The global battery market will continue to expand, and we look forward to DNP's further development of new technology, enhanced reliability, and lower cost for softpacks that meet



### **Achieving Safety and Quality in Collaboration** with Client Companies





Lithium ion batteries are currently used in a wide variety of electronics and electric equipment including mobile phones and laptops, and thus feature in many aspects of daily life. Batteries generally have metal packaging, but DNP has developed multilayer-film softpacks for lithium ion batteries. Our softpacks are flexible, easily molded and shaped, tough, light, and thin. These features have enabled their use to spread to smartphones and other slim mobile devices, and they are now seeing use in motive batteries for such transport applications as electric cars, where high levels of safety are required. Future use in an even wider range of applications is expected.

DNP partnered with customers to develop softpacks around the same time that lithium ion battery development was beginning. Precisely because DNP possesses a detailed understanding of the conditions of use for our customers' products and insights into usability, we can test softpack durability right from the design stage in simulated conditions of use. Furthermore, we are constantly improving our products in response to the challenges faced by customers as well as their requests. This enables us to offer the highest level of quality on an ongoing basis.

### Offering safe and secure products

**Design** stage Manufacturing stage Utilization stage

**Durability testing** simulating conditions of use for customer products

We simulate the conditions of use and test the ease of use of the softpack for the customer's product, and subject it to more severe conditions than it is likely to encounter. This testing is factored into our specifications.

### **Double-checking for** impurities

After manufacturing, the film undergoes imaging inspection and is then re-inspected for impurities and surface defects after being cut for the customer.

**Ensuring optimal product** providing customer service

individual customer needs.

We make our expertise in softpack molding available to customers and provide support if problems occur. We also provide customized support for

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cables, etc

To learn more about DNP's efforts and systems to leverage employee diversity, visit: http://www.dnp.co.jp/csr/theme08.html

### Leveraging Diversity to Create New Value and Culture

The DNP Group regards the uniqueness of each employee as a precious resource.

Fostering a corporate culture that encourages DNP Group members to realize their personal potential and work with enthusiasm promotes the creation of new value and sustainable development for the entire Group.

### Information Media Supplies Operations

Creating a work climate where diverse corporate and national cultures integrate naturally

Since its entry into the US market in 1994, Information Media Supplies Operations has continued to expand its share in Europe and the US in its two principal business areas of photographic and barcode media. Today it oversees seven overseas Group companies and approximately a third of its employees are non-Japanese. In the Japanese market as well, approximately 40% of the Group's employees came from other companies as the result of acquisitions. Diversity is therefore an integral part of its daily operations.

DNP adheres to an equitable personnel system that encourages this diverse pool of employees to actualize their individual potential and stimulate each other to create synergy, regardless of their background. For example, years-of-service calculations include time spent with previous employers. We also maintain an active program of employee transfers to encourage personnel interaction and provide employees with opportunities to put their careers to work in new areas of business.

### Cultivating and Leveraging Diversity

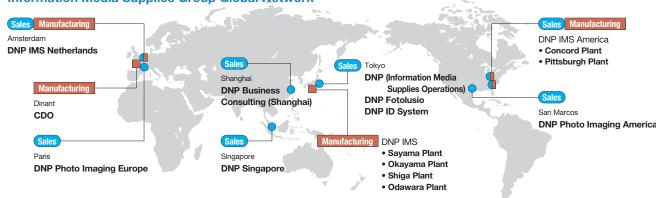
Cultivating diversity of outlook and foreign language ability to better serve the market

While business-to-business is the main area of activity for DNP, Information Media Supplies Operations provides consumer solutions including automated portrait photo booths and photo printing terminals. Success in this business demands sensitivity to market needs. To foster this sensitivity, the division sends employees to sales agents and retail outlets as part of their training and where they can hear directly from the market.

Since the division's products hold a high share in their overseas markets, an accurate understanding of overseas market requirements is also essential. In addition to foreign language training for employees at the Group level, the division also mounts its own language training efforts. This ensures rapid, efficient communication between business units in different countries. The Group also encourages the internationalization of its employees through such means as periodic TOEIC testing for all employees, with established score targets.

→ Information Media Supplies Operations http://www.dnp.co.jp/ims/

### Information Media Supplies Group Global Network



### As a member of DNP, a world-leading corporation, I always remember to be bold

### **Belinda Lopresti**

DNP IMS America

A great company is often defined by their products, sales, profitability, customers and brand strength. True. But none of this is achieved without integrity, teamwork, respect for the challenges and unlimited passion to do a great

job. One of the best examples of this culture is the "never give up" attitude of DNP employees. It has been a year of challenges but our strength of character, work ethic and dedication to fulfilling our customers' needs has helped shape our organization and shown us the path to take for our future.

DNP is on the verge of something truly great. We are ready to reinvent ourselves, to build toward unrivaled customer excellence with a passion for our work and a celebration of our successes. We will be an industry leader even in the face of turbulent times. I want to look back at DNP as one of the great companies in the world and someday say, I was part of that. It is a prevailing attitude and one that will take DNP from a good company to a global leader.

Aiming for personal growth by applying business ideas gained from interacting with people of different backgrounds

Kiyoshi Hamao

Manager, Sales Division 2, Information Media Supplies Operations, DNP

When we began to extend our brand, the accumulated experience and know-how of employees from Konica Minolta was a huge

help in creating a new business model for DNP. Employees who joined us from global pioneer Sony played a major role in streamlining and accelerating our business procedures. The lessons we have learned from employees coming from other companies have strengthened our client relationships and are a major asset.

Interaction between people of diverse backgrounds is essential if we are to grow the business rapidly in a constantly changing global market. I hope to actively absorb new ideas from diversity and hone my capacity for creating new value.



Generating Synergy from Interaction between Employees with Diverse Backgrounds

### **New value creation** Bolstering our planning, development and cost competitiveness for products that meet consumer needs (Information Media Supplies **Technical** expertise Group functions) Synergy Retail sales channel PM KM promotion expertise System integrator PM KM SO Printer manufacturer Active personnel exchange, training at sales agents and retail outlets, etc. Print media manufacturer SO DN

KM Konica Minolta Group

Information Media Supplies Operations formerly focused on supplying printing media to printer manufacturers. Then in 2004, the division invested in US company Pixel Magic Imaging, and in 2006 acquired the Konica Minolta Group's photo paper business. These moves brought numerous new sales and development personnel into the Group, creating an environment for absorbing a wide range of know-how relating to digital photo printing, from the manufacture of numerous varieties of print media to printing system development and sales.

PM Pixel Magic Imaging

Furthermore, in April 2011 the Group acquired Sony's printer business. This brought personnel to DNP who

had been involved with printer development at Sony and made it possible for DNP to develop its own printers and printer-related business. Employees with diverse backgrounds are now learning from and inspiring each other. The synergy from this interaction is promoting the creation of new value.

But intellectual property and technical know-how are not the only things to be gained from this human interaction. This interaction also brought know-how indispensible for the conduct of business, including cost control methods, thus enabling DNP to bring to bear numerous new perspectives.

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### Fostering Employee Motivation and Job Satisfaction for Continued Value Creation

A company is comprised of people.

If companies are to provide new value to society, they must establish environments where employees can work safely and comfortably with energy, enthusiasm, and a sense of reward.

DNP aims to create lively workplaces to enhance job satisfaction for every employee.

### Workstyle Innovation

From time resource creation to effective utilization of time resources and enhancing job satisfaction

In order to continuously create new value, we consider it necessary for employees to practice a self-directed working approach that is efficient and productive. With this in mind, DNP developed and promoted the Productive Time Resource Project Stage 1 Plan for FY2009-FY2011, based on a theme of workstyle innovation. We are promoting activities that focus on time resource creation, targeting value-added work, while creating time resources for every employee to utilize effectively. As part of this effort, we successfully reduced average group-wide overtime by more than 35% relative to the base year of FY2008.

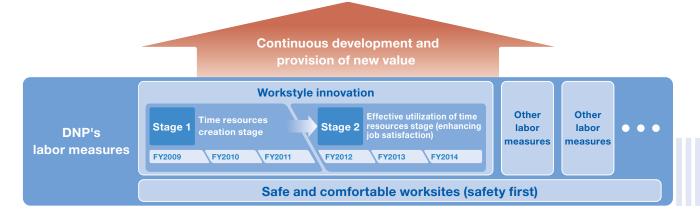
At the same time, we consider it necessary to enhance each employee's motivation and job satisfaction by promoting activities focusing on the effective use of time resources by further implementing workstyle innovation.

### Workstyle Innovation

Sharing pride and a sense of solidarity through *TAIWA* 

To enhance employee job satisfaction, it is important for them to take pride in their work and feel a connection with coworkers, while trusting management and understanding the direction the company is taking. With this in mind, we are making efforts to motivate employees through *TAIWA* with managers, focusing on employee activity, and creating opportunities for employees to participate and be stimulated, with the aim of enhancing job satisfaction through effective use of time resources.

We will continue working to ensure that our efforts are effective and fulfilling on a Group-wide basis, as well as for each Operations and Group company. In particular, we consider communication focusing on *TAIWA* to be the basis for enhancing job satisfaction. DNP targets workplaces where employees in a variety of roles can maximize their potential in a stimulating atmosphere.



#### Developing employee self-confidence and capacity for action through expertise and skills transfer

#### Yukio Kohara

Manager, Production Division 1, Product Management Division, D.N.K.

D.N.K. is a printing machine manufacturer. This profession requires specialized expertise. If a printing machine is assembled by referring to diagrams alone, it is not enough to ensure that printed materials will be streaming out

in no time. My aim is to transfer this expertise to younger employees. Accordingly, we have launched assembly seminars for manufacturing division employees to learn the basic skills required. I hope these seminars will give participants a chance to learn new skills and help them confirm their existing understanding, as well as answering any questions they may have regarding the work. I will continue striving to teach as much as I can to help each participant gain confidence and develop their capacity for action.

### VOICE

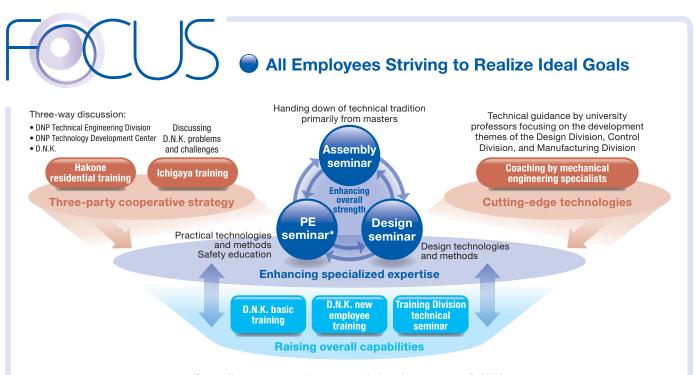
### Innovating for flexible response to changes in the business environment

#### Yuki Nakanishi

Deputy General Manager, Technical Engineering Division, DNP

D.N.K., the DNP Technology Development Center, and the DNP Technical Engineering Division are boldly promoting a three-party cooperative structure as they continue to innovate the manufacturing system. We are bolstering our

efforts to differentiate all processes from planning, development, design/manufacture, operation, and direction through to maintenance while working to enhance competitiveness. We hold residential training at our center in Hakone on a quarterly basis to strengthen collaboration among the three parties and combine vectors. In the stimulating atmosphere of a hot spring spa, participants engage in heart-to-heart discussions into the early hours. To achieve an ideal result, various measures and ideas from personnel development to strategic facility development are discussed, and the parties are responsible for promptly implementing these proposals. The role of D.N.K. as a manufacturing unit in particular is increasingly regarded as important by the manufacturing sites.



### Overall structure of personnel development at D.N.K. \* PE seminar: Plant engineering seminar

D.N.K. performs all operations, including the development, design, manufacturing, and maintenance of production systems for various printing machine coaters. In 2009, we took the opportunity afforded by the joint discussion camp held by the DNP Technology Development Center, DNP Technical Engineering Division, and D.N.K. with the aim of establishing an innovative manufacture system. All 358 employees assembled to discuss D.N.K.'s ideal goals and how they could be realized. The employees expressed wide-ranging views on such topics as how to strengthen the organization and its training systems. To create worksites where people can work actively, enthusiastically and happily, we have brought these views to management. In order to embody the themes proposed by many—making all D.N.K. employees self-

reliant, creating activated worksites, and personnel development—we have organized monthly D.N.K. basic training since 2011. During training sessions, three to five designated employees work with general managers and managers, who play the roles of lecturers to prepare lecture materials and are involved in running the session. Accordingly, this training session means that everything from preparation to operation becomes a training context. The fact that this scheme was the product of discussion by all employees helps reinforce their commitment and job satisfaction. Together with professional training, which was similarly established, the training helps restructure employee techniques and awareness, improves basic skills, and enhances the work climate.



### Supporting the Development of Graphic Design by Offering "Familiar Experiences"

DNP hopes to increase the number of individuals capable of respecting each other's sense of values through exposure to arts and culture.

We believe the experience of mutual involvement will facilitate a culture of TAIWA and help spawn new solutions as well as values.

#### What Is ggg?

Printing × Graphic design: A chance to experience the enhanced quality of collaboration

Graphic design as developed through posters and books is inextricably linked to printing. As printing technology has evolved to match design ideas, designer creativity has expanded even further. Consequently, products created through interchange between cutting-edge sensitivities and technologies have significant worth as artworks.

To create an opportunity to experience the brilliance of graphic design through examples of outstanding work, DNP launched "ggg" (Ginza Graphic Gallery)—Japan's first specialized graphic design gallery-in Ginza, Tokyo in 1986. DNP aims to nurture individuals with deep sensitivity, capable of accepting diverse cultures, by providing them with venues and opportunities to encounter creative and wide-ranging work and artists from a range of nationalities and eras.



Shigeo Fukuda Exhibition "ILLUSTRICK 412" (1986)



Ikko Tanaka Graphic Art. "Botanical Garden" (1990)

### ggg's 25th Anniversary

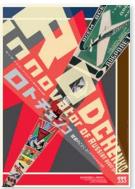
What we have cherished over 25 years and what we want to hand down for the next 25 years

ggg marked its 25th anniversary in 2011. Over this period, a total of more than 300 exhibitions have been held, generally once a month, and over a million people have visited the gallery.

ggg has been developing various activities under the themes of "Familiar experiences in graphic design" and "Preserving and passing on contemporary sensitivity." Its events have included themed exhibitions with tremendous impact that also offer the chance to experience the extreme attention to detail of real creations; "Gallery Talk" (also featuring web-casting), presenting the unique views of artists; and "ggg Books" (hard copy and digital), a series of 100 anthologies featuring the works of graphic designers bursting with unique talent. In addition to these activities, in future we also hope to collect and preserve creations in which the artist's era and sensitivities are accumulated as cultural assets, to provide renewed opportunities to experience such creations and hand them down to the next generation.



Shueitai 100 (2011)



Rodchenko: Innovator of Russian Avant-Garde (2012)

25 years have passed since ggg first opened. It remains the only gallery in Japan to introduce works of key graphic designers from Japan and overseas. I hope ggg will continue to evolve its activities over its next quarter century.



Happy 25th anniversary to ggg - the great greater greatest gallery!

It was 10 years ago when I was first invited for my 'Oriental Passion Western Harmony' exhibition, I love to work with ggg again . and again . . . and again!

Designer (China)

Since my days as an art student, ggg has been my dream venue. On countless occasions, I would fight my classmates to get ggg posters placed on the college bulletin board. I sincerely hope ggg continues to shine as a center for art.

> Akiko Nakava P&I Solution Group, DNP Hokkaido



The ggg gallery and its global view of activities as a locus, the contribution made by friendly competition and mutual inspiration among designers through printing technologies, and the virtue and significance of a working approach that expects nothing in return - I consider all of these to be hope for the future.

Designer, Executive Director of the Communication Design Laboratory



ggg has really given art students a boost through its work with THE SIX. I look forward to further opportunities to cultivate a diversified sense of values.

College of Art and Design, Musashino Art University

ggg has been a significant platform for the documentation and celebration of leading designers from throughout the world. Its international focus makes it one of the most important venues for the display of graphic design, typography and illustration. The only thing better is if ggg were in every major design city in the world.

Design Critic (USA)



### Congratulations, ggg!

ggg has twice organized personal exhibitions of Katsumi Asaba. Holding such personal exhibitions at ggg gives artists the opportunity to lay themselves bare and helps them see, discover, and recognize what they should do. It is a significant design launch pad.

10th Director of the Kuwasawa Design School

ggg. To graphic designers these three letters say it all.

Ginza Graphic Gallery is the focal point where art and design, quality and creativity

Congratulations for the splendid years and all the best for the future!

Designer (Finland)

ggg has been my mecca and goal, as well as a venue that constantly reminds me how much further I have to go.

My heart races with excitement, and this sensation urges me to continue designing. I think this feeling will last forever. With thanks!

Art Director, Vice President, SUN-AD Company Limited

I would like to extend my congratulations on ggg's 25th anniversary. I also express my respect for its wide-ranging contributions to culture and art, especially in the field of graphic design. I wish ggg the best in its future endeavors.

Graphics Curator, Art Museum Department, Kawasaki City Museum

ggg is a crucial venue for today's design community. How marvelously it has contributed to stimulating designers!

Art Director, President, MR\_DESIGN, INC



Has it already been 25 years or has it only been 25 years? Anyway, what a fruitful quarter

ggg is an iconic playground for global designers and an oasis where the latest contemporary trends flow like fresh air.

Deputy Curator, Museum of Modern Art, Toyama



Thanks to ggg's nearby stimulus, we have been able to continue our activity as a graphic design gallery in Ginza for such a long time.

Makiko Odaka Creation Gallery G8, Recruit Creative Center, Recruit Co. Ltd.



ggg is a dream for students, a source of motivation for designers, and a beacon of pride for DNP employees. I am truly grateful for this venue, which offers diversified value through graphic design.

Masakazu Matsukawa No. 2 Cross Media Planning Division, DNP Media Create



I feel grateful that you provide this unique venue for us to express ourselves. I look forward to our continued association.

Chairman, Tokyo Art Directors Club



ggg is worldwide strongly acknowledged and highly estimated with a strong focus on mediation of visual communication on a top level. With their exhibitions, publications and their generosity, the institution promotes graphic design internationally in a remarkable way. I cordially congratulate ggg on their big success.

Director, Museum für Gestaltung (Museum for Design), Zürich

Various posters let people experience the atmosphere of the era (left to right: designs by Shigeo Fukuda, Ikko Tanaka, Dainippon Type Organization, and Kijuro Yahagi)

### DNP Group Support for Victims Affected by the Tohoku-Pacific Ocean Earthquake

### **DNP Facility Services Efforts**

DNP Facility Services is a general service company that works to create a valuable, safe, and productive business environment, as well as a comfortable worksite and surrounding environment for the DNP Group and its stakeholders (mainly DNP Group

employees). The company is engaged in a wide range of businesses, including facilities administration and business support for over thirty plants and offices in Japan, security, company cafeterias, company stores, travel agency, real-estate, resort and training facilities, fitness clubs, and environmental measurement.

DNP Facility Services organized the "Support for Tohoku Fair," a project involving employees and local residents proactively purchasing and consuming specialty products from lwate, Miyaqi and Fukushima Prefectures, where damage was most acute. We provided services in the form of support activity, making it easy for Group employees to participate, and donated 5% of sales to charity for those affected.

### "Menus to support Tohoku" have been served at company cafeterias

The company offers a menu with seven meal options that maintain a high quality of ingredients, taste, and nutritional balance, featuring local products and specialty dishes of the Tohoku region. Over the course of around half a year, we provided more than 31,000 such meals at our 24 company cafeterias nationwide. The project has been very well received by employees, and we will continue to provide menus of local food from affected areas in 2012





es of regional Tohoku specialties at the company store

We ordered local specialties of Iwate, Miyagi, and Fukushima Prefectures for sale at a discount at the Ichigaya My Shop, a company store within the DNP Group. We also gave employees nationwide an opportunity to purchase the products at My Shops in local offices as well as by in-house mail. As a result, a total of more than 2,000 items of 28 kinds of food, including Morioka specialty noodles and confections from Miyagi, were sold.





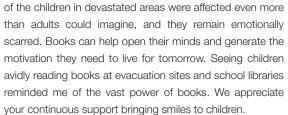
In March 2012, a donation of ¥775,573, equivalent to 5% of sales from the "Support for Tohoku Fair" plus a matching contribution of the same amount from DNP, for a total of ¥1,551,146, was donated to the secretariat of the Gakko Toshokan Genki Project (School Library Cheer-up Project). The project donates new books sought by school libraries in lwate, Miyagi, and Fukushima Prefectures that were affected by the earthquake.

Since donated books will be purchased locally, the effort will also help local book stores. Funds donated by the DNP Group will be used for book donations planned for August 2012.



Moriyuki Morita Director, School Library Association

I would like to express my sincere gratitude to those from DNP Facility Services as well as the DNP Group for their heartwarming support for earthquake victims. The hearts





### With the voluntary efforts of DNP Group employees nationwide, we successfully provided integrated support

Kenichi Kaya President, DNP Facility Services

business activities while participating in fund-raising activities as additional support for the next generation.

We have been considering what we could do to contribute decided to make our donation to the Gakko Toshokan Genki and how we could support earthquake victims through our Project which is related to DNP Group businesses, to produce

a member of the DNP Group in the aftermath of the earthquake.

Through these efforts, employees of both service providers We successfully held the "Support for Tohoku Fair," and I am and service receivers experienced the joy of participating in delighted to have accomplished our integrated efforts, however the project, and I believe we achieved a satisfactory result. At meager, within the DNP Group. We provided Group employees the same time, employees including myself felt we could do with opportunities to help support areas of the Tohoku region more within the company. I would like to use this experience to close to our worksites through our food business, which provide continuous support, as well as consider the nature of operates company cafeterias, as well as our service business support measures when disaster strikes to ensure that we are engaged in company store operations. Moreover, we also ready, based on lessons learned from the earthquake.

DNP has been providing various forms of support to help victims and reconstruct affected areas. In this section, we introduce the approaches taken by two Group companies.

For DNP to continue providing support, we shall strive to understand the current situation of the affected areas and act to meet their needs.

### **DNP Digitalcom Efforts**

technology and know-how we have developed through our business, and fostering employees who voluntarily participate in these activities.

With a vision of evolving to be an "ICT solution brand company" offering communication and commerce to everyone with "ICT and people" as the driving force, DNP Digitalcom provides solutions through digital media that facilitate and revitalize communication among society, companies, and general users. In addition, since 2009, we have been conducting our own CSR activity, which we have dubbed the Hachidori-no-Hitoshizuku (The Hummingbird and the Water Drop) Project, designed to contribute to society with

Fiscal 2011 marks the third year of DNP Digitalcom's Hachidori-no-Hitoshizuku Project\* and our activities have been conducted under six themes. One of these themes is disaster support, and since the earthquake we have

strived to do everything we could in this respect.

As the project name suggests, we hope to continue providing as much support for reconstruction as possible.

\* Hachidori-no-Hitoshizuku Project: The Hummingbird and the Water Drop is a native folk tale from South America's Andes region. It is said that when a forest fire struck, a hummingbird brought water in its beak and placed a single drop of water on the fire. The other animals told the hummingbird that it was wasting its time, but the hummingbird replied, "I am just doing what I can "We named our project Hachidori-no-Hitoshizuku because we would like to take small steps and do what we can, like this hummingbird.



Yuu Yasui Medical Doctor, GMJ President

With determination that we will not sit still when there are people in need, we at GMJ (Good Medicine Japan) have been delivering

hot meals and helping encourage victims in evacuation centers, mainly with the help of young adults from Tokyo. In December 2011, we held a Christmas party at a temporary shelter in Kesennuma. Six participants from DNP Digitalcom provided assistance as well as 30 sets of Santa Claus costumes for staff to wear that day. There were warm singing voices and laughter in the shelter, and I think the children were pleased and were enabled to momentarily forget their situation. I hope we can continue such support activities until the affected areas have recovered.

### Support for establishing a high school website in Fukushima

After the earthquake and the nuclear power station accident, evacuated students from one high school in the restricted zone in Fukushima Prefecture had to be divided among four different schools in the prefecture. In response to the desire of teachers to link the students via website. DNP Digitalcom provided website construction software and supporting materials.

### Joint efforts with an IT business operator in the affected areas

As part of our business-based support, we have been promoting the creation of a system for utilizing human resources engaged in local IT business. In November 2011, we started a new endeavor in cooperation with IT companies in affected areas while still seeking for the right business category in which our mutual strength is best leveraged. Looking to the fully-fledged launch in 2012, we are strengthening this cooperative structure.

### Dispatching employee volunteers

In December 2011, six employees participated as volunteers in a Christmas party held at a temporary shelter, helped decorate the party site, and provided costumes. Moreover, since April 2012, we have been dispatching 3-4 employees at a time to serve as volunteers on a regular basis. In April, our president joined this scheme. There is an increasing need for manpower support in the affected areas for debris removal and other restoration work, and we are considering providing physical support on an ongoing basis.





### The goal: Continuous reconstruction support in accordance with changing demand

President\*, DNP Digitalcom Ryota Chiba

for effective CSR.

are participating in the Hachidori-no-Hitoshizuku to help those in the affected areas. Project, and our goal is to get all employees involved. To achieve this, we have been providing various

DNP Digitalcom aims to be a company where people opportunities for our employees in response to their shine, providing services to help people shine, with our basic aspiration to contribute to society. In 2011, after Employees First management motto. People are our the earthquake struck, we were constantly wondering key asset and our driving force. We also believe that all what we could do right there and now. This has employees should strive to contribute to and improve also been one of the themes of our Hachidori-nosociety through our business activities. This will make Hitoshizuku Project. The theme remains ongoing, and we will strive to encourage as many employees as Currently, nearly half of DNP Digitalcom's employees possible to participate in this long-term support effort

\* Current Deputy General Manager, C&I Operation Division



### **Planning and Developme**

### **Color Universal Design**



The CUD mark is given to designs whose colors have been chosen to be easily perceptible by the majority of people. The mark is issued by the Color Universal Design Organization.

### Planning and Development Reliability



The J-SUS mark is given to environmental reports and other documents deemed by a testing institute to have met certain criteria in its reporting and contents. The mark is issued by the Japanese

Association of Assurance Organizations for Sustainability Information. Pages 49 through 52 of this report, which deal with environmental issues, are subject to J-SUS evaluation.

### Certifications and Symbol Marks Earned by This Report

These marks denote that we at DNP planned, produced, printed, and bound this report in a manner that was considerate of society's needs. Perhaps you have seen these marks before but do not know much about them. Why not take this opportunity to find out?

Printing & Binding Environmental Impact



Green Purchase Network, a ction of organizations who oursue green purchasing practices, issues this mark for companies who

manufacture printed products in accordance with the GPN's Printing Services Purchasing Guidelines and who disclose their practices on the GPN website. Our efforts related to this report are posted on that site.



This mark is awarded for products made using biomass-i.e. renewable organic resources. Because it uses organic resources and not fossil fuels, biomass offers two benefits: first, there is no danger of the resources running out and, second, CO<sub>2</sub> emissions are minimal. The mark is issued for products approved by the Japan Organics Recycling Association. In the case of this report, the ink has been approved for the biomass mark.



This mark is awarded for the use of natural, "green" electricity generated using wind, biomass, and small-scale hydroelectricity facilities. Natural energy produces no CO<sub>2</sub> emissions during the generation process and is renewable, unlike energy produced from fossil fuels. As a result, it has a smaller impact on the environment. This report took 2,476kWh of

electricity to print and bind, which was taken from the 1.15 million kWh of green energy we source every year.



This mark is awarded for documents printed on paper that can be recycled back into printing paper. This report is printed on recyclable paper made using only A-rank materials as listed on

the Japan Federation of Printing Industries' Paper Recyclability List (materials that do not hinder recycling back into printing paper are ranked A).

ing & Binding Forest Protection



This mark is issued by the Forest Stewardship Council™ to paper produced in a way that helps sustain forest environments. This mark applies to the cover and main body of this document.

The mark of sponsible forestr



This mark is awarded for documents printed on the Forest Neighborhood Association's "forest thinning support paper" which promotes

forest thinning and therefore contributes to healthier forests. Forest thinning is carried out by Office Chonai-kai, an NPO that focuses on environmental issues, to produce no more paper than is needed. The price for this paper includes a surcharge to fund forest thinning (15 yen per kilogram), all of which is put to thinning activities and the effective use of forest thinning. The cover and main body of this report is printed on forest thinning support paper.



This mark is awarded for products made using non-wood materials. Issued by the Non-Wood Green Products Association of Japan, an NPO, it is designed to help cut back on deforestation. The questionnaire included in this report is

printed on approved non-wood paper containing 30% reed pulp.

**Environmental Conservation** throughout the Whole Life Cycle



CO2の「見える化」 カーボンフットプリント 検証番号: CV-BS01-015 The Carbon Footprint of Products (CFP) mark indicates the total amount of greenhouse gas (converted to amount of CO<sub>2</sub>) emitted in the product's entire lifecycle, from materials procurement to disposal and recycling. DNP has participated from the beginning in CFP System Trials conducted by the Ministry of Economy, Trade and Industry and other related

agencies. We calculate and indicate the CFP of our own publications, and promote the growth of the CFP system.

DNP's CSR Efforts

### Environmental Report



### "A hermit crab—one natural monument living in another natural monument"\*

Submission to Company Photo Contest (2011) sponsored by the Information Media Supplies Operations Photo: Child of Mitsuru Kitamura, Research and Development Center

The terrestrial hermit crab has been designated as a natural monument. This one lives in a semi-fossilized shell of the mandarina luhuana, a species of snail said to have become extinct 1,000 years ago. These shells are also natural monuments. This photo was taken at Minamijima Island, one of the Ogasawara Islands, which have been designated by UNESCO as a natural heritage site.

### As a manufacturer, we at DNP are constantly concerned about achieving a harmonious coexistence with the Earth's environment. We do our best for the planet, as required by the DNP Group Code of Conduct, which states that "We are contributing to building a sustainable society so as to pass on the rich blessings of the Earth to future generations."



### **Environmental Management Structure**

Our environmental management structure is operated by the DNP Group Environmental Committee and the Operations Group Environmental Committees.

### • DNP Group Environmental Committee

The committee is made up of operations group directors in charge of environmental matters. They deliberate and make decisions concerning the environmental policies, objectives, and plans of the entire Group, and monitor the progress of the plans and the status of the achievement of those objectives.

• Operations Group Environmental Committees The decisions made by the DNP Group Environmental Committee are developed by the Operations Group Environmental Committees after considering the special characteristics of the particular sphere of business.

### **Environmental Management System**

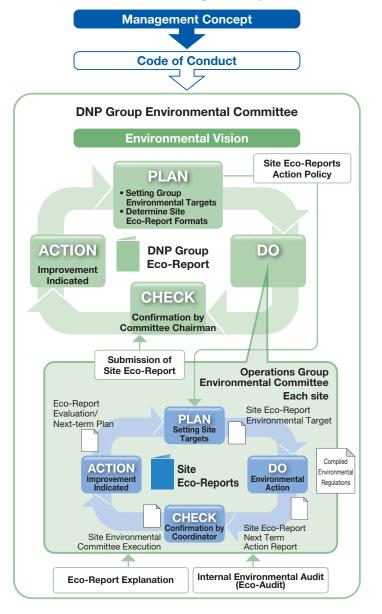
We established an independent environmental management system (EMS) in 1993. Using Eco-Reports and Site Eco-Reports, we operate a halfyearly "Plan-Do-Check-Action" cycle.

We also strive to improve the efficacy of our EMS. To that end, we began performing "Eco-Audits" in 1996 to strengthen the foundation of the group's environmental management initiatives.

#### **Structure Overview**



### **Outline of Environmental Management System**



#### **Evaluation** Target exceeded by a wide margin **FY2011 Environmental Management Results Targets** Target achieved or making steady progress toward target △ Making active efforts but target not achieved X Efforts insufficient Result Targets through FY2015\* Targets relating to global warming prevention and reducing environmental impact incurred during Global warming prevention transport are for FY2020. 5.3% Emissions in 2005: 1.035 million tons To reduce GHG emissions 10% from the 2005 levels by FY2020. decrease from Emissions in 2005: 0.980 million tons that in 2005 Reduction of environmental impact incurred during transport To reduce per-unit fuel use for transport (amount of fuel used/ 1.9% Per unit in 2010: 1.61kl/100 million ven sales) by 1% per annum and 10% by FY2020 compared to increase from Δ Per unit in 2011: 1.64kl/100 million yen FY2010. that in 2010 **VOCs** 18.7% Emissions in 2010: 6,840 tons To reduce emissions of VOCs (except for methane) by 20% 0 decrease from compared to 2010 by FY2015. Emissions in 2011: 5.563 tons that in 2010 **Reduction of industrial waste** 3.6% Per unit in 2010: 0.468 tons/10 million ven To reduce per unit waste emissions (waste emissions/ decrease from production) by 15% from the 2010 level by FY2015. Per unit in 2011: 0.451 tons/10 million yen that in 2010 0.1 point Landfill waste rate in 2010: 0.9% To achieve zero emissions for the entire DNP Group by FY2015. decrease from Landfill waste rate in 2011: 0.8% that in 2010 Development and sales of environmentally conscious products 5.7% Sales of 318.0 billion yen in 2010 To increase sales of environmentally conscious products and increase from services to 400 billion yen by FY2015. Sales of 336.0 billion yen in 2011 that in 2005 Green purchasing 39.9% green purchasing rate for materials in 2010 5.9 point To increase the rate of the materials purchased according to the 0 increase from DNP green purchasing standards to 50% by FY2015. 45.8% green purchasing rate for materials in 2011 that in 2010 To increase the purchase rate of environmentally certified 1.2 point 60.0% green purchasing rate for materials in 2010 products, such as those labeled with the Eco-Mark, of the total increase from supplies (office supplies and equipment) to 85% by FY2015. 61.2% green purchasing rate for materials in 2011 that in 2010

Elivir	oninental conservation		
To kee	p the maximum concentration of air emissions subject to	95% achievement rate of targets for 2011	
emissio	ons regulations at 70% of the required standard or less.	(voluntary target)	U
To keep	the maximum concentration of wastewater discharges subject	97% achievement rate of targets for 2011	
to wast	rewater regulations at 70% of the required standard or less.	(voluntary target)	U
To kee	ep the maximum concentration of odors at our site	98% achievement rate of targets for 2011	
perime	eters at 70% of the required standard or less.	(voluntary target)	U
To kee	ep the maximum level of noise at our site perimeters at	82% achievement rate of targets for 2011	
70% of	f the required standard or less.	(voluntary target)	
To kee	p the maximum level of vibration at our site perimeters at	100% achievement rate of targets for 2011	
70% of	f the required standard or less.	(voluntary target)	
To kee 70% of To kee	ep the maximum level of noise at our site perimeters at f the required standard or less.  p the maximum level of vibration at our site perimeters at	82% achievement rate of targets for 2011 (voluntary target) 100% achievement rate of targets for 2011	0

### Office environment

To increase the rate of the fractional recovery of waste paper to 70% of that for general waste.

77.7% recovery of waste paper in 2011

Status of Legal Compliance

In FY2011, there was one incidence where water quality standards for wastewater were exceeded, the fourth such incident in three years. There are no ongoing legal disputes involving environmental issues. We have unfortunately had some complaints from areas neighboring our plants concerning noise and odors. Whenever we receive such complaints, we respond promptly by launching a thorough investigation into the cause of the problem and working to make improvements and prevent recurrence.

DNP manufactures a variety of different products closely related to the everyday lives of consumers, with main materials such as paper, film, plastic, metal (iron, aluminum, etc.), and ink, as well as electronics.

### a Information Communications Segment

Mainly manufactures magazines and other printed material through offset printing, uses a great amount of paper.

### **b** Lifestyle and Industrial Supplies Segment

One of the biggest users of solvents at DNP as it manufactures packaging, construction and other industrial materials and uses solvents for its gravure printing, coating, and lamination.

### c Electronics Segment

Uses and discharges a great amount of water in proportion to the rest of the Group in manufacturing LCD color filters and lead frames through its etching and photolithography technologies.

### d Other

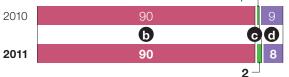
Group companies manufacturing products not associated with the Information Communications, Lifestyle and Industrial Supplies, or Electronics segments, or those spanning multiple segments.

#### Main materials (Unit: 1,000 tons) 2010 2011 Paper 1,816.7 **1,824.8** (0.4% increase) Film 121.8 119.2 (2.1% decrease) Plastic 107.0 **113.6** (6.2% increase) 47.6 Metal **50.5** (6.1% increase) **51.1** (1.7% decrease) 52.0 Others 104.1 98.1 (5.8% decrease) Percentage distribution by individual segment for paper (Unit: %) 2010 10 12 a **6 0** 9 12 2011

### Main secondary materials (Unit: 1,000 tons)

	2010	2011
Solvent	23.4	<b>25.0</b> (6.8% increase)
Acid and alkaline	21.0	<b>13.9</b> (33.8% decrease)

### Percentage distribution by individual segment



### **Utilities**

	2010	2011
Overall energy input (TJ)	23,100	<b>22,400</b> (3.0% decrease)
Electricity (million kWh)	1,635.5	<b>1,585.7</b> (3.0% decrease)
City gas (million m³)	117.1	<b>115.7</b> (1.2% decrease)
LNG (million kg)	15.2	<b>13.8</b> (9.2% decrease)
LPG (million kg)	6.8	<b>6.5</b> (4.4% decrease)
Fuel oil (kl)	1,900	<b>1,000</b> (47.0% decrease)
Steam (TJ)	520	<b>500</b> (3.8% decrease)
Kerosene (kl)	1,300	<b>1,300</b> ( – )
Water (million m³)	16.7	<b>15.9</b> (4.8% decrease)

### Percentage distribution by individual segment for water

2010	6	12	66	16
	a	<b>6</b>	•	d
2011	5	12	68	15



ormation Communications Segn Books and periodicals, commercial printing, business forms

a

b festyle and Industrial Supplies Se Packaging, decorative materials.

C Electronics Segment Displays, electronic devices

industrial supplies

d Other

Ink, beverages, etc.

### Current Status of Recycling in the DNP Group

	2010	2011
Recycled solvent (1,000 tons)	4.6	4.0
Usage ratio *1	1.2	1.2
Recycled acid and alkaline (1,000 tons)	3.2	3.2
Usage ratio	1.2	1.2
Recycled water (million m³) *2	519.4	509.7
Usage ratio	32.2	33.0
Vapor generated from waste heat recovery (tons)	206,400	203,200

### **Emissions into the air**

	2010	2011
GHG*3 emissions (1,000 tons-CO <sub>2</sub> )	1,017	<b>980</b> (3.6% decrease)
NOx emissions (tons)	697	<b>740</b> (6.2% increase)
SOx emissions (tons)	11	<b>10</b> (9.0% decrease)
Atmospheric emissions of VOCs (tons)	6,840	<b>5,563</b> (18.7% decrease)
Of which, subject to PRTR (tons)	654	<b>676</b> (3.4% increase)

### Percentage distribution by individual segment for GHG emission amounts

2010	19	33	33	15
	а	6	G	d
2011	19	32	35	14

### **Emissions into bodies of water**

	2010	2011
Water discharged (million m³)	14.0	<b>13.6</b> (2.9% decrease)
COD emissions (tons)	48.9	<b>40.4</b> (17.4% decrease)
Nitrogen emissions (tons) *4	13.4	<b>13.5</b> (0.7% increase)
Phosphoric emissions (tons)	0.4	0.4 (-)

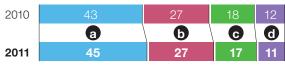
Percentage distribution by individual segment for water discharge



### Undesired materials generated (Unit: 1,000 tons)

	2010	2011	
Total amount of undesired materials	365.6	357.9	(2.1% decrease)
Waste emissions	65.1	59.3	(8.9% decrease)
Landfill waste amount	3.2	2.7	(15.6% decrease)

### Percentage distribution by individual segment for undesired materials



\*1 Usage ratio: This is a calculation of (input + recovery and recycling)/input. It does not include vapor or solvent in ink.

OUTPUT

- \*2 Calculation methods have been revised and FY2010 data recalculated accordingly.
- \*3 GHG: Greenhouse Gases
- \*4 Water discharge channels to which the Water Pollution Control Act applies.

### Applying the PDCA cycle to energy management

For more than thirty years, we at DNP have endeavored to promote achievement of a low-carbon society, and our efforts have been based on three main concepts: (1) development, implementation, and constant improvement of energy-efficient facilities and technologies; (2) increased production efficiency; and (3) finding ways to improve operations.

We have pursued deliberate action throughout all areas of our business to achieve this goal, wherein our various workplaces have led a broad range of efforts. Having built up a wealth of experience in this area, we now seek to establish a structure that will enable the whole DNP Group to achieve solid outcomes.

### Bolstering Network-wide Efforts

Development and introduction of new systems bring solid outcomes and further improvements

At DNP, we have made a concerted effort to make energy consumption more visible using a system we launched in 2009. We have installed monitoring equipment at some 70 business sites nationwide. Information about their energy use and energy loss can then be put to use optimizing manufacturing conditions and otherwise making our production activities more energy-efficient.

In August 2011, the outcomes we had achieved up to that point culminated in the development of our Energy-Saving Total Management System, which enables our business sites to keep tabs on energy use across the whole production process from initial planning to final testing of products. The system, which helps each site to apply the PDCA cycle in its efforts to conserve energy, represents a major success in our creation of a framework that provides for more efficient energy conservation innovations.

#### Action as a Group

**Deploying the Energy-Saving Total** Management System as a concerted group-wide effort

The Energy-Saving Total Management System runs on regular computers or other general-purpose devices, and the interface can be customized in accordance with the work performed by the site involved. The system can be built quickly and at low cost, as illustrated by its smooth introduction into DNP Group sites despite the fact that those workplaces cover a broad array of products including printed paper materials, films, and electronic components.

What is more, we are constantly looking for initiatives to pursue energy conservation on a companywide scale. For instance, 36 facilities within the Tokyo Electric Power Company (TEPCO) service area and 9 within the Kansai Electric Power Company (KEPCO) service area are connected to a network that enables the Technical Engineering Division at DNP head office to monitor energy use centrally.

### **Energy-Saving Total Management System Configuration** (4 sub-systems)



The system displays 350 energy-saving actions in descending order of effectiveness. Users select the desired action and enter successive status data to monitor progress.



Energy efficiency diagnoses highlight areas in which energy savings can be made. Optimal energy-efficiency plans are suggested on a per-plant or per-equipment item basis.



### Visualization

Data on energy use from monitoring devices installed on production equipment is tallied and analyzed according to operating



The effects of upgrading to more efficient devices, fine-tuning operating conditions, and other initiatives are calculated and used to determine whether or not those ideas should be adopted.











### A group-wide effort to conserve electricity raises awareness of the importance of energy conservation

#### Manabu Ohara

Technology Division, Kuki Plant, Ichigaya Publication Printing Operations, DNP

The Kuki Plant is located in the Kiyoku Industrial Park in Kuki City, Saitama Prefecture. Here, we are involved in rotary printing such as offset and letterpress printing, as well as saddle-stitching and perfect binding. We boast more printing

and binding devices than most other printing factories in Japan, and offer the full range of printing solutions for a large number of periodicals and other printed material.

To conserve electricity in the high-demand summer season, we have introduced a group-wide electricity cap, and we work with other factories supplied by TEPCO to make electricity demand along our production lines more readily visible and monitor demand centrally. Here at the Kuki Plant, we have increased the capacity of our power generators and installed gasfired devices, as well as implemented limits on the use of lights and air conditioners. We also stagger our summer vacations to flatten the peaks of demand. These innovations proved last year that we can get through periods of limited supply if we try and reinstilled in us the importance of energy conservation.

Long-term efforts to ensure substantial quality of energy conservation initiatives and leverage experience bring clear outcomes

Tetsuji Oyama

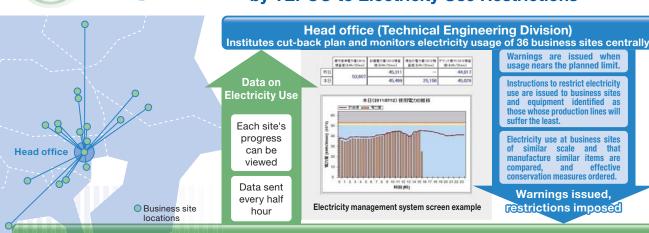
Expert Adviser, Technical Engineering Division, DNP

We at DNP have long strived to monitor and share information about energy conservation efforts at our plants nationwide. Similarly, as we go about building the Energy-Saving Total Management System, we have always endeavored to exchange

information and share successful case studies in order to achieve a system of substantial efficacy, both quantitatively and qualitatively. In particular, our drive to visualize overburden, waste, and inconsistencies throughout our plants and facilities has promoted strong teamwork throughout the DNP Group, and the same can also be said for the mutual identification by head office and plant staff of areas in each other's workplaces where energy could be conserved. These experiences helped us to quickly respond to the restrictions on electricity use, as covered in the Focus section on this page, and I believe this contributed to our ability to make electricity savings.

Moving forward, we look forward to further following the PDCA cycle to achieve better outcomes in terms of conserving energy and reducing greenhouse gas emissions. These efforts will surely lead to due recognition of DNP as a company that makes environmental management a pillar of its business.

### The Response of 36 DNP Business Sites Supplied by TEPCO to Electricity Use Restrictions



VOICE

36 business sites supplied by TEPCO

In the summer of 2011, an order was issued to large consumers of electricity supplied by TEPCO to cut their power consumption at peak times by 15% compared with the previous year. Here at DNP, we created a system that connected 36 of our business sites supplied by TEPCO (including our head office, plants, and sales offices) to a network and enabled the Technical Engineering Division to manage electricity use centrally. In addition to each site's conservation initiatives, having efficient, centralized control of their power consumption enabled us to achieve savings of 20% at peak times in comparison with the previous year.

Japan's nuclear power stations were shut down after the accident at Fukushima Dajichi Nuclear Power Station in the wake of the Tohoku-Pacific Ocean Earthquake of March 2011. Since then, the resumption of their operations has been delayed nationwide, and this has led to instability in the nation's power supply. In December, we also installed the Energy-Saving Total Management System at nine of our business sites supplied by KEPCO, thus ensuring we have a system in place to minimize disruptions if similar restriction orders are received. At DNP, we have some 70 plants nationwide and we are looking into expanding the scope of the Energy-Saving Total Management System.

### Installing new facilities to improve our plants' recycling capabilities

Here at DNP, we place effective action above mere talk when it comes to reducing environmental impact. To that end, we seek to modify our manufacturing processes so they produce less undesired materials and allow for more effective reuse of any waste that may be produced. Those efforts include designing new plants and offices to be as environmentally considerate as possible.

### Attention to Design

Designing plants to maintain product quality and reduce environmental impact

In November 2011, we built a new wing on the premises of the Tanabe Plant, where we manufacture paper containers for liquids and non-liquid products. At the new facility, we will make soft packaging using highperformance film for drinks, instant food products, and medicines.

The design of the new building takes environmental needs into account from a variety of angles. For instance, the clean area features a multi-stage dirt removal area with air showers and other devices so that dust and dirt are not brought into the clean area during entry and exit. In this way, we seek to ensure the integrity of our product quality regime. In addition, the new plant has heat pumps\* to harness heat energy, as well as stateof-the-art equipment that allows the solvents used in the printing process to be reused. As illustrated by these examples, we are keen to introduce new facilities so as to help reduce the environmental impact of our manufacturing processes.

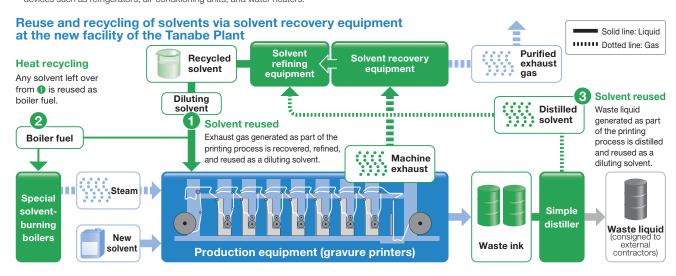
\* Heat pump: A device that transfers thermal energy from a source to a sink that is at a higher temperature than the source. Heat pumps find uses in devices such as refrigerators, air-conditioning units, and water heaters.

### **Building Plants that Promote Recycling**

Recycling solvents helps cut back on use of materials and CO<sub>2</sub> emissions

The new wing of the Tanabe Plant is designed not only to minimize CO<sub>2</sub> emissions, but also to cut back on the use of materials. By doing so, we hope that lifecycle assessment (LCA) will also show that the new building has lower environmental impact and is conducive to recycling. For instance, we now have equipment that recovers the solvents used to thin out ink as a gas from among the exhaust generated as part of the printing process and converts them back into liquid form. Impurities are then removed and the solvents can once again be used for printing. From design to installation, it took more than a year to make this system a reality, including the design of special refining equipment. As a result, we now use more recycled solvents in the printing process than new, and this has contributed to a drop in use of materials.

Meanwhile, because solvents are also contained in the ink itself, we end up recycling more solvent than we use. As a result, we use excess solvent as fuel for our boilers, which reduces the need to activate electric boilers to generate heat.



### Numerous challenges overcome to build the new plant - now to make many environmentally conscious products

#### Masaki Amikura

Manager, Manufacturing Optimization Promotion Division, Packaging Operations, DNP

I get the feeling we hear the term "recycling society" from all sorts of places these days. But the reality is that there are still many challenges to overcome before you can actually put that concept into action. Opportunities to build a new production facility, like we did at the Tanabe Plant, are rare indeed. When designing the new wing, we thought of all the environment-related

ideas we'd come up with previously and debated repeatedly with various divisions about how to best overcome the challenges we faced. The new building was completed after a long and exhaustive process. This, however, is not the end: it is just a milestone. It is our mission to provide the world with all kinds of environmentally conscious products, and we look forward to pursuing that goal.



### Only a manufacturer could have designed a plant so suited to recycling

#### Tatsushi Nanameki

When 80+°C

temperatures

are needed.

supplied from

steam is

the boiler

Design Group, Kyoto Branch, Daikin Applied Systems Co., Ltd.

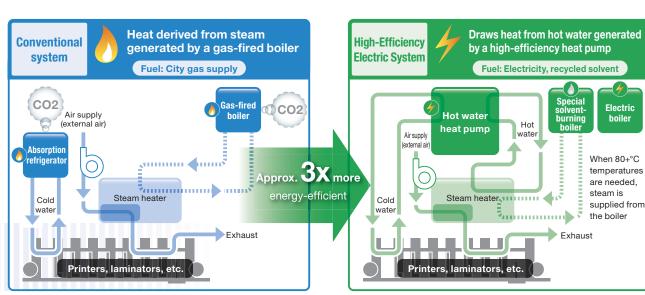


When DNP sought our opinion on the various concepts and other matters relating to their new plant, it became clear that not only were there some high hurdles to clear, but also that DNP were determined to build the factory most suited to recycling and with the least environmental impact in the whole world. The designs faced extreme difficulties and

underwent innumerable amendments, but we got there in the end by installing systems that have been developed and proven in DNP's existing plants, incorporating know-how that had been gained through long years of improvements made to their production lines, and using technology verified through examinations at test plants. Moreover, the generous sharing of expertise by producers, machine manufacturers, and equipment suppliers was a major contributing factor. I hope that the DNP Tanabe Plant will serve as an example of how we can contribute to the minimization of society's environmental impact without compromising productivity.



### **Energy-Efficient Drying System Using Heat Pump Technology**



When we built the new wing at our Tanabe Plant, we designed, manufactured, and installed a print drying device based on heat-pump technology. The gravure printing process used for soft packaging involves laying one color at each unit and, as a result, the ink needs to be dried before the film is moved to the next unit. Around 30% of the energy used by a printer is spent on the dryer, so we thought making the dryer more efficient would result in

Previously, our dryers got their heat from steam generated by gas-fired boilers, but we developed an energy-efficient dryer system that draws heat from hot water generated by a heat pump and could be augmented by an electric boiler when demand was greater than the system could handle. Because it is configured to generate only the amount of heat energy needed to dry ink and not create any waste, and since the heat-pump is up to three times more efficient than a conventional gas-fired boiler, our new dryer system's average energy consumption is about half that of a conventional system.

At the same time as they create hot water, heat pumps also create cold water, which can be used to cool printers. In this way, the heat pump system also helps cut back on

significant cuts in energy use. energy used for cooling.

### Leveraging our Business to Help Protect Biodiversity

The human race benefits from a diverse ecosystem, but society does not yet sufficiently realize the importance of biodiversity. Here at DNP, we are keenly aware of our reliance on the ecosystem in the course of our operations, and we feel it is our responsibility to protect it and in turn promote a sustainable society.

#### **Basic Policy**

Business activities that are deeply relevant to ecosystem protection are our key focus

We unveiled the DNP Group Biodiversity Declaration in March 2010 and commenced our action plan under the declaration as part of our biodiversity protection initiatives.

In FY2011, we reexamined the effects on biodiversity of our product development, material procurement, manufacturing, sales, use of products, and disposal of waste. As a result, we established two key initiatives, both of which have a major influence on ecosystems, and we are already working to achieve them. These initiatives are the creation of green spaces at our business sites and the improvement of material procurement practices.

#### Major Initiatives

Creation of green spaces at business sites and improvement of material procurement practices

It is important that our employees are aware of the goals and progress of our biodiversity protection initiatives, and that they work to help achieve those goals.

For instance, regarding our goal of creating green spaces at our business sites, beginning in October 2011 we conducted a survey of our business sites worldwide to see how we could contribute to ecosystems in their vicinity with green spaces.

Similarly, as part of our drive to improve material procurement practices, we are working to apply lifecycle assessment (LCA), which we have used since the 1990s, to development and commercialization of packaging made from materials that are considerate of biodiversity.

Elsewhere, we have implemented biodiversity-friendly initiatives for materials in other segments, too, in line with our CSR Procurement Criteria. We are also looking to bolster our efforts in this area, particular as relates to printing and paper for processing, for which we are considering instituting procurement guidelines.

### VOICE

### Our survival depends on ensuring biodiversity

Dr. Naoki Adachi

CEO, Response Ability, Inc.



Protecting biodiversity is not just a nice way for companies to contribute to the community; it is vital for the future survival of their businesses. The way DNP has gone about its biodiversity protection initiatives after first investigating the impact of its business activities on ecosystems demonstrates that they understand that principle.

This report contains information on how the company is striving to improve the quality of its stewardship of green spaces. DNP conducted on-site surveys of 65 manufacturing facilities in Japan and one overseas, not only to check on the state of affairs at those sites, but also

to ascertain their influence on the surrounding ecosystems. I think its assessments and plans, which take these issues into account, are far ahead of the curve. I hope that DNP will strive to continue to benefit ecosystems, not just through the efforts of the company's employees, but by involving local residents as well.

The use of Biomatech PET material and the company's LCA are also intriguing endeavors. The results of these initiatives indicate that biomass will continue to be sought and used as a sustainable resource, but even so, we must use these resources carefully so as to minimize impact on ecosystems and water resources. I sincerely hope that DNP will come up with concrete ideas that will point us in the right direction.

### Surveys conducted at 65 sites in Japan, one overseas

We conducted surveys at 65 production facilities in Japan and one overseas to see how we could use green spaces to contribute to the ecosystems in their vicinity.

First, we gauged the level of biodiversity in and around our sites based on factors such as the areas of the premises, green spaces, and other green areas (e.g., woods, grassed areas, and forested slopes) or wetlands (e.g. ponds, swamps, rivers, and springs) within 2km of the premises. The sites were divided into groups in accordance with the results of these studies.

Ten of the sites that stood out were targeted for further studies into whether or not there was a link between the on-site green areas and those nearby in terms of their role as a habitat for wildlife. These relationships were made into diagrams and used for further ecological network analysis.

Meanwhile, we also conducted on-site surveys based on the Eco-friendly Business Site Promotion Guidelines developed by the Japan Business Initiative for Biodiversity (JBIB) as a first step to boosting interest among employees and motivating them toward creating green areas that contribute to biodiversity.

Furthermore, the current redevelopment of our site at Ichigaya includes plans for an Ichigaya Forest, which will link with surrounding green areas. Our aim is to create an environment for birds and insects that is not divided by land boundaries. We have already begun studies of flora and fauna on our premises and its surrounds in order to gauge the degree of any contribution to biodiversity that the Ichigaya Forest may make, in order to reflect that contribution into subsequent plans.



### **Knowledge of Current Environments Will Help Future Initiatives**

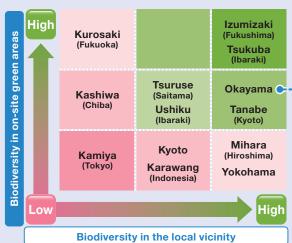
Biodiversity network evaluations made it possible to gauge quantitatively the level of biodiversity at the DNP business sites and the surrounding areas. This information provides useful insights for use when deciding on the direction of future initiatives.

In addition, quantitative information on the link between the green areas on DNP land and those in the local vicinity was studied as part of an ecosystem network analysis in order to determine how DNP may further contribute to the building of a local ecosystem network.

In the case of the Okayama Plant, because the Mitsu

Industrial Park, in which the plant is located, is situated on developed land in a valley between mountains, the continuity of forest land has been compromised. However, 34% of the land within 1km of the plant is green land, and is in proximity to the Asahigawa River, which is home to a broad array of wildlife. It was discovered that, therefore, the area has high potential for biodiversity. Accordingly, we look forward to using the Okayama Plant's green areas to provide habitats for wildlife, and we aim to turn the area into a pathway from the forest mountains to the lowland, thus creating a local ecosystem network.

### Studies of Potential Biodiversity of Major DNP Business Sites (sample)



Ecosystem Network Analysis of the Okayama Plant

Key
Network Assessment
(relative)
Low
High

Mt. Shiroyama
River
Route 53
Plant

Mt. Kawatakayama

Ot Kita Ward, Okayama City, Okayama Line

Assa of given space

Other Perfecture
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Analysis of the Okayama Plant

### Lifecycle assessments of Biomatech PET

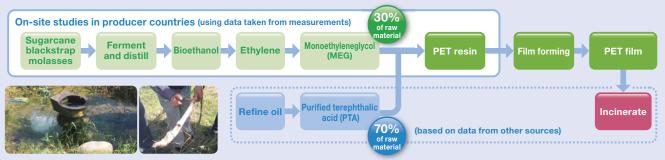
### made from sugarcane-derived material

When we at DNP develop products, we research materials thoroughly based on lifecycle assessment (LCA), which offers a quantitative evaluation of the impact the subject material has on ecosystems and environments. Through this, we are aggressively commercializing sustainable, biodiversity-considerate packaging.

In 2011, we were the first in the world to develop Biomatech PET, a PET film made from plant-derived ingredients, in a joint research project focusing on LCA. Our research partners were Norihiro Itsubo, an associate professor at Tokyo City University, and Iwatani Corporation.

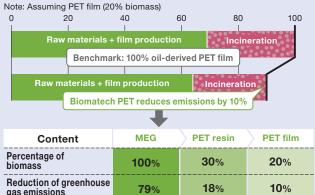
LCA begins with painstaking data research to ensure the studies are based on accurate information. We visited India, where the sugarcane that forms the basis of Biomatech PET material is produced, in order to study the various relevant manufacturing processes and get a tangible idea of the volume of greenhouse gas emissions. Also, because Biomatech PET is made from plant-derived material, it was also vital that we looked into use of water resources and the effects of production on biodiversity, and we made these issues more readily visible.

### **Biomatech PET Manufacturing Process**



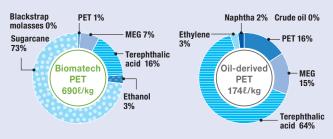
Sugarcane raised using spring water

### Reduction of Greenhouse Gases Emitted in the Production of Biomatech PET Film



Biomass MEG enables greenhouse gas emissions to be reduced by 79% compared to oil-derived MEG
 PET resin (30% biomass) enables greenhouse gas emissions to be reduced by 18%

### Use of water resources per kg of PET resin



- Because biomass is made from plant-derived ingredients, it registers a higher environmental burden in terms of water resource use. (Sugarcane cultivation accounts for 70% of water use in production.)
- Because rainfall, soil quality, and irrigation methods differ from region to region, it became clear that it was important to obtain data on these factors when studying sugarcane production.



Sugarcane field in northern India

ndia Monoethylene glycol plant

Our studies showed that Biomatech PET film can reduce greenhouse gas emissions by 10% over the PET film lifecycle.

Conversely, we also found that it uses around four times the water resources of oil-derived PET and has around five times the impact on biodiversity. Therefore, if we are to continue to use sugarcane as a raw material, we will need to consider ways of eliminating risks regarding water consumption and biodiversity.

We at DNP are determined to address pressing issues like these through appropriate supply chain management and big-picture decisions.

#### Research into environmental impact helps us publicize good and bad aspects and minimize risks

#### **Ayumi Shibata**

Development Division, Packaging Operations, DNP

By dedicating ourselves to finding the right raw materials and conducting in-depth studies in production regions, we were able to get a clear picture of the effects of PET film on the environment. We reaffirmed our view that Biomatech PET is a material we can recommend to clients with confidence; it is

recyclable, a replacement for conventional, oil-derived PET, and contributes to efforts to prevent global warming. I was reminded of the importance of LCA for businesses like ours because it provides a visible picture of environmental impact.

The results of these latest studies were not uniformly favorable from a DNP perspective; there were some negative results among the positives. But I believe it is vital for companies to publish the bad along with the good, to be as considerate of the environment as possible, and to minimize environmental risks



### Vigorously supporting DNP's environmental conservation efforts, including ground-breaking use of sugarcane

#### Norihiro Itsubo

Ph.D. (Engineering) Associate Professor, Faculty of Environmental and Information Studies, Tokyo City University

The rise in interest in bioplastics has sparked innumerable environmental assessment projects worldwide. The environmental impact of a crop varies greatly depending on a variety of factors, including the type of plant, cultivation methods, location, and yield. As such, it is imperative that any analysis be conducted

based on data relating to local conditions. The ethylene glycol used in Biomatech PET is derived from sugarcane—specifically, the blackstrap molasses which is usually disposed of as waste. This radical innovation means that we can use sugarcane in a way that does not put us in competition for the same resources with food producers who want the sugar, and we can reduce the amount of waste the sugarcane generates. DNP did well to identify sugarcane as a potential ingredient for bioplastic, and to verify its efficacy through LCA. I strongly support DNP's efforts to pursue the potential of eco-materials while maintaining the traceability of environment-related information.



# FOCUS

### Morinaga Milk Uses Biomatech PET in Creamer Packets

Hopes are high that DNP's Biomatech series can play a major role as a packaging material with a low environmental impact for a broad range of goods, particularly for goods used on a daily basis such as foods, beverages, and daily sundries. Here at DNP, we are gradually replacing the packaging materials we supply to manufacturers with Biomatech series materials. Starting in March 2012, Biomatech PET is being used in Morinaga Milk Industry's Creap and Creap Light coffee creamer packets. Plantderived film is generally much more expensive than oilderived material, but we have succeeded in capping the increase in manufacturing costs of our Biomatech series of films to between 20% and 30% compared with oilderived film. We will continue to pursue expanded sales of the Biomatech series by further reducing costs and broadening its use to a greater range of products.



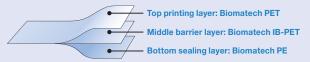
220g packet of Morinaga Milk Industry's Creap coffee creamer advertising the use of environmentally friendly sugarcane-derived material

Our Biomatech series of films are packaging materials made from plant-derived ingredients. For instance, Biomatech PET is made using approximately 30% ethylene glycol, which is produced from sugarcane-derived bioethanol, instead of oil-derived material.

What is the plant-derived Biomatech series of films?

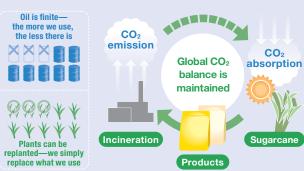
Packaging material needs three layers: a printing layer, an internal layer, and a barrier layer in between. To this end, we developed a printable three-layer film that can be used in a broad range of fields including food, daily sundries, pharmaceuticals, and industrial products.

#### Packaging Material Configuration



### Why is plant-derived material environmentally friendly?

The main reason is that it reduces the use of fossil fuels, which are finite resources. The plants that form the basis of the Biomatech series can be grown and harvested again and again. In addition, although  $\mbox{CO}_2$  emissions are generated when the products are incinerated after their useful life is over, plants absorb  $\mbox{CO}_2$  as they grow so there is no net increase in emissions.



### **■ ERNST & YOUNG**

#### Translation

The following is an English translation of an independent assurance report prepared in Japanese and is for information and reference purposes only. In the event of a discrepancy between the Japanese and English versions, the Japanese version will prevail.

### Independent assurance report

15 June 2012

Mr. Yoshitoshi Kitajima

President and Director Dai Nippon Printing Co., Ltd.

#### 1. Purpose and scope of our assurance engagement

We have performed certain assurance procedures, based on the engagement with Dai Nippon Printing Co.,Ltd. (the "Company"), on the Company's key environmental performance indicators. These comprise the material environmental information<sup>1</sup> of the Company and its major subsidiaries for the year ended 31 March 2012, that were reported in the DNP Group CSR Report 2012 (the 'Report"). The assurance procedures are with respect to whether the key environmental performance indicators have been measured and calculated accurately and whether material information has been fully disclosed in accordance with the reporting standards for the Report<sup>2</sup>.

The preparation of the Report is the responsibility of the Company's management. Our responsibility is to express an independent opinion on the Key Environmental Performance Indicators.

#### 2. Outline of the assurance procedures performed

We have performed limited assurance procedures<sup>3</sup> in accordance with the 2003 International Standard on Assurance Engagements (ISAE) 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information of the International Federation of Accountants (IFAC) and the 2012 Practical Guidelines for the Assurance of Sustainability Information of the J-SUS. Therefore, our assurance engagement provides relatively limited assurance compared to a reasonable assurance engagement.

#### 3. Conclusion

Based on the assurance procedures performed, nothing has come to our attention that causes us to believe that the Key Environmental Performance Indicators have not been measured and calculated accurately in accordance with the reporting standards of the Report, or material information has not been disclosed in accordance with the 2011 Environmental Reporting Assurance and Registration Criteria, in all material respects.

### 4. Independence

Our assurance is compliant with the Ethics Regulations of J-SUS and there is no financial interest between the Company and us.

Akihiro Nakagome Representative Director Ernst & Young Sustainability Co., Ltd.

### On-site audits





### **Third Party Opinion**



Chairman, Japan Association of Environment and Society for the 21st Century

### Saburo Kato

Upon graduating from the Faculty of Engineering of the University of Tokyo in 1966, joined the Ministry of Health and Welfare. Works in pollution and environmental administration at the newly-established Environmental Agency. Appointed first Head of the Global Environmental Department in 1990. Participated in the Global Summit and helped write the Basic Environment Act. Left office in 1993 to establish the Research Institute for the Environment and Society, of which he is currently president. Serves concurrently as Chairman of the Japan Association of the Environment and Society for the 21st Century (formerly the Association for the Study of the Environment and Society in the 21st Century). Major published works include: Thoughts About The Environment (2010, President Inc.); The Power of the Environment to Create Wealth (2005, Goma Shobo); The Power of the Environment (2003, Goma Shobo); The Environmental Century (2001, The Mainichi Newspapers); Conditions for Creating the Recycling Society (1998, Nikkan Kogyo Shimbun); and The Environment and the Future of Culture (1996, President Inc.).

DNP defines CSR as the process of earning the trust of society. This is the fifth time the company's CSR report has been subject to comment by a third party. As with previous occasions, I have read the report carefully, page by page, and have taken great interest in DNP's efforts over the past year.

The first thing that took my eye was the title of President Kitajima's message, Creating What Everyone Will Take for Granted in the Future. Wondering what he meant, I read on in anticipation. He goes on to say: "No one can accurately predict the future, but it is possible to participate in forming it and sketching its blueprints. Each of our employees continuously engages in TAIWA with our many stakeholders, quickly perceives the issues facing consumers, companies, and society, and solves those issues by applying our technology and know-how. That is DNP's mission, and we believe it will lead us to Creating What Everyone Will Take for Granted in the Future." DNP has been a mainstay of the printing business since the 1800s. The company is a pioneer in many areas, producing such innovative technologies and products as color filters for high-definition displays and softpacks for lithium ion batteries. I was solidly convinced by those words, which are backed by robust performance.

DNP has stated that it has three key challenges to achieving sustainable growth. They are:

- (1) Offering stronger solutions to the issues society faces, such as those relating to the environment, energy, education, the super-aging society, and universal design;
- (2) Pursuing R&D that leads to the creation of new businesses in a guest to solve problems from the consumer's standpoint;
- (3) Respond to the increasing borderlessness of markets by further expanding the company's global business.

I was impressed by the way President Kitajima has exhorted his charges to maintain their consistency in offering technologies and expertise that are breathtaking today but will go on to be the "everyday" standards of the future.

I always look forward with particular pleasure to the Special Report section in DNP's CSR Report. This time, those articles are focused on expanding the possibilities of the "culture of intellectual knowledge." With its origins in Shueisha, which was founded 130 years ago as Japan's first full-scale printing company, DNP has always played the role of being one of the foremost disseminators of intellectual knowledge through its publication and printing operations. At DNP, intellectual knowledge is defined as information with value. The company has successfully evolved with the times to consistently deliver that knowledge, incorporating heavyweight bookstores such as Maruzen and Junkudo into its corporate group and transforming "honto," originally an e-book website, into a hybrid "paper and digital" bookseller.

This year's Special Report looks not only at the transfer of intellectual knowledge from multiple angles, but also at DNP's schemes to generate and cultivate new intellectual knowledge. I was smitten by the idea of the digital pen, the electronic blackboard, and digital textbooks, all part of the Digital Pen Learning Support System that encourages handwritten communication. Indeed, I felt the real broadening of the "culture of intellectual knowledge" in DNP's contribution to creating a system that encourages today's youngsters to be more enthusiastic about learning, while still maintaining the tradition of writing by hand in this era of digitalization.

DNP has long valued TAIWA. The company maintains such interactive communication with its many suppliers and its employees, many of whom, in this age of globalization, are foreign nationals or employees newly coming aboard via mergers. This richness of variety among its employees amounts to a profound diversification of the company. It appears to me that DNP does much to deliberately create opportunities for all parties to come together and engage in TAIWA with an atmosphere of respect for each other's personalities and values so that the resulting dialogue may yield new values and solutions.

The company's environmental conservation initiatives are also worth mentioning. Each year's efforts see generally positive outcomes, which has led to largely positive appraisal of their stance. However, as I say every year, the company would do well to set higher goals for greenhouse gas emission cuts, not only because it would do the company credit, but also because it would encourage the development of new technologies. In the mid-to-long term, this would certainly lead to further improvements in the company's strength in competition. DNP's performance in FY2011 measures 5.3% lower than FY2005 and 3.6% lower than FY2010. This must be taken in the context of the dramatic reduction in energy use in the aftermath of the Tohoku-Pacific Ocean Earthquake of 2011 and the subsequent nuclear power plant accident. Despite this. DNP managed to reduce electricity consumption at peak times in FY2011 by 20% compared with the previous year through a summertime initiative that saw the company connect 36 of its business sites supplied by Tokyo Electric Power to a network that enabled its Technical Engineering Division to control consumption centrally. It is my fervent hope that DNP uses that experience as inspiration to set higher emission reduction targets as an industry leader.

Meanwhile, DNP has made strides toward establishing indepth measures to help protect biodiversity. Sixty-five of its business sites in Japan and one overseas were subject to painstaking quantitative assessments of biodiversity on-site and in their local vicinities. As such, there are high expectations that the results of these analyses will guide the company's efforts to create green areas on its various sites and improve its material procurement practices.

I mentioned DNP's efforts to develop Biomatech PET plantderived material in this column last year, and this year I noticed that this new packaging had been adopted by client companies. A year on, I am thrilled to see that the company has stepped up its endeavors in that area, a sure sign that there is more to look forward to in the future.





Savama Plant DNP Technopack

DNP Chubu

Okayama Plant DNP Lifestyle Materials

<sup>&</sup>lt;sup>1</sup> The scope of material environmental information is stipulated in the 2011 Environmental Reporting Assurance and Registration Criteria of the Japanese Association of Assurance Organizations for Sustainability Information (J-SUS).

<sup>&</sup>lt;sup>2</sup> The reporting standards refer to the 2012 Environmental Reporting Guidelines of Japan's Ministry of the Environment, the 2011 Sustainability Reporting Guidelines of the Global Reporting Initiative, and the 2011 Environmental Reporting Assurance and Registratio Criteria of J-SUS in the context of specifying the material subject to disclosure

<sup>3</sup> We have mainly reviewed and assessed the Company's procedures for the collection and aggregation of data, performed analytical procedures, as well as recalculated and reconciled them with the conoborating evidence on the quantitative sustainability information on a test basis. In addition, we have mainly made inquiries and reviewed related records to verify the qualitative information.