



This English text is a tentative translation of the Japanese original. The Japanese original is authoritative. April 16, 2001 Nippon Telegraph and Telephone Corporation

# NTT Group Three-Year Business Plan (FY2001-03<sup>1</sup>) -- Business Reform of the NTT Group --

Last April, the NTT Group published a three-year business plan for FY2000-02, intended to chart the business direction of the Group, taking advantage of the opportunity provided by the corporate reorganization. In FY2000, the first year of the business plan, the Group restructured businesses in a number of areas to keep up with the dramatic changes in the market structure: the lowering of charges by nearly 300 billion yen for fixed-line telephones; the response to broadband technology by providing world-leading fiber-optic access services for the Internet and other services; and active efforts to internationalize the Group's operations, led mainly by NTT DoCoMo and NTT Communications. NTT has now revised the business plan as the "NTT Group Three-Year Business Plan (FY2001-03)" in consideration of the significant changes in the market structure and the other developments over the past year.

1"FY2001" refers to the year from April 1, 2001 to March 31, 2002.

## I. Main Themes

1. Approach to the IT Revolution

The NTT Group will make significant contributions to the government's "e-Japan Strategy," with its goal of making Japan a world leader in information technology in the next five years by means of: furthering rate decreases, focused especially on flat-rate Internet services; aggressive development of fiber-optic Internet access service; introduction of the world's first IMT-2000 service; and groundbreaking efforts to develop contents applications for the anticipated broadband market. To these ends, the Group will respond to the rapidly changing market from fixed to mobile, telephone to Internet, and narrowband to broadband.

In addition, the NTT Group is utilizing its entrepreneurial resources to form a broadband content service company to develop the market for broadband contents and applications.

### 2. Globalization

Since last year, the NTT Group has engaged in investments and tie-ups with

overseas partners, focused on mobile services and IP network/platform services. In the years to come, the challenge will be to make the most out of the synergy with these overseas strategic partners and continue the full-scale development of NTT's overseas operations.

### 3. Cost structure reform of NTT East and NTT West

To facilitate contributions to the IT revolution, NTT East and NTT West, in the face of the serious financial situation they face as a result of major cuts in interconnection charges and user charges, must engage in a radical and uncompromising revision of their cost structures and unite all Group members to cooperate toward achieving this goal.

### 4. Group Management under the Holding Company System

To achieve the goals in the three areas outlined above, NTT Group management will continue to exploit the considerable advantages of the holding company model, which has proven its value in (1) sustaining integrated R&D; (2) providing a full service line from fixed to mobile, local to long-distance, and telephone to IP; (3) allowing flexible and responsive shifts in the Group organization in response to changing market conditions; and (4) allowing smooth and efficient reallocation of personnel within the Group.

## **II. Specific Topics**

## 1. Changes in the Market Environment

 In Internet service markets, new providers are launching ADSL and other services one after another. Meanwhile, with the age of broadband upon us, NTT East and NTT West initiated trial fiber-optic IP connection services of 10Mb/s last December, and a competing company also started similar services of 100Mb/s in March this year, entering into full-scale competition for providing services.

In addition, with the "e-Japan Strategy" aiming "to provide high-speed constant access networks to at least 30 million households and ultra high-speed constant access to 10 million households" within 5 years, the goal of a new era of broadband technology is now poised to become a reality.

- 2) The use of mobile communications is expected to continue to expand, with the number of users of mobile units expected to hit 84.6 million in FY2004, and users of mobile computing services such as "i-mode" predicted to reach 65.2 million (77.1% of all Japanese mobile telephone users).\* \*According to a March 2001 survey conducted by the Mobile Computing Promotion Consortium
- 3) While the trend toward fewer fixed-line subscribers is expected to continue, competition to provide customers with comprehensive local-to-international packages is heating up as a result of the introduction of MYLINE (pre-subscription). Meanwhile, structural changes are afoot, such as the diffusion of VoIP services using Internet technology.
- 4) With the growth of investment by foreign capital in major Japanese information and telecommunications companies, the globalization of the market for these services is proceeding rapidly, and with increasingly fierce competition.

## 2. Business Activities

Internet-Related Services

The NTT Group will actively expand its Internet-related businesses, based on the priority policy areas of the "e-Japan Strategy" (development of an ultra-high speed network infrastructure, improvement of regulations for e-commerce, creation of e-government, and strengthening of human resources development).

1) Internet access

To develop demand for broadband Internet access services rapidly, NTT East and NTT West will offer a full lineup from copper to fiber-optic services, and meet the competition with aggressive efforts to deploy and reduce the rates charged for fiber-optic services, while simultaneously further decreasing the rates charged for ADSL and other copper line services, which are already comparable to world standards.

Meanwhile, NTT East and NTT West will work to eliminate the digital divide and expand the Internet population by providing their "L-mode" services, which allow anyone to get connected to the Internet simply and easily.

a) Fiber-optic service, "B-FLET'S (tentative name) "

In July of this year, full-scale consumer services will commence with major rate cuts and the addition of 100 Mb/s service to the menu of options. Three packages will be offered:

• B-FLET'S Family Plan:	Max. of 10 Mb/s, at approximately 5,000yen per month <sup>*</sup>
B-FLET'S Basic Plan:	Max. of 100 Mb/s, at approximately 9,000yen per month <sup>*</sup>
B-FLET'S Mansion Plan:	Max. of 100 Mb/s, at approximately 3,800yen per month

(\* An additional 900yen for the modem will be required.)

The service area will be expanded to prefectural capitals and other cities of equivalent size by FY2003 and to most municipal cities by FY2005.

Henceforth, NTT East and NTT West will effectively deploy optical fibers based on the actual demand for services in individual areas, without sticking to the old concept for planned infrastructure development.

In regions with low demand, NTT East and NTT West are also examining the development of services using the optical fibers laid by national and local governments and other parties.

b) Flat-rate Internet services over copper lines

In July of this year, NTT East and NTT West will lower the rates for their FLET'S • ADSL service from 4,050yen to approximately 3,800yen per month; the rates charged for FLET'S • ISDN, presently 3,600yen per month, will also be further reduced. In addition, by the end of FY2002 the service area for these services will be expanded to cover almost the entire country.

c) L-mode

Nationwide L-mode service will be introduced around this June. This

service provides customers with simple e-mail and browser capabilities using telephones equipped with L-mode functionality, for a fixed monthly fee of 200yen<sup>\*</sup> plus regular phone charges. (\*An additional charge for carriers providing inter-prefecture communications will be required.)

- 2) Networks, platforms, and contents applications
  - a) ISP operations

The individual NTT Group companies offering OCN, Plala, InfoSphere, DreamNet, and WAKWAK services are all responding to the challenges of providing broadband services and reducing costs, and contributing to the expansion of the customer base of the NTT Group utilizing their unique strengths.

b) Data centers

NTT Communications, NTT East, NTT West and other group companies are developing housing and hosting services using their network technologies and space in their facilities. In addition, the NTT Group is developing data center services through its constituent companies' information-sharing platform businesses, including upper-layer services such as ASP and contents transmission networks.

c) Broadband content service company

The NTT Group will muster its entrepreneurial resources to create a company whose mission is to develop broadband content services. In association with outside partners such as contents providers, this company will make a variety of services available including a user-friendly information-sharing environment backed by such platform functionalities as copyright protection. Beyond this, the company will aim at further development of the demand for broadband content and the sharing of broadband content, making the most of the strengths of fiber-optic transmission services and next-generation mobile services.

## Mobile Communications

The NTT DoCoMo Group is working to expand non-voice communication traffic and increase profits through development of the mobile multimedia market, while at the same time aiming toward continuous growth of the mobile communications market as a whole by expanding its service concept from "people" to include "all working units."

a) i-mode service:

Services offered by i-mode have been significantly expanded in scope and functionality by the introduction of Java<sup>TM</sup> applets called "i-appli"; meanwhile, through active investment and tie-ups with outside partners, NTT DoCoMo continues to develop and make new services and applications available in areas such as mobile banking, e-commerce, and advertising.

In addition, plans are underway to open the i-mode system to third-party ISPs.

#### b) IMT-2000 (FOMA)

In order to provide more enhanced and diverse mobile multimedia services, the

NTT DoCoMo Group will launch its world-leading IMT-2000 (FOMA) service in Tokyo (within the 23 wards), Yokohama, and Kawasaki at the end of May 2001. This service will provide Internet access to mobile devices at a data transfer rate of 384 kb/s in motion, and in the future, at 2Mb/s at rest. The service area will be expanded to the Osaka and Nagoya areas around December 2001, and to major cities across Japan around April 2002. By the end of FY2003, the service should be available to 97% of the Japanese population.

## Fixed-Line Telephone Services

NTT East, NTT West, and NTT Communications worked hard throughout FY2000 to reduce the rates for fixed-line telephone service, implementing a total rate cut of 300 billion yen.

While ensuring the provision of universal services, NTT East and NTT West will continue to offer a variety of rate menus, implement further rate cuts, and expand the range of discounts in order to meet the service competition that has arisen at the local level as a result of the introduction of the MYLINE service.

Meanwhile, in response to the entry of NCCs into the local telephone market and their provision of seamless services ranging from local through long-distance and international calls, NTT Communications will offer local-to-international packages targeted at corporate clients as well as discounts to ordinary consumers on bundled services combining long-distance and international services. In addition, NTT Communications is working to achieve further reductions in its rates and diversification of its services in anticipation of the new wave of inexpensive Internet-telephony about to hit the market.

### Expansion of Business Areas

The NTT Group companies are actively expanding the Group's business into such fields as constructing high-integrity power sources, air-conditioning systems and other information environments (NTT Facilities), manufacturing fiber-optic devices (NTT Electronics), maintenance and integration operations (NTT-ME and others), software development (NTT Software, Nippon Information and Communication Corporation, and others), and electric power supply (ENNET).

### 3. Promoting Internationalization

To respond to the globalization of domestic and international markets, the NTT Group will engage in international operations, taking maximum advantage of the Group's operational merits.

- 1) Strategy with overseas partners
  - a) NTT DoCoMo has established strategic partnerships with AT&T Wireless (U.S.) and KPN Mobile (Netherlands) in the U.S. and Europe, and with Hutchison Telephone Company (Hong Kong) and KG Telecom (Taiwan) in Asia, and is moving to expand its network of overseas strategic partnerships, mainly in Asia.

By sharing its proprietary i-mode and next-generation mobile phone technology and know-how with strategic overseas partners, NTT DoCoMo is promoting the rapid worldwide diffusion of convenient mobile Internet services, as well as the development of the W-CDMA format as a common platform for this purpose.

- b) During FY2000, NTT Communications acquired the U.S. Internet company Verio, and Verio and other foreign strategic partners are now playing a central role in NTT Communications' efforts to develop NTT Com's Global IP Network, which will offer broadband IP connectivity throughout the major markets of Japan, North America, Asia, and Europe. In addition, NTT Communications is positioning itself to become a "global IP company," responding to the needs of multinational corporations in a borderless world by developing a system of overseas data centers and providing such high value-added services as assisting companies that want to fully outsource the construction and maintenance of their information and telecommunications networks.
- 2) Uncompromising emphasis on return on investment The development of NTT's overseas ventures inherently involves various risks, but by carefully monitoring investments and taking flexible and decisive action when needed, the managerial strategy will continue to maintain an unwavering commitment to return on investment.

#### 4. Promotion of R&D for the Creation of New Businesses

NTT is systematizing its information-sharing services around the following two basic streams, and is promoting R&D to further develop and expand these streams under an integrated R&D system. In addition, NTT Laboratories is also engaging in efforts to explore the demand for new businesses in a variety of subsidiary fields.

a) Hikari-Soft services

Fiber-optic infrastructure offers remarkable speed, volume, interactivity, and convergence. Hikari-Soft services exploit these advantages and make the most of the exciting sense of audiovisual reality.

b) Ubiquitous services

In taking advantage of the mobility and ubiquity to be realized by networked devices employing IPv6 technology and advances in wireless technology, NTT will provide services that make it possible for users to access all types of data anywhere, at any time.

In concrete terms, the target market for these information-sharing services can be divided into three segments according to the nature of the information sharing: contents, commerce, and community/collaboration. By strengthening the following three approaches to these areas, NTT hopes to foster a safe, secure, convenient and enjoyable networked society, and to contribute to the IT revolution in a manner that will make the most of Japan's inherent strengths.

- 1) R&D aimed at providing a foundation for information-sharing services Research and development efforts must be strengthened to increase the valueadded provided by networks, and to provide a viable foundation for the information-sharing services outlined above.
  - Research into "optical networks" that can deliver ultra-high speed, flexible and diverse services at a low cost. Based on photonic technology, the

networks consist of fiber-optic or optical/wireless converged access systems and high-volume fiber-optic backbones.

- \* Research into "information-sharing platforms" that can enrich the Internet experience by offering applications and contents providers a whole new range of functions supporting networked socioeconomic activities.
- Research into "optical network terminals" that bring about a radical reconception of the relationship between networks and terminal devices through development of ultra-high capacity memory cards that will allow any individual to carry enormous amounts of data anywhere and home gateway functions that will allow seamless control and communication with smart appliances, etc.
- 2) Development of the market for Hikari-Soft services

While recognizing that developing the demand for fiber-optic access as soon as possible is the most important issue at present, NTT Laboratories will aim at developing the market for Hikari-Soft services, engaging in the following strategic "market-creation activities."

- \* Through visualization of radical new applications tapping the strengths of fiber optics, as well as the formation of new business models made possible by fiber optic technology, NTT Laboratories will engage in their own efforts to create new businesses by using a foundation for information-sharing services in partnership with contents copyright holders, smart appliance manufacturers, telecommunications hardware companies, etc.
- \* Meanwhile, positive efforts will be made to develop the demand for fiberoptic services by creating a variety of opportunities and venues which allow end users to experience the merits of fiber-optic technology first-hand.
- Research into the cutting-edge technologies of the future In order to create future cutting-edge technologies, the NTT Group is engaged in basic research focused on long-term strategic business priorities.
  - \* The material base: fiber-optics devices, nanotechnology, the environment and energy
  - \* Communications sciences: video and image processing, natural-language computing, and cryptography and security

#### 5. Management for Maximizing Corporate Value

- 1) Group management stressing return on investment
  - With the release of shares previously held by the government, general shareholders now represent the majority of the NTT Group's investors. Responding to the trust vested in them by the shareholders, the individual companies making up the NTT Group have adopted a basic management policy of stressing return on investment and of working toward the expansion of the total value of the Group.

NTT recognizes Type 1, 2 and 3 companies as core companies, while implementing selective capital investment policies ("choose-and-concentrate") for Type 4 companies.

In order to achieve a unified analysis on the rate of return achieved by the NTT Group, each of the Group companies' business fields will be monitored with regard to such indexes as the enterprise growth stage (newly launched, growing,

matured); their individual risk positions; and their contribution to other Group companies.

2) Strengthening investor relations

The NTT management team will work to expand opportunities to explain the status of the Group's enterprises and the Group's managerial strategy to domestic and international institutional investors and analysts so that the NTT Group as a whole will receive an accurate market valuation. In addition, by further enriching the contents of the newsletters and Web sites provided for shareholders, management will work to provide a fair and free flow of information to all investors, including individuals.

3) Enforcing corporate ethics

The NTT Group believes not just in following the rule of law, but in observing the norms of our society in a manner befitting the world's leading information and communications companies. The watchword is compliance, and this is extended to our global operations. Specifically, this means promoting a policy of thorough understanding and strict adherence to local laws and regulations.

## 6. Business Reform of the NTT Group

1) Regulatory reforms

Bills have been submitted to the Diet proposing revisions to the Telecommunications Business Law and the NTT Law. The measures under consideration include the reform of various regulations to bring them into accordance with international standards; a loosening of the limitations on the scope of businesses of NTT East and NTT West; introduction of a system to ensure universal service in a competitive market; and further deregulation of foreign investment in NTT in response to global competition. These bills will be deliberated during the 151st session of the Diet.

In step with these trends in regulatory reform, the NTT Group, while observing fair competition, will continue to make a positive contribution to the IT revolution and to achieve a steady expansion of its international activities taking maximum advantage of the Group's operational merits.

2) Promoting the restructuring of NTT East and NTT West NTT East and NTT West are now trying to reform their business structure under the Mid-Term Restructuring Plan of November 1999. The points listed below are new directions for this restructuring program.

a) Specializing the basic functions of NTT East and NTT West to strategic planning, facility construction and management, development of new services, and corporate marketing. Operations such as order processing, maintenance and operations, and repairs will be outsourced to subsidiaries of the NTT Group's management resource utilization companies, which cover single or multiple prefectures.

Meanwhile, the Group's management resource utilization companies will thoroughly rationalize their operations and expand orders from Group companies and other firms.

b) In implementing the above policies, care will be taken to reduce personnel costs through the diversification of the employment and benefits system,

including new retirement and re-employment packages responding to the diversification of the life plans of our employees.

c) The reallocation of personnel from NTT East and NTT West to other companies in the Group will be further expanded.

d) The unified efforts of the entire NTT Group will be essential to implement the above policies. The holding company (NTT) must play a coordinating function within the Group, putting its resources as a holding company to work while reviewing its operating expenses.

3) The new performance-based personnel and wage system A new personnel and wage system was introduced on April 1, 2001 stressing results and productivity. By encouraging every employee to adopt a "can-do" spirit and take positive action, the NTT Group will maximize the performance of its human resources as a whole.

## 7. Managerial Goals of the Three-Year Plan

To maximize corporate value, the NTT Group is employing management indices that prioritize cash flow: EBITDA margin, free cash flow, and ROCE. The specific targets for the final year of the Three-Year Plan (FY2003) are as follows.

EBITDA margin	33%
Free cash flow	500 billion yen
ROCE	6%

(Note: Investments in large-scale M&As are not included in free cash flow.)

## **Definition of Terms (in alphabetical order)**

- \* <u>Application Service Provider (ASP)</u>: A company that provides applications via circuits.
- \* <u>Broadband</u>: General term covering fiber-optic, ADSL, CATV, FWA (wireless), and other access systems.
- <u>Data Centers</u>: Centers that provide Internet-related services to individual companies via circuits.
- \* <u>Hikari-Soft services</u>: This term was created by NTT, and combines "Hikari" (optic) with "Soft" (software). These services are provided via multimedia software, such as information-sharing platforms and applications over fiber-optic networks, to deliver contents such as those with an exciting sense of audiovisual reality.
- Hosting: Service that allows clients to share the telecommunications carrier's server.
- <u>Housing</u>: Service that houses and manages users' equipment at the telecommunications carrier's facilities.
- <u>International Mobile Telecommunications 2000 (IMT-2000)</u>: Worldwide standard specifications for a third-generation mobile communication system.
- \* Internet Service Provider (ISP): A company that provides access to the Internet.
- <u>IP Network</u>: Network using Internet protocol.
- \* IPv6: Next-generation Internet protocol which will dramatically expand the number

of addresses.

- \* <u>Mobile Computing and Mobile Multimedia</u>: Use of the Internet and data communications via mobile terminals.
- \* <u>Nanotechology</u>: "Nano" means one billionth of a meter. Nanotechnology primarily works at the minute level of atoms and molecules.
- <u>Type 1, 2, 3, and 4 Companies</u>: Categorization of NTT Group companies, as follows. Type 1: NTT East and NTT West; Type 2: NTT Communications, NTT DATA and NTT DoCoMo; Type 3: management resource utilization companies; Type 4: companies breaking into new business areas.
- \* <u>Voice-over IP (VoIP)</u>: Voice communications using an IP network.
- <u>Wideband Code Division Multiple Access (W-CDMA)</u>: Method adopted by NTT DoCoMo as part of IMT-2000.

Figures contained in this plan relating to future predictions were estimated according to information available at this point in time, and may change in response to trends in the Japanese economy and the information communications world, as well as new services and rate of charges, etc. The NTT Group therefore does not guarantee the reliability of the figures in question.

