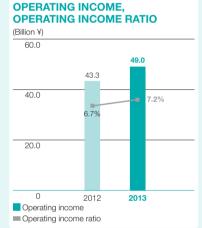
### REVIEW OF OPERATIONS

## **PUBLIC BUSINESS**

NEC provides safe, secure and efficient social solutions for domestic and foreign governments, governmental agencies, public institutions, financial institutions and other organizations by combining its distinctive technology assets, including networking and sensing technologies, with broad systems integration expertise and customer assets.







# **Fiscal 2013 Performance and Main Accomplishments**

Business segment sales increased 4.8% year on year to ¥680.7 billion. This increase mainly reflected steady growth in fire and disaster prevention systems, and aerospace and defense systems.

Operating income improved ¥5.8 billion to ¥49.0 billion, mainly reflecting increased sales and cost reductions.

In fiscal 2013 in the government agency sector, NEC won an order through DSN Corporation, a special purpose company NEC invested in, for a Program to Upgrade and Operate X-Band Satellite Communications Functions. This project is the first satellite private finance initiative (PFI) in Japan. Through a similar PFI scheme, QZS System Services Inc., another special purpose company invested in by NEC, won an order for operating a quasi-zenith satellite system. Furthermore, a "Bird Position Detection Solution," which helps to reduce the threat of collision between birds and aircraft during takeoff and landing, contributing to safe and secure airport operations, was adopted by Tokyo International Airport (Haneda Airport). Moreover, in the safety

business, NEC and INTERPOL signed a partnership agreement for strengthening measures to fight increasingly complex and sophisticated cybercrime. The two partners will work together on state-of-the-art cyber security measures.

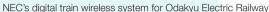
In the public services sector, sales remained strong in the fire and disaster prevention area on the back of continued high demand due to regional enlargement and digitization of wireless communication networks. NEC also steadily built on its track record in the integration of cloud computing platforms and provision of services for local governments, schools, libraries and other customers. In addition, NEC implemented a new traffic management system that enables the real-time provision of traffic information thanks to the high-speed processing of Big Data for the Shin-Tomei Expressway operated by Central Nippon Expressway Company Limited. And NEC delivered a new train wireless system to Odakyu Electric Railway Co., Ltd. that uses software-defined radio technologies to facilitate flexible operations.

In the medical sector, NEC helped to implement and operate the Tsukuba Pediatric Allergy Information Network (T-PAN), which has been developed by Tsukuba Medical Center Hospital to share medical information between partner medical institutions and patient families, as part of the efforts to develop regional medical networks.

In the financial sector, we provided sales support systems compatible with smartphones and other smart devices, an area of increasing need among financial institutions, to over 30 credit unions nationwide.

For the media industry, we delivered digital transmitters for Mobacas, a new multimedia broadcasting service for smartphones, to Japan Mobilecasting, Inc. and NEC delivered transmitters for digital television broadcasting to commercial broadcasters in Myanmar, building on NEC's track record at home and abroad.







Portable DNA analyzer (prototype)

#### **For Further Growth**

With the ICT market in Japan still recovering, sharp growth is not expected for the foreseeable future. At the same time, economic growth led by emerging countries is expected to continue going forward and, in developed countries, new demand will likely be created from structural changes driven by new trends. Responding effectively to globalization, structural changes and new markets will become even more important in the years to come.

NEC will look to capitalize on such changes and steadily carry out business centered on customers in Japan, while also actively branching out globally using strengths stemming from its cumulative experience and expertise. For the government and governmental agencies, we will seek to meet demand for integration of new systems and upgrading systems associated with establishment of the common number, or "my number." law, by actively making related system proposals. In the area of aerospace and defense systems, a new satellite assembly plant will be constructed on the premises of the Fuchu Plant to augment capacity. Leveraging its track record of past involvement in integration of numerous satellites, NEC will work to further develop Japan's satellite infrastructure, which makes possible environmental protection, resource development and provision of positioning data on a global scale, as well as capture satellite demand in emerging countries in Asia and other parts of the world.

In the fire and disaster prevention domain, we will steadily meet domestic demand while developing globally, particularly in the Asia-Pacific region. We have already received an order for a disaster prevention and emergency information cloud system in Taiwan and will continue to focus on consultative sales going forward.

In addition, we are also actively committed to creating new businesses that are not extensions of existing ones. To create new social infrastructure utilizing ICT, we continue to move ahead with developing and commercializing a failure sign monitoring system for large-scale plants capable of analyzing the signs of failure in large facilities and identifying unsound conditions in facilities before failure occurs. This is made possible by using data collected through many sensors installed at factories and power stations, and represents an effort to provide new value through utilization of Big Data. Further, NEC has partnered with the Swiss firm Gutermann AG, a global leader in advanced leak detection technologies, to develop and market solutions for effective use of water resources as a part of its smart city business.

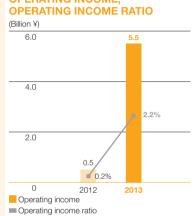
Safety is an area where growth is expected globally going forward. In a move to strengthen cyber security, NEC has acquired a 100% stake in Cyber Defense Institute, Inc., which boasts industry-leading technologies in system security vulnerability diagnostics. And, in collaboration with Cyber Security Factory, an organization established in November 2012 that assists with the installation and operation of cyber security measures for government agencies and the private sector, NEC intends to develop even more advanced cyber security solutions. Portable DNA analyzers are another safety and security product NEC is currently developing. They will help accelerate crime investigations and reduce crime. Joint assessments are underway with Japan's National Research Institute of Police Science and New Zealand's Institute of Environmental Science & Research Limited, and we intend to accelerate the process to commercialization.

### **ENTERPRISE BUSINESS**

NEC provides IT solutions to meet private-sector demand, centering on manufacturing and retail/services, while launching new services to help create new value for customers. We intend to accelerate development in retail/distribution infrastructure in particular, both in Japan and overseas, as it will be a growth field going forward.







#### **Fiscal 2013 Performance and Main Accomplishments**

Business segment sales increased 13.2% year on year to ¥251.6 billion. This increase mainly reflected steady growth in sales to manufacturing and retail/ services sectors.

Operating income improved ¥4.9 billion year on year to ¥5.5 billion, mainly due to higher sales.

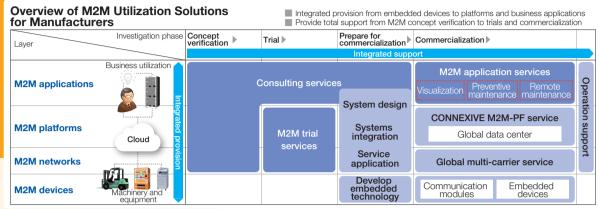
In fiscal 2013 for the manufacturing sector, drawing on its experience in overhauling core systems, NEC implemented a common IT platform for Asahi Group Holdings, Ltd. NEC also provided a system for managing contracted sales by pharmaceutical companies through wholesale channels to multiple companies in the form of a hybrid system that combines cloud services and system integration

features.

For the retail/services sector, NEC implemented a new distribution system for real-time tracking and management of the inventory of main ingredients used by Mister Donut, which is managed by DUSKIN CO., LTD., and began providing a cloud service for Toyo Logistics Co., Ltd. that enables the company to efficiently verify the position of cargo in transport, inventory availability and other status information. NEC also focused on proposals for solutions utilizing smart devices such as tablet terminals and received orders for an IT platform for Lawson, Inc. to improve the administrative efficiency of store trainers and for a customer service support system for Kojima Co., Ltd.

In addition, steady progress was made on initiatives for expanding new business domains. As a part of efforts to bolster Big Data-related businesses, NEC launched machine-to-machine (M2M) utilization solutions for customers in manufacturing and other sectors for when they begin business activities using M2M technologies. The solution provides end-to-end support for business development through integrated services that are needed at different stages, from planning to commercialization. NEC has begun supplying the solution to machinery manufacturers.

Furthermore, utilizing its manufacturing know-how, NEC provided comprehensive assistance for production innovations at NEPON Inc., helping the company reinforce its business base by reducing inventory and improving cash flow. Going forward, NEC will continue working in this way to create value together with customers.



: Planned for expansion

#### **For Further Growth**

The domestic market is starting to revitalize around consumer goods thanks to the government's economic policies, but corporate IT investment is still recovering. At the same time, interest is mounting in Big Data, smart devices, cloud services and other solutions that help customers bolster their competitiveness and reduce costs.

Under this business environment, NEC will work to secure steady sales in its existing systems integration business and boost profitability through rigorous project management. In addition, in Big Data-related areas, NEC will focus on increasing sales of M2M utilization solutions for manufacturers to help customers using M2M improve services, streamline business processes and boost sales. Moreover, in retail/distribution infrastructure, where growth is anticipated, NEC intends to leverage the assets of the NEC Group to promote global business expansion and create new businesses utilizing smart devices.

Specifically, global business expansion will be driven by the Regional Retail Business Support Center (RBSC) established at NEC Asia Pacific Pte Ltd an NEC subsidiary in Singapore, in May 2013. By standardizing total solutions covering sales management, ordering, inspection and inventory, and store and product management, which NEC has provided to major Japanese retailers, and rolling them out from the RBSC globally, NEC will make highly detailed, locally oriented solutions proposals to retailers with multi-store operations in the Asia-Pacific region, including convenience store and drug store chains.

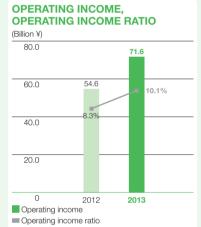
Additionally, NEC will accelerate development and sales of new services that generate innovation, including mobile POS and online-to-offline, or O2O, services that utilize smart devices. As part of these efforts, NEC launched integrated e-money solutions, which provide systems needed for issuing and using prepaid e-money through an integrated cloud service, and will work to expand this business both in Japan and overseas. Further, harnessing O2O NEC will focus on development of O2O Cloud Services, which connect with smart devices and help users locate stores and make purchase decisions.

## TELECOM CARRIER BUSINESS

NEC supplies equipment required for network implementation to telecom carriers, along with network control platform systems and operating services. NEC's wealth of experience in large-scale network implementation and strong technical capabilities contribute to the development of highly reliable communications networks.







# **Fiscal 2013 Performance and Main Accomplishments**

Business segment sales increased 7.6% year on year to ¥709.3 billion. This increase mainly reflected steady growth in domestic business and the consolidation of the business support systems operations of U.S.-based Convergys Corporation.

Operating income improved ¥16.9 billion year on year to ¥71.6 billion, mainly due to higher sales.

In fiscal 2013, NEC provided network infrastructure and built systems to respond to data traffic growth driven

by the uptake of smartphones in Japan. NEC steadily converted these business opportunities into sales.

In international markets, while difficult business conditions continued due to a strong yen and a sluggish European economy, NEC moved ahead with the steady execution of its existing Asia Submarine-cable Express system and South-East Asia Japan Cable projects. In the mobile backhaul business, NEC worked to expand sales to telecom carriers in international markets, including Poland's Polkomtel, Telenor of Norway, and Tele2 Sverige AB of Sweden.

In terms of the services & management business, the NEC Group completed the acquisition of the business support systems (BSS) operations of U.S.-based Convergys Corporation in May 2012, and integrated this business with the operation support systems (OSS) operations of NetCracker Technology Corp., an NEC subsidiary, making it possible to provide telecom operations and management solutions (TOMS). As a result of active efforts to expand sales under this new structure, the NEC Group won an order to supply operation support systems from KDDI CORPORATION, and began providing TOMS to Europe's largest power transmission company Réseau de transport d'électricité (RTE) of France and U.S. telecom carrier Sprint Nextel Corporation (currently Sprint Corporation).



A wireless outdoor unit, the smallest and lightest of its kind in the world, for ultra-compact microwave communications systems (IPASOLINK)



NEC has received an order for a core optical transmission network in Myanmar

#### For Further Growth

The environment for business targeting telecom carriers is expected to be marked by an ongoing increase in data traffic, and in the mid-term, the global need for network infrastructure is trending upward. At the same time, in the near term no significant increase is forecast in capital investments by carriers, meaning that for the time being, growth is expected to remain moderate in this market.

Under this operating environment, NEC will continue to focus mainly on wireless broadband access, submarine cable systems and mobile backhaul, as it works to increase sales.

In wireless broadband access, in addition to meeting domestic demand for LTE networks, NEC will focus on efforts to build on its track record overseas, including a joint project with Sumitomo Corporation to build infrastructure in Myanmar, which is now receiving Official Development Assistance (ODA) from Japan. In submarine cable systems, NEC will steadily seize demand for the shift to broadband networks, working to execute existing projects and capturing new deals. In the mobile backhaul business, NEC aims to expand market share through expanded sales of new products and by promoting cost reductions to enhance cost competitiveness.

In addition to these efforts, NEC will focus on expansion of TOMS and SDN, core businesses for future growth. As network infrastructure scales up and becomes increasingly complex, the need to streamline operations management and reduce costs has become a major issue. As a result, telecom carriers are looking to TOMS and SDN solutions as a means of resolving those issues.

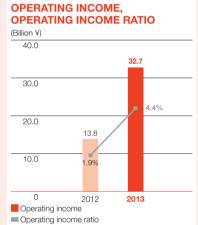
In the TOMS business, NEC is building on the global track record of NetCracker Technology Corp. to expand sales to telecom carriers as one of the top providers of complete OSS and BSS. At the same time, NEC will expand this business by working to offer these solutions to companies other than telecom carriers, including those in the electric power and logistics industries. In the SDN business, NEC is already building on its lead in development, having begun collaboration with Spain's Telefónica S.A. in solutions development, and in a joint evaluation project with Portugal Telecom, and accelerating its efforts to quickly bring practical applications to the world's advanced carrier markets. NEC will further work to deploy those achievements in emerging nations, expanding the business globally.

### SYSTEM PLATFORM BUSINESS

NEC provides products for business, ranging from terminals to network equipment, computer equipment, software products and service platforms, and solutions and services based on them. NEC's solution platforms, which organically fuse these products and solutions and services, reduce labor and improve efficiency in customers' businesses, and at the same time, create new value based on ICT.







### **Fiscal 2013 Performance and Main Accomplishments**

Business segment sales increased 4.7% year on year to ¥744.4 billion. This increase mainly reflected growth in hardware and software sales due to large projects.

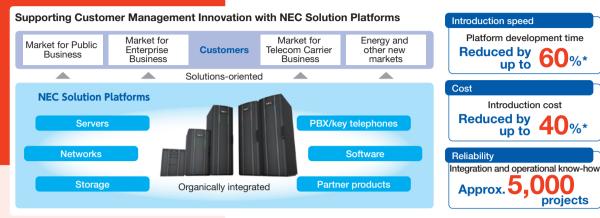
Operating income improved ¥18.9 billion year on year to ¥32.7 billion. This improvement was mainly due to higher sales and structural reforms.

In fiscal 2013, NEC expanded its hardware product lineup, offering models in its PC server "Express5800 series" with enhanced server integration and virtualization capabilities, as well as models capable of operating at room temperatures of 40°C, contributing to energy savings at data centers and corporations. Solid sales of these products enabled NEC's PC server "Express5800 series" to achieve the No. 1 share\* in the Japanese market for the 17th consecutive year. In mainframes, NEC released a successor product featuring significant improvements in performance and reductions in power consumption over previous models. NEC won an order for Sumitomo Mitsui Banking Corporation's next core banking system. Sales of corporate PCs and other products were also steady.

In software, NEC worked to provide system software such as NEC's core cloud platform software "WebSAM" and scale out database software for Big Data "InfoFrame Elastic Relational Store." In addition, NEC bolstered its product lineup in the security domain and in terms of virtualization.

In enterprise network solutions, NEC delivered a system to Kanazawa University Hospital utilizing NEC's own network technology "programmable flow," based on its "OpenFlow" technology. This delivery was important in the context of NEC's focus on SDN. The technology has also been deployed as a part of NTT Communications Corporation's cloud service platform, and NEC continues to steadily add to its track record. NEC also continued to expand and enhance the functionality of its "UNIVERGE PF series," which also utilizes programmable flow technology, making it possible to respond to a wider range of users and business needs.

In other news, the NEC Tokyo 3rd Data Center and the NEC Kyushu Data Center came online in fiscal 2013, enhancing NEC's services business.



\*Maximum benefit from within the lineup

nn

projects

#### For Further Growth

There is a strong trend toward commoditization among the products offered in the system platform business, making cost competitiveness essential for these products. Under these conditions, NEC will work to reduce costs in order to maintain competitiveness, while also continuing efforts to enhance customer competitiveness by creating new value through the use of ICT.

Efforts to reduce costs will focus in particular on basing the manufacture of server and device hardware on common platforms. This should reduce development and parts costs, leading to a level of cost competitiveness that will enable NEC to survive against global competition.

Additionally, NEC will move away from providing products and services on an individual basis, promoting a shift toward offering an integrated mix of products and service platforms, as it works to create new value for its customers. One effort to realize this concept began with the launch of "NEC Solution Platforms," a group of products that provides vertical integration of system components optimized for specific industries and applications. In addition to the initial 10 models,

which offer optimal combinations of hardware, software, and network products in high-demand areas such as Big Data and cloud service platforms, and packages designed for specific industries and applications, NEC will continue to expand its lineup of models in response to customer needs.

Further, as a response to advanced technology, NEC will continue its focus on the SDN field, building on its extensive track record in both IT and networks to steadily add to its portfolio of achievements in data centers at home and abroad, and in corporate networks and elsewhere.

NEC was also the first to develop "ExpEther" technology, which enables efficient, low-cost system scalability and data transfer acceleration in response to increases in data volume, and is working with partners worldwide to promote its use.

Through these efforts, NEC is working to provide platforms for Solutions for Society, and deliver new value to its customers.

\* Source: CY1996-2012 Japan x86 Server Market (Unit, Factory Revenue (Yen)), IDC, Worldwide Quarterly Server Tracker, 2013Q1





"UNIVERGE PF series" programmable flow switches