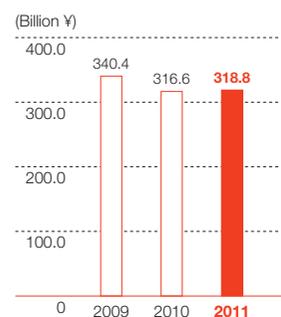# SOCIAL INFRASTRUCTURE BUSINESS

NEC provides eco-friendly, reliable and secure systems and solutions that contribute to a comfortable society. Through information and communications technology (ICT), these systems and solutions support the sophisticated operation of social infrastructure, including broadcasting and video distribution systems, control systems, transportation and public network systems, fire and disaster prevention systems, and aerospace and defense systems.

Tomonori Nishimura
Senior Vice President

SALES

(Billion ¥)

340.4 (2009)
316.6 (2010)
318.8 (2011)

OPERATING INCOME, OPERATING INCOME RATIO

(Billion ¥)

7.9 (2009)
21.7 (2010)
14.6 (2011)

2.3% (2009)
6.9% (2010)
4.6% (2011)

■ Operating income
— Operating income ratio

FISCAL 2011 PERFORMANCE AND MAIN ACCOMPLISHMENTS

Business segment sales increased 0.7% year on year to ¥318.8 billion. This increase mainly reflected steady growth in the social systems field including broadcasting, transportation, and fire and disaster prevention systems, despite a decline in sales in the aerospace and defense systems fields due to government expenditure cutbacks in Japan.

Operating income decreased ¥7.1 billion year on year to ¥14.6 billion mainly owing to the influence of highly profitable projects in the previous year and increased costs for strengthening the development and sales organization in the social systems field, despite efforts to reduce costs and tighten risk management.

In fiscal 2011, NEC saw the rapid emergence of replacement demand due to regional restructuring and digitization of wireless communications networks of fire and disaster prevention systems. NEC captured a high market share by harnessing strengths in software-based wireless technology and its extensive experience in large-scale

fire-fighting command systems.

In addition, NEC is proposing systems that will support efforts to reduce CO_2 emissions in the logistics sector, which accounts for 20% of CO_2 emissions in Japan. In fiscal 2011, NEC developed a telematics system called "See-T Navi" in partnership with Yamato Transport Co., Ltd. to raise the efficiency of collection/delivery operations, and to support safer and more environmentally friendly vehicle operations.

Besides, NEC has been working to develop compact infrared cameras for security, thermography and other applications using its original uncooled infrared detector technology. In fiscal 2011, NEC developed an uncooled infrared camera called AEROEYE to support helicopter operations at night or in poor visibility conditions, and delivered the camera to the Tokyo Fire Department.
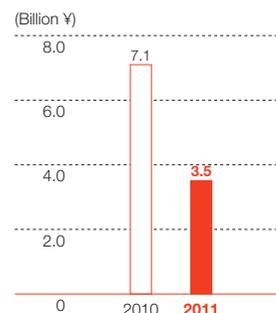
FOR FURTHER GROWTH

NEC provides a broad range of security solutions underpinning many different areas, from national and regional security to the protection of individuals and

R&D EXPENSES, R&D EXPENSES RATIO

(Billion ¥)

8.4 (2010)
8.3 (2011)

2.7% (2010)
2.6% (2011)

■ R&D expenses
— R&D expenses ratio
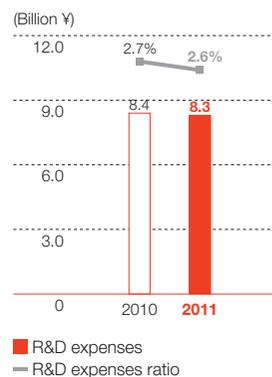
CAPITAL EXPENDITURES

(Billion ¥)

7.1 (2010)
3.5 (2011)

corporations, with the aim of supporting a more reliable, safe, and comfortable society. In recent years, demand has grown for the digitization of wireless communications networks, which underpin transportation safety for expressways, and public transit such as railways, as well as reliable communications in the fire and disaster prevention fields. Particularly, replacement demand for fire and disaster prevention systems is expected to grow continuously over the next several years, driven by regional restructuring and the digitization of wireless communications networks. NEC continues to reinforce its operating structure in this field.

Furthermore, nationwide multimedia broadcasting for mobile terminals will enter service using remnant terrestrial analog broadcasting frequencies. Here, NEC will help to develop systems spanning program production to transmission (digital broadcasting) in support of the convergence of communications and broadcasting. Similarly, the intelligent transportation system (ITS) field is studying the feasibility of developing vehicle-to-vehicle and road-to-vehicle communications also using these remnant frequencies. In this area, NEC will help to develop technologies and build infrastructure that reduces traffic congestion and accidents.

Moreover, NEC offers ITS telematics solutions which help to reduce CO_2 emissions in the logistics field by facilitating safe and environmentally friendly driving and raising the efficiency of logistics operations. Looking ahead, NEC aims to expand this business by extending telematics solutions from commercial to personal vehicles and entering the ASP service* business using cloud computing.

In other areas, NEC offers building solutions that enable integrated facility management for security and power

High-performance fire-fighting command center to support rapid-response fire and disaster prevention and rescue activities (Fire and disaster prevention systems).


Digital terrestrial TV transmitters for overseas markets (Broadcasting and video distribution systems)

The ASNARO is equipped with the NEXTAR small standard satellite bus module.

consumption within a building. Also, NEC is currently participating in various smart grid demonstration trials. Going forward, NEC will roll out power control solutions that address the introduction of renewable energy and multiplying means of electricity trading, which are expected to advance further.

NEC set up the Overseas Business Strategy Office in September 2010 to promote overseas development of systems that support the advanced use of social infrastructure developed in Japan. Collaboration with partner companies and government agencies in fields such as expressways, railways, waterworks, fire and disaster prevention and space applications, NEC will strive to increase sales in emerging markets such as Asian countries, as well as Latin America and Africa, as it works to drive overseas business expansion forward.
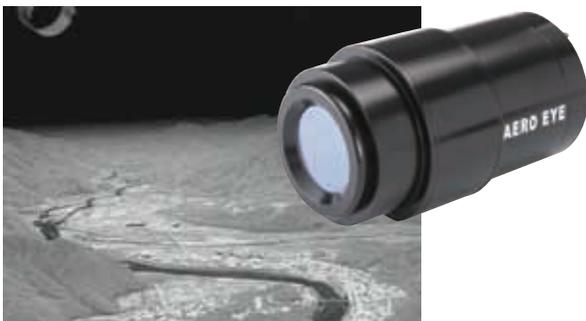
Infrared camera AEROEYE IRV-3200H with a photograph taken by the camera

* ASP (Application Service Provider) service: A service where access to applications is provided to customers over the Internet.