Hitachi is determined to combine its long-developed infrastructure businesses to capture synergies that ultimately create optimal value, “uVALUE,” for customers and society. By interweaving its wealth of experience, knowledge and expertise gained from its involvement in a broad range of business domains, Hitachi will exercise its true collective strengths to create even higher value.
Social Infrastructure Business

Railway Systems
Hitachi is Japan’s only railway systems integrator. In areas extending from rail vehicles, traffic management and signaling systems to substation systems and information services, Hitachi provides solutions catering to diverse needs. Hitachi is committed to continuing to support advances in railway systems by drawing on its reservoir of technologies and know-how.

Explosives Trace Detection Systems
These systems can instantly detect explosives such as plastic explosives. In May 2005, Hitachi became the first company outside the U.S. to receive certification from the U.S. Transportation Security Administration (TSA), one of the world’s leading authorities concerning evaluation of security systems. The latest detection systems are used by companies such as Japan Airlines Corporation, All Nippon Airways Co., Ltd. and Yusen Air & Sea Service Co., Ltd.

Coal-fired Power Plants
Hitachi boasts integrated capabilities extending from the design, manufacture and assembly and installation of key components—steam turbines, boilers, generators and control equipment—for power plants, including those based on ultra-super critical pressure coal-fired thermal power generation technology, to trial operation of plants. Leveraging these collective strengths, Hitachi supports the development of infrastructure around the world, contributing to richer societies.
Elevators and Escalators

Elevators and escalators are vital infrastructure for enabling people to move with ease inside buildings, shopping centers, condominiums and other complexes. Hitachi provides high-speed, large capacity elevators, advanced elevator management systems and other infrastructure that support the efficient movement of people in urban spaces. With its extensive track record and experience in Japan, Hitachi’s goal is nothing less than capturing the top share in China and Southeast Asia as well as in Japan.

Construction Machinery

Hitachi Construction Machinery Co., Ltd. uses its extensive experience and advanced technological capabilities to develop and manufacture leading-edge construction machinery. The company’s mainstay product is excavators. As the world’s leading manufacturer, Hitachi Construction Machinery caters to the full spectrum of needs with a lineup extending from small and midsize models to ultra-large excavators with an impressive operating weight of 780 tons. Hitachi Construction Machinery manufactures products locally in Europe, the U.S. and Asia, commanding high shares in each market.

Automotive Systems

Hitachi is creating new value for people, cars and society by enhancing the performance of cars in four fields. Hitachi’s engine management systems and electric powertrain systems achieve higher levels of energy efficiency and also help protect the environment. Drive control systems enable minute control thanks to the application of By-Wire and other technologies. And car information systems offer greater convenience for drivers by utilizing large amounts of data at high speeds.
Life Infrastructure Business

Home Appliances
In the home appliances field, Hitachi delivers new value for households and lifestyles. Its washing machines are powerful yet conserve water. And a new concept refrigerator has a centrally positioned freezer to match changing lifestyles. In April 2006, Hitachi formed Hitachi Appliances, Inc. to strengthen Hitachi’s comprehensive air conditioning systems business, covering residential and commercial users, and all-electric housing products business.

Washer-dryer

Digital Consumer Electronics
Hitachi conducts a wide range of businesses in the digital consumer electronics field. Its operations include plasma and LCD flat-panel TVs, LCD projectors, HDD/DVD recorders, DVD camcorders, mobile phones and optical disk drives. In these fields, Hitachi is making new lifestyle proposals with new-generation audio visual devices. The nucleus of this approach is flat-panel TVs with in-built HDDs, but other devices include large-capacity HDD/DVD recorders and mobile phones able to receive digital terrestrial broadcasts.

Home Appliances

Medical Systems
Fusing various technologies and knowledge, Hitachi is working to provide leading-edge equipment, systems and services in fields including advanced medicine. In the imaging diagnosis and treatment field, Hitachi is channeling resources into the development of competitive products, including Open Magnetic Resonance Imaging (MRI) systems, ultrasound equipment and proton beam therapy systems. Hitachi is supplying a proton beam therapy system to the University of Texas, M.D. Anderson Cancer Center, one of the largest hospitals specializing in the treatment of cancer in the U.S.

High field MRI system “ECHelon Vega”
High Functional Materials

High functional materials have an increasingly important part to play in various fields, ranging from devices for semiconductors and LCDs to automobiles. Hitachi Group companies are contributing to advances in the device field: Hitachi Chemical Co., Ltd. with anisotropic conductive films for displays, Hitachi Metals, Ltd. with sputtering target materials for LCDs, and Hitachi Cable, Ltd. with semiconductor packaging materials.

HDDs

Amid the trend toward hard disk drives (HDDs) that are more compact but have greater storage capacity, perpendicular magnetic recording technology is stealing the limelight. Hitachi has started shipments of 2.5-inch HDDs based on this technology. Plans are also in hand to begin shipments of 1.8-inch drives in the latter half of 2006.

LCDs

Hitachi’s IPS (In-Plane-Switching) technology achieves vibrant, natural images even where a display is viewed from an angle. This technology has already been incorporated in TVs and mobile phones. Now, Hitachi has started mass producing high-function, high-definition LCDs based on IPS technology for digital still cameras, which continue to deliver even higher performance. This will enable digital still cameras to display the same detailed, vibrant images.

Infrastructure Technology/Products
Information Infrastructure Systems

Traceability/RFID
Hitachi is providing traceability solutions for various industries based on Radio Frequency Identification (RFID) IC chips, particularly the “µ-chip.” One of the world’s smallest contactless RFID IC chips, the “µ-chip” measures a mere 0.4mm square. Used in meat, pharmaceutical and other production and distribution management systems as well as other applications, including admission management in offices and at events, Hitachi’s traceability technology is helping to create a safer, more convenient society offering people peace of mind.

SAN/NAS Storage Solutions
Demand for storage systems is diversifying as the volume of data handled by businesses increases. Besides offering a broad product lineup covering everything from large to small and medium-size systems, Hitachi sells products that envisage various business scenes. These products include management software and virtualization technology for simplifying storage operation and management.

Finger Vein Authentication
Hitachi is providing finger vein authentication system solutions amid growing security needs in society. Using finger vein patterns, these systems are compact yet highly accurate, making forgery and impersonation difficult. Having garnered a strong response, Hitachi’s technology is being rapidly adopted by banks for ATMs, as well as in offices and other buildings for managing room access and in PC login systems, among other applications.

ATM equipped with a finger vein authentication system

Disk array subsystem