

NORTHROP GRUMMAN CORP /DE/

Form 10-K

February 10, 2009

Table of Contents

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2008
or
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 1-16411

NORTHROP GRUMMAN CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE
(State or other jurisdiction of
incorporation or organization)

95-4840775
(I.R.S. Employer
Identification Number)

1840 Century Park East, Los Angeles, California 90067 (310) 553-6262
(Address and telephone number of principal executive offices)

Securities registered pursuant to section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, \$1 par value	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act.
Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or such shorter period that the registrant was

required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes

No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes

No

As of June 30, 2008, the aggregate market value of the common stock (based upon the closing price of the stock on the New York Stock Exchange) of the registrant held by non-affiliates was approximately \$22,160 million.

As of February 6, 2009, 327,180,490 shares of common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Northrop Grumman Corporation's Proxy Statement to be filed with the Securities and Exchange Commission pursuant to Rule 14A for the 2009 Annual Meeting of Stockholders are incorporated by reference in Part III of this Form 10-K.

Table of Contents**NORTHROP GRUMMAN CORPORATION****TABLE OF CONTENTS**

	Page
<u>PART I</u>	
<u>Item 1.</u>	<u>Business</u> 1
<u>Item 1A.</u>	<u>Risk Factors</u> 13
<u>Item 1B.</u>	<u>Unresolved Staff Comments</u> 18
<u>Item 2.</u>	<u>Properties</u> 19
<u>Item 3.</u>	<u>Legal Proceedings</u> 20
<u>Item 4.</u>	<u>Submission of Matters to a Vote of Security Holders</u> 22
<u>PART II</u>	
<u>Item 5.</u>	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u> 23
<u>Item 6.</u>	<u>Selected Financial Data</u> 26
<u>Item 7.</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u> 27
	<u>Overview</u> 27
	<u>Business Acquisitions</u> 30
	<u>Business Dispositions</u> 31
	<u>Contracts</u> 31
	<u>Critical Accounting Policies, Estimates, and Judgments</u> 32
	<u>Consolidated Operating Results</u> 37
	<u>Segment Operating Results</u> 42
	<u>Key Segment Financial Measures</u> 43
	<u>Backlog</u> 49
	<u>Liquidity and Capital Resources</u> 50
	<u>Other Matters</u> 54
	<u>Glossary of Programs</u> 55
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures about Market Risk</u> 59
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u> 60
	<u>Report of Independent Registered Public Accounting Firm on the Consolidated Financial Statements</u> 60
	<u>Consolidated Statements of Operations and Comprehensive (Loss) Income</u> 61
	<u>Consolidated Statements of Financial Position</u> 62
	<u>Consolidated Statements of Changes in Shareholders' Equity</u> 66
	<u>Notes to Consolidated Financial Statements</u> 67
	<u>1. Summary of Significant Accounting Policies</u> 67
	<u>2. New Accounting Standards</u> 73
	<u>3. Goodwill Impairment Charge</u> 73
	<u>4. Dividends on Common Stock and Conversion of Preferred Stock</u> 74
	<u>5. Business Acquisitions</u> 75
	<u>6. Business Dispositions</u> 75
	<u>7. Segment Information</u> 76
	<u>8. (Loss) Earnings Per Share</u> 79
	<u>9. Accounts Receivable, Net</u> 80

Table of Contents

	Page
<u>10. Inventoried Costs, Net</u>	81
<u>11. Goodwill and Other Purchased Intangible Assets</u>	81
<u>12. Fair Value of Financial Instruments</u>	83
<u>13. Income Taxes</u>	84
<u>14. Notes Payable to Banks and Long-Term Debt</u>	87
<u>15. Litigation</u>	89
<u>16. Commitments and Contingencies</u>	91
<u>17. Retirement Benefits</u>	92
<u>18. Stock Compensation Plans</u>	98
<u>19. Unaudited Selected Quarterly Data</u>	101
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	103
<u>Item 9A. Controls and Procedures</u>	103
<u>Item 9B. Other Information</u>	103
<u>Management's Report on Internal Control over Financial Reporting</u>	104
<u>Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting</u>	105
<u>PART III</u>	
<u>Item 10. Directors, Executive Officers, and Corporate Governance</u>	106
<u>Item 11. Executive Compensation</u>	108
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	109
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	109
<u>Item 14. Principal Accountant Fees and Services</u>	109
<u>PART IV</u>	
<u>Item 15. Exhibits and Financial Statement Schedule</u>	109
<u>Signatures</u>	117
<u>Schedule II Valuation and Qualifying Accounts</u>	118
<u>EX-10(J).(III)</u>	
<u>EX-10(J).(IV)</u>	
<u>EX-10(N)</u>	
<u>EX-10(T)</u>	
<u>EX-10(W)</u>	
<u>EX-12(A)</u>	
<u>EX-21</u>	
<u>EX-23</u>	
<u>EX-24</u>	
<u>EX-31.1</u>	
<u>EX-31.2</u>	
<u>EX-32.1</u>	
<u>EX-32.2</u>	

Table of Contents

NORTHROP GRUMMAN CORPORATION

PART I

Item 1. Business

HISTORY AND ORGANIZATION

History

Northrop Grumman Corporation (Northrop Grumman or the company) is an integrated enterprise consisting of businesses that cover the entire defense spectrum, from undersea to outer space and into cyberspace. The companies that have become part of today's Northrop Grumman achieved historic accomplishments, from transporting Charles Lindbergh across the Atlantic to carrying astronauts to the moon's surface and back.

The company was originally formed in California in 1939 and was reincorporated in Delaware in 1985. From 1994 through 2002, the company entered a period of significant expansion through acquisitions of other businesses, most notably:

- n In 1994, Northrop Corporation acquired Grumman Corporation (Grumman) and was renamed Northrop Grumman. Grumman was a premier military aircraft systems integrator and builder of the Lunar Module that first delivered men to the surface of the moon.
- n In 1996, the company acquired the defense and electronics businesses of Westinghouse Electric Corporation, a world leader in the development and production of sophisticated radar and other electronic systems for the nation's defense, civil aviation, and other international and domestic applications.
- n In 2001, the company acquired Litton Industries (Litton), a global electronics and information technology enterprise, and one of the nation's leading full-service design, engineering, construction, and life cycle supporters of major surface ships for the United States (U.S.) Navy, U.S. Coast Guard, and international navies.
- n Also in 2001, Newport News Shipbuilding (Newport News) was added to the company. Newport News is the nation's sole designer, builder and refueler of nuclear-powered aircraft carriers and one of only two companies capable of designing and building nuclear-powered submarines.
- n In 2002, Northrop Grumman acquired the space and mission systems businesses of TRW Inc. (TRW), a leading developer of military and civil space systems and satellite payloads, as well as a leading global integrator of complex, mission-enabling systems and services.

The acquisition of these and other businesses have shaped the company into its present position as a premier provider of technologically advanced, innovative products, services and solutions in information and services, aerospace, electronics and shipbuilding. As prime contractor, principal subcontractor, partner, or preferred supplier, Northrop Grumman participates in many high-priority defense and commercial technology programs in the U.S. and abroad. The company conducts most of its business with the U.S. Government, principally the Department of Defense (DoD). The company also conducts business with local, state, and foreign governments and domestic and international commercial customers. For a description of the company's foreign operations, see Risk Factors in Part I, Item 1A.

Organization

On December 31, 2008, the company was aligned into seven reporting segments categorized into four primary businesses. The Mission Systems, Information Technology, and Technical Services segments are presented as

Information & Services. The Integrated Systems and Space Technology segments are presented as Aerospace. The Electronics and Shipbuilding segments are each presented as separate businesses.

The company, from time to time, acquires or disposes of businesses, and realigns contracts, programs or business areas among and within its operating segments that possess similar customers, expertise, and capabilities. Internal realignments are designed to more fully leverage existing capabilities and enhance development and delivery of

Table of Contents

NORTHROP GRUMMAN CORPORATION

products and services. The operating results for all periods presented have been revised to reflect these changes made through December 31, 2008.

During the second quarter of 2008, the company transferred certain programs and assets from the missiles business in the Mission Systems segment to the Space Technology segment. This transfer allows Mission Systems to focus on the rapidly growing command, control, communications, intelligence, surveillance, and reconnaissance (C3ISR) business. The missiles business will be an integrated element of the company's Aerospace business growth strategy.

In January 2008, the Newport News and Ship Systems businesses were realigned into a single operating segment called Northrop Grumman Shipbuilding. Previously, these businesses were separate operating segments which were aggregated into a single reporting segment for financial reporting purposes. In addition, certain Electronics businesses were transferred to Mission Systems during the first quarter of 2008.

Subsequent Realignments In January 2009, the company streamlined its organizational structure by reducing the number of reporting segments from seven to five. The five segments are Aerospace Systems, which combines the former Integrated Systems and Space Technology segments; Electronic Systems; Information Systems, which combines the former Information Technology and Mission Systems segments; Shipbuilding and Technical Services. The creation of the Aerospace Systems and Information Systems segments strengthens alignment with customers, improves the company's ability to execute on programs and win new business, and enhances cost competitiveness. This subsequent realignment is not reflected in any of the accompanying financial information.

INFORMATION & SERVICES

Mission Systems

The Mission Systems segment, headquartered in Reston, Virginia, is a leading global systems integrator of complex, mission-enabling systems for government, military, and commercial customers. Products and services are focused on the fields of command, control, communications, computers and intelligence (C4I), missile and air defense, airborne reconnaissance, intelligence management and processing, and decision support systems. The segment consists of two areas of business: Command, Control and Communications (C3); and Intelligence, Surveillance, and Reconnaissance (ISR).

Command, Control and Communications C3 supports the DoD, aerospace prime contractors, and other customers. Offerings include operational and tactical command and control systems; communications solutions and network management; tactical data link communications products and integration; network services; software defined radios; decision support and management information systems; system engineering and integration; land forces and global combat support; intelligence support to operations, mission planning and management applications; critical infrastructure security and force protection; logistics automation; robotic systems; homeland security solutions; naval systems engineering support and integration; command centers integration; and missile defense battle management and fire control systems.

Intelligence, Surveillance and Reconnaissance ISR supports the intelligence community, the DoD, and other federal agencies. Offerings include large systems integration; net-centric signals intelligence; airborne reconnaissance; payload control; sensor tasking and data collection; satellite ground stations; data collection and storage; information analysis and knowledge integration; computer network operations; information operations and information assurance; analysis and visualization tools; environmental and weather systems; special intelligence; and sustainment services.

Information Technology

The Information Technology segment, headquartered in McLean, Virginia, is a premier provider of information technology (IT) systems engineering and systems integration for the DoD, national intelligence, federal, civilian, state and local agencies, and commercial customers. The segment consists of four areas of business: Intelligence; Civilian Agencies; Commercial, State & Local; and Defense.

Table of Contents

NORTHROP GRUMMAN CORPORATION

Intelligence Intelligence provides IT systems, services and solutions primarily to the U.S. Intelligence Community, which includes customers in national agencies, DoD, homeland security, and other agencies at the federal, state and local level. This business area also collaborates with other Information Technology business areas by providing specialized technology solutions in areas such as information security, secure wireless communications, secure cross agency information-sharing and geospatial information systems. Services and solutions span the entire mission life cycle from requirements and technology development through processing and data analysis to information delivery.

Civilian Agencies Civilian Agencies provides IT systems, services and solutions primarily for federal civilian agencies, as well as government and commercial healthcare customers. Civilian Agencies customers include the departments of Homeland Security, Treasury, Justice, Transportation, State, Interior, and the U.S. Postal Service. Homeland Security offerings include secure networking, criminal justice systems, and identity management. Healthcare customers include the Department of Health and Human Services, DoD Health Affairs, the Centers for Disease Control and Prevention, the Food and Drug Administration, the Department of Veterans Affairs, and a number of pharmaceutical manufacturers. Healthcare offerings include enterprise architecture, systems integration, infrastructure management, document management, human capital management, case management, and specialized health IT solutions in electronic medical records pertaining to public health, bio-surveillance, benefits, and clinical research.

Commercial, State & Local Commercial, State & Local provides IT systems, services and solutions primarily for state and local agencies and commercial customers. The commercial business centers on managed IT services both as a prime contractor and partner in addition to specialized solutions that address specific business needs. The state and local focus includes public safety, secure wireless solutions, human services, and managed IT services. This business area provides IT outsourcing services on a service level agreement basis, where contractual terms are based on infrastructure volume and service levels. Services include management of data centers, networks, desktops, storage, security, help desk, and applications. Specialized state and local offerings include systems for police/fire/medical emergency dispatch, public safety command centers, biometric identification, and human services.

Defense Defense provides IT systems, services and solutions to all elements of the DoD including the Air Force, Navy, Army, Marines, the Office of the Secretary of Defense, and the Unified Combatant Commands. Offerings include business applications and systems integration related to human capital and business management, logistics, transportation, supply chain, and combat systems support. Other offerings consist of IT and network infrastructures, including modernization, architecture, design and capacity modeling. Defense also provides solutions and services for defense technology laboratories and research and development centers, system program offices, operational commands, education and training commands, test centers, and other defense agencies.

Technical Services

The Technical Services segment, headquartered in Herndon, Virginia, is a leading provider of logistics, infrastructure, and sustainment support, while also providing a wide array of technical services including training and simulation. The segment provides infrastructure management and maintenance, training and preparedness, and logistics and life cycle management in a wide array of operating environments. Technical Services consists of three areas of business: Systems Support; Training and Simulation; and Life Cycle Optimization and Engineering.

Systems Support Systems Support provides infrastructure and base operations management, including base support and civil engineering work, military aerial and ground range operations, support functions which include space launch services, construction, combat vehicle maintenance, protective and emergency services, and range-sensor-instrumentation operations. Primary customers include the Department of Energy, the DoD, the

Department of Homeland Security, and the U.S. Intelligence community, in both domestic and international locations.

Training and Simulation Training and Simulation provides realistic and comprehensive training to senior military leaders and peacekeeping forces, designs and develops future conflict training scenarios, and provides

Table of Contents

NORTHROP GRUMMAN CORPORATION

U.S. warfighters and international allies with live, virtual, and constructive training programs. This business area also offers diverse training applications ranging from battle command to professional military education. Primary customers include the DoD, Department of State and Department of Homeland Security.

Life Cycle Optimization and Engineering Life Cycle Optimization and Engineering provides complete life cycle product support and weapons system sustainment. This business area is focused on providing Performance Based Logistical support to the warfighter including supply chain management services, warehousing and inventory transportation, field services and mobilization, sustaining engineering, maintenance, repair and overhaul supplies, and on-going weapon maintenance and technical assistance. The group specializes in rebuilding essential parts and assemblies. Primary customers include the DoD as well as international military and commercial customers.

AEROSPACE

Integrated Systems

The Integrated Systems segment, headquartered in El Segundo, California, is a leader in the design, development, and production of airborne early warning, electronic warfare and surveillance systems, and battlefield management systems, as well as manned and unmanned tactical and strike systems. The segment designs, develops, produces, and supports fully missionized integrated systems and subsystems in the areas of battlespace awareness, command and control systems, integrated combat systems, and airborne ground surveillance.

Integrated Systems is involved in several manned vehicle programs such as subcontractor work on the F/A-18 and F-35 programs and prime contract work on the B-2 program and the Multi-Platform Radar Technology Insertion Program (MP-RTIP). For the F/A-18, Integrated Systems is responsible for the full integration of the center and aft fuselage and vertical tail sections and associated subsystems. For the F-35, Integrated Systems is responsible for the detailed design and integration and production of the center fuselage and weapons bay, systems engineering, mission system software, autonomic logistics and global sustainment, ground and flight test support, signature/low observables development, and support of modeling and simulation activities. Integrated Systems is the prime systems integration contractor for the MP-RTIP, which will provide advanced radar capabilities for the Global Hawk Unmanned Aerial Vehicle (UAV). Integrated Systems is working on a radar and avionics upgrade program for the B-2 bomber and is a prime integrator for all logistics support activities including program depot maintenance.

Integrated Systems is also a leader in unmanned vehicle programs such as the Global Hawk, the Unmanned Combat Air System Carrier Demonstration (UCAS-D), Aerial Targets, and the Fire Scout. Integrated Systems is the prime contractor for these product lines with the exception of the Army version of Fire Scout for Future Combat Systems (FCS). The Global Hawk is a high altitude long endurance unmanned aerial reconnaissance system. UCAS-D is a development/demonstration program that will design, build and test two demonstration vehicles that will conduct a carrier demonstration. The technology demonstrations are to show carrier control area operations, catapult launch, and an arrested landing of a low observable unmanned aerial combat vehicle. Aerial Targets has two primary models, the BQM-74 and the BQM-34 and is the prime contractor on multiple domestic and international contracts. Fire Scout is a vertical takeoff and landing tactical UAV system in development and consists of two versions – the Vertical Takeoff and Landing Unmanned Air Vehicle (VTUAV) for the U.S. Navy and the FCS Class IV UAV for the U.S. Army.

The E-2 Hawkeye is the U.S. Navy's airborne battle management command and control mission system platform providing airborne early warning detection, identification, tracking, targeting, and communication capabilities. The company is currently performing on a follow-on multi-year contract for eight E-2C aircraft to be delivered to the U.S. Navy through 2009 (two aircraft were delivered in each of 2006, 2007, and 2008). The company is also

developing the next generation capability including radar, mission computer, vehicle, and other system enhancements called the E-2D Advanced Hawkeye under a System Design and Development (SDD) contract with the U.S. Navy. Pilot Production of three aircraft was authorized in 2007 and long-lead funding for the first lot of Low Rate Initial Production, consisting of two aircraft, was received in December 2007.

Table of Contents

NORTHROP GRUMMAN CORPORATION

Joint STARS (Joint Surveillance Target Attack Radar System) detects, locates, classifies, tracks, and targets potentially hostile ground movement in all weather conditions. It is designed to operate around the clock in constant communication through secure data links with U.S. Air Force command posts, U.S. Army mobile ground stations, or centers for military analysis far from the point of conflict. The Joint STARS fleet has flown for more than 40,000 hours for Operation Iraqi Freedom over the last 6 years. The program is currently developing system and airframe performance upgrades under an ongoing Systems Improvement Program contract, including improvements in surveillance systems and sensor processing, battlement management capability, interoperability, and communication suite. Fleet sustainment is performed by Northrop Grumman through the Total Systems Support Responsibility contract, currently in its ninth year of performance, with a contract term that extends through 2021. In 2007, an initial non-recurring contract was awarded to design and re-engine the Joint STARS fleet with more reliable, powerful and fuel efficient engines. Follow-on nonrecurring and initial recurring shipsets were awarded in May 2008. In December 2008, the program's re-engined test aircraft successfully made its maiden flight. Risk reduction contracts for an upcoming Joint STARS Radar Modernization program were initiated in 2008.

The BAMS (Broad Area Maritime Surveillance) Unmanned Aircraft System SDD contract was awarded in 2008 and leverages the Global Hawk platform but integrates maritime requirements including sensors, communications, mission control systems and platform enhancements to provide a persistent maritime Intelligence, Surveillance, and Reconnaissance (ISR) data collection and dissemination capability to the U.S. Navy. The BAMS Unmanned Aircraft System contract includes options for Low Rate Initial Production and for furnishing the BAMS Unmanned Aircraft System to Australia.

The EA-6B Prowler is currently the armed services' primary offensive tactical radar jamming aircraft. Integrated Systems has developed the next generation mission system for this aircraft under the Increased Capacity (ICAP) III contract and has completed the final test and evaluation phase. The company completed the low-rate initial production for ICAP III Kits during 2006, and has been awarded follow-on contracts for ICAP III Kits & Spares, with deliveries through 2011. In addition, the company is performing on a contract to incorporate the ICAP III mission system into an F/A-18 platform, designated the EA-18G. Integrated Systems is the principal subcontractor to Boeing for this program, which is currently in the SDD phase. Northrop Grumman has been awarded contracts for Low Rate Initial Production I and II with hardware deliveries that commenced in the second quarter of 2008.

Other Integrated Systems programs include the Littoral Combat Ship Mission Package Integration contract and Mine Counter Measures contracts with multiple customers that focus on detecting and neutralizing in-land, coastal and water surface/subsurface mines.

Space Technology

The Space Technology segment, headquartered in Redondo Beach, California, develops and integrates a broad range of systems at the leading edge of space, defense, and electronics technology. The segment supplies products primarily to the U.S. Government that are critical to maintaining the nation's security and leadership in science and technology. Space Technology's business areas focus on the design, development, manufacture, and integration of spacecraft systems and subsystems, electronic and communications payloads, intercontinental ballistic missile systems, and high energy laser systems and subsystems. Products and services are grouped into the following areas of business: Civil Systems; Military Systems; Missile Systems; National Systems; and Technology & Emerging Systems (Technology).

Civil Systems The Civil Systems business area produces and integrates space-based systems, instruments, and services primarily for the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration, and other governmental agencies. These systems are primarily used for space science,

earth observation and environmental monitoring, and exploration missions. A variety of systems and services are provided, including mission and system engineering services, satellite and instrument systems, mission operations, and propulsion systems. Major programs include National Polar-orbiting Operational Environmental

Table of Contents

NORTHROP GRUMMAN CORPORATION

Satellite System (NPOESS), the James Webb Space Telescope (JWST), and the legacy Chandra space telescope and Earth Observing System programs.

Military Systems Military Systems produces and integrates spiral development programs and operational programs associated with the U.S. Air Force, Missile Defense Agency (MDA), and other military customers. Responsibilities include study design, build integration, launch, and operations of major U.S. military space systems. Programs include the Advanced Extremely High Frequency (AEHF) payload, Space Tracking and Surveillance System (STSS), and the communication payload for the legacy Milstar program, currently in operation. The Defense Support Program is a contract for monitoring ballistic missile launches for the U.S. Air Force.

Missile Systems Missile Systems supports the U.S. Air Force Intercontinental Ballistic Missile (ICBM) program, the MDA Kinetic Energy Interceptor (KEI) program and other large missile customers. Offerings include air and missile system engineering and integration; modeling and simulation; program management; system test and integration; development and deployment; missile system sustainment and modernization services; and development and test activities for complex missile systems.

National Systems The National Systems business area gives the nation's monitoring systems a global reach and enhanced national security. Addressing requirements in space-based intelligence, surveillance, and reconnaissance systems, National Systems provides mission and system engineering, satellite systems, and mission operations. Customers are predominantly restricted, as are the major programs.

Technology & Emerging Systems Technology performs government funded research and development in support of the four business areas above. Programs include the Airborne Laser (ABL), other directed energy programs and advanced concepts programs.

ELECTRONICS

The Electronics segment, headquartered in Linthicum, Maryland, designs, develops, produces, integrates, and supports high performance sensors, intelligence processing, navigation systems, test and simulation systems, and weapons operating in all environments from undersea to outer space and cyberspace. It also develops, produces, integrates, and supports power, power control, and ship control systems for commercial and naval ships in domestic and international markets. In select markets it performs as a prime contractor, integrating multiple subsystems to provide complete systems to meet customers' solution requirements. The segment is composed of seven areas of business: Aerospace Systems; Defensive Systems; Government Systems; Land Forces; Naval & Marine Systems; Navigation Systems; and Space & Intelligence, Surveillance, & Reconnaissance (ISR) Systems.

Aerospace Systems Aerospace Systems provides sensors, sensor processing, integrated sensor suites, and radar countermeasure systems for military surveillance and precision-strike; missile tracking and warning; and radio frequency electronic warfare. Fire control radars include systems for the F-16, F-22A, F-35, and B-1B. Navigation radars include commercial and military systems for transport and cargo aircraft. Surveillance products include the Airborne Warning and Control System radar, the Multi-role Electronically Scanned Array (MESA) radar, the MP-RTIP, the ship-board Cobra Judy Replacement radar, and multiple payloads on the P-8A. Radio frequency electronic warfare products include radar warning receivers, self-protection jammers, and integrated electronic warfare systems for aircraft such as the EA-6B, EA-18, F-16, and F-15.

Defensive Systems Defensive Systems provides systems that support combat aviation by protecting aircraft and helicopters from attack, by providing capabilities for precise targeting and tactical surveillance, by improving mission availability through automated test systems, and by improving mission skills through advanced simulation systems. A wide variety of fixed wing and helicopter protection systems include threat detection and laser-based countermeasures systems to defeat ground-launched infrared-guided missiles. Defensive Systems countermeasures systems are currently installed on over 40 types of aircraft, many of which are conducting combat operations in the Global War on Terror. Targeting systems utilize lasers for target designation and precision weapon delivery, image processing, and target acquisition, identification, and tracking. The LITENING targeting pod system is

Table of Contents

NORTHROP GRUMMAN CORPORATION

combat-proven on the AV-8B, A-10A/C, B-52H, F-15E, F-16, and F/A-18A/C/D. Test systems include systems to test electronic components of combat aircraft on the flight line and in repair facilities. Defensive Systems also provides advanced simulators for use on test ranges and training facilities to emulate threats of potential adversaries. Customers include the U.S. government and a wide variety of international allies.

Government Systems Government Systems provides products and services to meet the needs of governments for improvements in the effectiveness of their civil and military infrastructure and of their combat and counter-terrorism operations. This includes systems and system integration of products and services for postal automation, for the detection and alert of Chemical, Biological, Radiological, Nuclear, and Explosive material, and for homeland defense, communications, and enterprise management. Key programs include: Flats Sequencing System; International Sorting Centers; U.S. Postal Service bio-detection systems; and national level command and control, integrated air and missile defense and homeland defense systems for international customers.

Land Forces Land Forces provides a full range of warfighting system solutions for the digital battlefield, including fire control systems for airborne and tracked vehicles, air and ground sensors to detect enemy movement, tactical range finding and precise laser designation, and systems that detect and defend against enemy fire. These solutions include precision guided munitions for manned and unmanned air vehicle delivery, laser designators and rangefinders, ground-based tactical radars for warning of missile and artillery attack, situational awareness sensors, unattended sensor systems, ground vehicle communication networks, and compact, lightweight Synthetic Aperture Radar / Ground Moving Target Indicator (SAR/GMTI) radars for unmanned/rotary wing aircraft. Sensor technologies provided include radio frequency, infrared, and electro-optical. Principal programs include the Longbow Weapons System for the Apache attack helicopter, the Lightweight Laser Designator Rangefinder, the Viper Strike precision guided munitions, the Vehicular Intercommunication System (VIS), the Firefinder counter-battery integrated radar system, the Ground/Air Task Oriented Radar System (G/ATOR), and the lightweight STARLite SAR/GMTI for unmanned air vehicles.

Naval & Marine Systems Naval and Marine Systems provides major subsystems and subsystem integration for sensors, sensor processing, missile launching, ship controls and power generation. It provides systems to military surface and subsurface platforms, and bridge and machinery control systems for commercial maritime applications. Principal programs include: radars for navigation; radars for gun fire control and cruise missile defense; bridge management and control systems; power generation systems for aircraft carriers; power and propulsion systems for the *Virginia*-class submarine; launch systems for Trident submarines and the KEI program; the Advanced SEAL Delivery System mini-submarine; and unmanned semi-autonomous naval systems.

Navigation Systems Navigation Systems provides advanced navigation, avionics systems, and command and control centers for military and commercial applications. Its products are used in military air, land, sea, and space systems as well as commercial space and aircraft in both U.S. and international markets. Its subsidiaries, Northrop Grumman LITEF (Freiburg, Germany) and Northrop Grumman Italia (Pomezia, Italy), are leading European inertial sensors and systems suppliers. Key programs and applications include: integrated avionics for the U.S. Marine Corps attack and utility helicopters and U.S. Navy E-2 aircraft; military navigation and positioning systems for the F-16 fighter, F-22A fighter/attack aircraft, Eurofighter, and U.S. Navy MH-60 helicopter; navigation systems for commercial aircraft; navigation systems for military and civil space satellites and deep space exploration. Navigation Systems also develops and produces fiber-optic acoustic systems for underwater surveillance for *Virginia*-class submarines and the AN/TYQ-23 multi-service mobile tactical command centers for the U.S. Marine Corps and U.S. Air Force.

Space & ISR Systems Space & ISR Systems provides space-based sensor and exploitation systems for civil, military, and intelligence community customers, as well as ground/surface based command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) solutions to process, exploit, and disseminate multi-sensor data. Capabilities include space-based payloads, radar, Overhead Non-Imaging Infrared sensors, electro-optic & multi/hyper-spectral sensors, passive microwave sounders, mission processing solutions, and Service-Oriented open architecture C4ISR systems. The current portfolio of programs includes

-7-

Table of Contents

NORTHROP GRUMMAN CORPORATION

Spaced-Based Infrared System as the lead for the payload and mission processing systems, the Distributed Common Ground System Army as the system integrator, as well as a variety of civil space and restricted programs.

SHIPBUILDING

The Shipbuilding segment, headquartered in Newport News, Virginia, is the nation's sole industrial designer, builder, and refueler of nuclear-powered aircraft carriers and one of only two companies capable of designing and building nuclear-powered submarines for the U.S. Navy. Shipbuilding is also one of the nation's leading full service providers for the design, engineering, construction, and life cycle support of major programs for the U.S. Navy, U.S. Coast Guard, international navies, and for commercial vessels. The segment includes the following areas of business: Aircraft Carriers; Expeditionary Warfare; Surface Combatants; Submarines; Coast Guard & Coastal Defense; Fleet Support; Commercial; and Services & Other.

Aircraft Carriers The U.S. Navy's newest carrier and the last of the Nimitz class, the *USS George H. W. Bush*, was commissioned in January 2009. Advanced design and preparation efforts have been ongoing for the new generation carrier, the Ford class, which will incorporate transformational technologies that will result in manning reductions, improved war fighting capability, and a new nuclear propulsion plant design. In September 2008, Shipbuilding received a \$5.1 billion contract award for construction of the first ship of the class, the *Gerald R. Ford*, which is scheduled for delivery in 2015. The company also provides ongoing maintenance for the U.S. Navy aircraft carrier fleet through overhaul, refueling, and repair work. Shipbuilding is currently performing the refueling and complex overhaul of the *USS Carl Vinson* with redelivery to the U.S. Navy anticipated in early 2009. Planning for the *USS Theodore Roosevelt* refueling and complex overhaul began in the fall of 2006 and the ship is expected to arrive at Newport News, Virginia in the summer of 2009.

Expeditionary Warfare Expeditionary Warfare programs include the design and construction of amphibious assault ships for the U.S. Navy, including the LHD 1 WASP class and the San Antonio LPD 17 class. Shipbuilding is the sole provider for the LHD class of large-deck, 40,500-ton multipurpose amphibious assault ships, which serve as the centerpiece of an Amphibious Ready Group. Currently, the LHD-8 is under construction and is a significant upgrade from the preceding seven ships of its class. The LHD-8 is scheduled for delivery in mid-2009. In 2007, the construction contract for LHA 6, the first in a new class of enhanced amphibious assault ships, was awarded. The ship is scheduled for delivery in 2013. Shipbuilding is also the sole provider of the LPD 17 class of ships, which function as amphibious transports. The initial four ships were delivered in 2005, 2006, 2007, and 2008, and five LPD 17 ships are currently under construction.

Surface Combatants Surface Combatants includes the design and construction of the Arleigh Burke DDG 51 class Aegis guided missile destroyers, and the design and construction of DDG 1000 (previously DD(X)), the Navy's future transformational surface combatant class. Shipbuilding is one of two prime contractors designing and building DDG 51 class destroyers, which provide primary anti-aircraft and anti-missile ship protection for the U.S. Navy fleet. Three Arleigh Burke class destroyers are currently under construction. In 2006, Shipbuilding was awarded Phase IV detailed design and long lead construction funding for the initial DDG 1000. The construction award for the second ship in the class, DDG 1001, was received in 2008. The contract establishes a joint work share between Shipbuilding and General Dynamics Bath Iron Works (which will produce the first ship in the class) for detailed design and construction of the DDG 1000 class of ships. The advanced technologies developed for the DDG 1000 are anticipated to be incorporated into the next generation guided missile cruiser CG(X).

Submarines Northrop Grumman is one of only two U.S. companies capable of designing and building nuclear-powered submarines. In February 1997, the company and Electric Boat, a wholly owned subsidiary of General Dynamics Corporation, reached an agreement to cooperatively build *Virginia* class nuclear attack submarines. The initial four submarines in the class were delivered in 2004, 2006, and 2008. Electric Boat and Shipbuilding were awarded a construction contract in August 2003 for the second block of six *Virginia* class submarines, the first of which was delivered by Electric Boat in August 2008. Construction on the remaining five submarines is

Table of Contents

NORTHROP GRUMMAN CORPORATION

underway, with the last scheduled to be delivered in 2014. In December 2008, Shipbuilding and Electric Boat were awarded a construction contract for the third block of eight *Virginia* class submarines. The multi-year contract allows Shipbuilding and its teammate to proceed with the construction of one submarine per year in 2009 and 2010, and two submarines per year from 2011 to 2013. The eighth submarine to be procured under this contract is scheduled for delivery in 2019.

Coast Guard & Coastal Defense Shipbuilding is a joint venture partner along with Lockheed Martin for the Coast Guard's Deepwater Modernization Program. Shipbuilding has design and production responsibility for surface ships. In 2006, the Shipbuilding/Lockheed Martin joint venture was awarded a 43-month contract extension for the Deepwater program. The first National Security Cutter (NSC), *USCGC Berthoff*, was delivered to the Coast Guard in 2008. Currently the *Waesche* (NSC2) and *Stratton* (NSC3) are in construction, and long lead procurement is underway for NSC4.

Fleet Support Shipbuilding provides after-market services, including on-going maintenance and repair work, for a wide array of naval and commercial vessels. The company has ship repair facilities in the U.S. Navy's largest homeports of Norfolk, Virginia, and San Diego, California.

Commercial Under the Polar Tanker program, Shipbuilding was under contract to produce five double-hulled tankers. These tankers each transport one million barrels of crude oil from Alaska to west coast refineries and are fully compliant with the Oil Pollution Act of 1990. The last ship under this program was delivered in mid-2006.

Services & Other Shipbuilding provides various services to commercial nuclear and non-nuclear industrial customers. In January 2008, Savannah River Nuclear Solutions, a joint venture among Shipbuilding, Fluor Corporation, and Honeywell, was awarded a contract for site management and operations of the U.S. Department of Energy's Savannah River Site in Aiken, South Carolina. In October 2008, Shipbuilding announced the formation of a joint venture with AREVA NP to build a new manufacturing and engineering facility in Newport News, Virginia, to help supply the growing American nuclear energy sector.

Corporate

The company's principal executive offices are located at 1840 Century Park East, Los Angeles, California 90067. The company's telephone number is (310) 553-6262. The company's home page on the Internet is www.northropgrumman.com. References to the company's website in this report are provided as a convenience and do not constitute, and should not be viewed as, incorporation by reference of the information contained on, or available through, the website. Therefore, such information should not be considered part of this report.

SUMMARY SEGMENT FINANCIAL DATA

For a more complete understanding of the company's segment financial information, see Segment Operating Results in Part II, Item 7, and Note 7 to the consolidated financial statements in Part II, Item 8.

CUSTOMERS AND REVENUE CONCENTRATION

The company's primary customer is the U.S. Government. Revenue from the U.S. Government accounted for approximately 90 percent of total revenues in 2008, 2007, and 2006. No other customer accounted for more than 10 percent of total revenue during any period presented. No single product or service accounted for more than 10 percent of total revenue during any period presented. See Risk Factors in Part I, Item 1A.

Table of Contents**NORTHROP GRUMMAN CORPORATION****PATENTS**

The following table summarizes the number of patents the company owns or has pending as of December 31, 2008:

	Owned	Pending	Total
U.S. patents	3,210	447	3,657
Foreign patents	2,091	470	2,561
Total	5,301	917	6,218

Patents developed while under contract with the U.S. Government may be subject to use by the U.S. Government. In addition the company licenses intellectual property to, and from, third parties. Management believes the company's ability to conduct its operations would not be materially affected by the loss of any particular intellectual property right.

SEASONALITY

No material portion of the company's business is considered to be seasonal. The timing of revenue recognition is based on several factors including the timing of contract awards, the incurrence of contract costs, cost estimation, and unit deliveries. See Revenue Recognition in Part II, Item 7.

BACKLOG

At December 31, 2008, total backlog was \$78.1 billion compared with \$63.7 billion at the end of 2007. Approximately 65 percent of the \$37.4 billion funded backlog at December 31, 2008, is expected to be converted into sales in 2009.

Total backlog includes both funded backlog (firm orders for which funding is contractually obligated by the customer) and unfunded backlog (firm orders for which funding is not currently contractually obligated by the customer). Unfunded backlog excludes unexercised contract options and unfunded indefinite delivery indefinite quantity (IDIQ) orders. For multi-year services contracts with non-federal government customers having no stated contract values, backlog includes only the amounts committed by the customer. For backlog by segment see Backlog in Part II, Item 7.

RAW MATERIALS

The most significant raw material required by the company is steel, used primarily for shipbuilding. The company has mitigated supply risk by negotiating long-term agreements with a number of steel suppliers. In addition, the company has mitigated price risk related to its steel purchases through certain contractual arrangements with the U.S. Government. While the company has generally been able to obtain key raw materials required in its production processes in a timely manner, a significant delay in receipt of these supplies by the company could have a material adverse effect on the company's consolidated financial position, results of operations, or cash flows. See Risk Factors in Part I, Item 1A.

GOVERNMENT REGULATION

The company's business is affected by numerous laws and regulations relating to the award, administration and performance of U.S. Government contracts. See Risk Factors in Part I, Item 1A.

Certain programs with the U.S. Government that are prohibited by the customer from being publicly discussed in detail are referred to as "restricted" in this Form 10-K. The consolidated financial statements and financial information contained within this Form 10-K reflect the operating results of restricted programs under accounting principles generally accepted in the United States of America (U.S. GAAP). See Risk Factors in Part I, Item 1A.

Table of Contents

NORTHROP GRUMMAN CORPORATION

RESEARCH AND DEVELOPMENT

Company-sponsored research and development activities primarily include independent research and development (IR&D) efforts related to government programs. IR&D expenses are included in general and administrative expenses and are generally allocated to U.S. Government contracts. Company-sponsored research and development expenses totaled \$576 million, \$534 million, and \$569 million in 2008, 2007, and 2006, respectively. Expenses for research and development sponsored by the customer are charged directly to the related contracts.

EMPLOYEE RELATIONS

The company believes that it maintains good relations with its 123,600 employees, of which approximately 18 percent are covered by 36 collective bargaining agreements. The company expects to re-negotiate seven of its collective bargaining agreements in 2009. It is not expected that the results of these negotiations will, either individually or in the aggregate, have a material adverse effect on the company's results of operations. See Risk Factors in Part I, Item 1A.

ENVIRONMENTAL MATTERS

Federal, state, and local laws relating to the protection of the environment affect the company's manufacturing operations. The company has provided for the estimated cost to complete environmental remediation where the company has determined it is probable that the company will incur such costs in the future to address environmental impacts at currently or formerly owned or leased operating facilities, or at sites where it has been named a Potentially Responsible Party (PRP) by the Environmental Protection Agency or similarly designated by other environmental agencies. These estimates may change given the inherent difficulty in estimating environmental cleanup costs to be incurred in the future due to the uncertainties regarding the extent of the required cleanup, determination of legally responsible parties, and the status of laws, regulations, and their interpretations.

In order to assess the potential impact on the company's financial statements, management estimates the possible remediation costs that reasonably could be incurred by the company on a site-by-site basis. Such estimates take into consideration the professional judgment of the company's environmental engineers and, when necessary, consultation with outside environmental specialists. In most instances, only a range of reasonably possible costs can be estimated. However, in the determination of accruals, the most probable amount is used when determinable, and the minimum is used when no single amount is more probable. The company records accruals for environmental cleanup costs in the accounting period in which the company's responsibility is established and the costs can be reasonably estimated. The company does not anticipate and record insurance recoveries before it has determined that collection is probable.

Management estimates that at December 31, 2008, the range of reasonably possible future costs for environmental remediation sites is \$186 million to \$279 million, of which \$231 million is accrued in other current liabilities in the consolidated statements of financial position. Environmental accruals are recorded on an undiscounted basis. At sites involving multiple parties, the company provides environmental accruals based upon its expected share of liability, taking into account the financial viability of other jointly liable parties. Environmental expenditures are expensed or capitalized as appropriate. Capitalized expenditures relate to long-lived improvements in currently operating facilities. In addition, should other PRPs not pay their allocable share of remediation costs, the company may have to incur costs in addition to those already estimated and accrued, which could have a material effect on the company's consolidated financial position, results of operations, or cash flows. The company has made the investments it believes necessary in order to comply with environmental laws. Although management cannot predict whether new information gained as

projects progress will materially affect the estimated liability accrued, management does not anticipate that future remediation expenditures will have a material adverse effect on the company's consolidated financial position, results of operations, or cash flows.

Table of Contents

NORTHROP GRUMMAN CORPORATION

COMPETITIVE CONDITIONS

Northrop Grumman, along with Lockheed Martin Corporation, The Boeing Company, Raytheon Company, and General Dynamics Corporation are among the largest companies in the U.S. defense industry at this time. Northrop Grumman competes against these and other companies for a number of programs, both large and small. Intense competition and long operating cycles are both key characteristics of Northrop Grumman's business and the defense industry. It is common in this industry for work on major programs to be shared among a number of companies. A company competing to be a prime contractor may, upon ultimate award of the contract to another party, turn out to be a subcontractor for the ultimate prime contracting party. It is not uncommon to compete for a contract award with a peer company and, simultaneously, perform as a supplier to or a customer of such competitor on other contracts. The nature of major defense programs, conducted under binding contracts, allows companies that perform well to benefit from a level of program continuity not common in many industries.

The company's success in the competitive defense industry depends upon its ability to develop and market its products and services, as well as its ability to provide the people, technologies, facilities, equipment, and financial capacity needed to deliver those products and services with maximum efficiency. It is necessary to maintain, as the company has, sources for raw materials, fabricated parts, electronic components, and major subassemblies. In this manufacturing and systems integration environment, effective oversight of subcontractors and suppliers is as vital to success as managing internal operations.

Similarly, there is intense competition among many companies in the information and services markets, which are generally more labor intensive with competitive margin rates over contract periods of shorter duration. Competitors in the information and services markets include the defense industry participants mentioned above as well as many other large and small entities with expertise in various specialized areas. The company's ability to successfully compete in the information and services markets depends on a number of factors; most important is the capability to deploy skilled professionals, many requiring security clearances, at competitive prices across the diverse spectrum of these markets. Accordingly, various workforce initiatives are in place to ensure the company is successful in attracting, developing and retaining sufficient resources to maintain or improve its competitive position within these markets. See Risk Factors in Part I, Item 1A.

EXECUTIVE OFFICERS

See Part III, Item 10, for information about executive officers of the company.

AVAILABLE INFORMATION

Throughout this Form 10-K, the company incorporates by reference information from parts of other documents filed with the Securities and Exchange Commission (SEC). The SEC allows the company to disclose important information by referring to it in this manner, and you should review this information in addition to the information contained herein.

The company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and proxy statement for the annual shareholders' meeting, as well as any amendments to those reports, are available free of charge through the company's web site as soon as reasonably practicable after electronic filing of such material with the SEC. You can learn more about the company by reviewing the company's SEC filings on the company's web site. The company's SEC reports can be accessed through the investor relations page of the company's web site at

www.northropgrumman.com.

The SEC also maintains a web site at www.sec.gov that contains reports, proxy statements and other information regarding SEC registrants, including Northrop Grumman. The public may read and copy any materials filed by the company with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

-12-

Table of Contents

NORTHROP GRUMMAN CORPORATION

Item 1A. Risk Factors

The company's consolidated financial position, results of operations and cash flows are subject to various risks, many of which are not exclusively within the company's control, that may cause actual performance to differ materially from historical or projected future performance. The company urges investors to carefully consider the risk factors described below in evaluating the information contained in this report.

- n The Company Depends Heavily on a Single Customer, the U.S. Government, for a Substantial Portion of the Company's Business, Including Programs Subject to Security Classification Restrictions on Information. Changes Affecting this Customer's Capacity to Do Business with the Company or the Effects of Competition in the Defense Industry Could Have a Material Adverse Effect On the Company or Its Prospects.***

Approximately 91 percent of the company's revenues during 2008 were derived from products and services ultimately sold to the U.S. Government and are therefore affected by, among other things, the federal budget process. The company is a supplier, either directly or as a subcontractor or team member, to the U.S. Government and its agencies as well as foreign governments and agencies. These contracts are subject to the respective customers' political and budgetary constraints and processes, changes in customers' short-range and long-range strategic plans, the timing of contract awards, and in the case of contracts with the U.S. Government, the congressional budget authorization and appropriation processes, the U.S. Government's ability to terminate contracts for convenience or for default, as well as other risks such as contractor suspension or debarment in the event of certain violations of legal and regulatory requirements. The termination or failure to fund one or more significant contracts by the U.S. Government could have a material adverse effect on the company's results of operations or prospects. Current or future economic conditions could result in the reprioritization of or reduction in future U.S. Government defense spending levels.

In the event of termination for the government's convenience, contractors are normally protected by provisions covering reimbursement for costs incurred. The company is involved as a plaintiff in a lawsuit concerning a contract terminated for convenience. See Other Matters in Part I, Item 3. Termination resulting from the company's default could expose the company to liability and have a material adverse effect on its ability to compete for contracts.

In addition, a material amount of the company's revenues and profits is derived from programs that are subject to security classification restrictions (restricted business), which could limit the company's ability to discuss details about these programs, their risks or any disputes or claims relating to such programs. As a result, investors might have less insight into the company's restricted business than other businesses of the company or could experience less ability to evaluate fully the risks, disputes or claims associated with restricted business.

The company's success in the competitive defense industry depends upon its ability to develop and market its products and services, as well as its ability to provide the people, technologies, facilities, equipment, and financial capacity needed to deliver those products and services with maximum efficiency. A loss of business to the company's competitors could have a material adverse effect on the company's ability to generate favorable financial results and maintain market share.

- n Many of the Company's Contracts Contain Performance Obligations That Require Innovative Design Capabilities, Are Technologically Complex, Require State-Of-The-Art Manufacturing Expertise or Are Dependent Upon Factors Not Wholly Within the Company's Control. Failure to Meet These Obligations Could Adversely Affect the Company's Profitability and Future Prospects.***

The company designs, develops and manufactures technologically advanced and innovative products and services applied by its customers in a variety of environments. Problems and delays in development or delivery as a result of issues with respect to design, technology, licensing and patent rights, labor, learning curve assumptions, or materials and components could prevent the company from achieving contractual requirements.

Table of Contents**NORTHROP GRUMMAN CORPORATION**

In addition, the company's products cannot be tested and proven in all situations and are otherwise subject to unforeseen problems. Examples of unforeseen problems which could negatively affect revenue and profitability include loss on launch of spacecraft, premature failure, problems with quality, country of origin, delivery of subcontractor components or services, and unplanned degradation of product performance. These failures could result, either directly or indirectly, in loss of life or property. Among the factors that may affect revenue and profits could be unforeseen costs and expenses not covered by insurance or indemnification from the customer, diversion of management focus in responding to unforeseen problems, loss of follow-on work, and, in the case of certain contracts, repayment to the government customer of contract cost and fee payments previously received by the company.

Certain contracts, primarily involving space satellite systems, contain provisions that entitle the customer to recover fees in the event of partial or complete failure of the system upon launch or subsequent deployment for less than a specified period of time. Under such terms, the company could be required to forfeit fees previously recognized and/or collected. The company has not experienced any material losses in the last decade in connection with such contract performance incentive provisions. However, if the company were to experience launch failures or complete satellite system failures in the future, such events could have a material adverse impact on the company's consolidated financial position or results of operations.

n Contract Cost Growth on Fixed-Price and Other Contracts That Cannot Be Justified as an Increase In Contract Value Due From Customers Exposes The Company to Reduced Profitability and the Potential Loss of Future Business.

Operating income is adversely affected when contract costs that cannot be billed to customers are incurred. This cost growth can occur if estimates to complete increase due to technical challenges or if initial estimates used for calculating the contract cost were incorrect. The cost estimation process requires significant judgment and expertise. Reasons for cost growth may include unavailability and productivity of labor, the nature and complexity of the work to be performed, the effect of change orders, the availability of materials, the effect of any delays in performance, availability and timing of funding from the customer, natural disasters, and the inability to recover any claims included in the estimates to complete. A significant change in cost estimates on one or more programs could have a material effect on the company's consolidated financial position or results of operations.

Due to their nature, fixed-price contracts inherently have more risk than flexibly priced contracts and therefore generally carry higher profit margins. Approximately 30 percent of the company's annual revenues are derived from fixed-price contracts—see Contracts in Part II, Item 7. Flexibly priced contracts may carry risk to the extent of their specific contract terms and conditions relating to performance award fees, including cost sharing agreements, and negative performance incentives. The company typically enters into fixed-price contracts where costs can be reasonably estimated based on experience. In addition, certain contracts other than fixed-price contracts have provisions relating to cost controls and audit rights. Should the terms specified in those contracts not be met, then profitability may be reduced. Fixed-price development work comprises a small portion of the company's fixed-price contracts and inherently has more uncertainty as to future events than production contracts and therefore more variability in estimates of the costs to complete the development stage. As work progresses through the development stage into production, the risks associated with estimating the total costs of the contract are generally reduced. In addition, successful performance of fixed-price development contracts which include production units is subject to the company's ability to control cost growth in meeting production specifications and delivery rates. While management uses its best judgment to estimate costs associated with fixed-price development contracts, future events could result in either upward or downward adjustments to those estimates. Examples of the company's significant fixed-price development contracts include the F-16 Block 60 combat avionics program and the MESA radar system program for

the Wedgetail and Peace Eagle contracts, both of which are performed by the Electronics segment. It is also not unprecedented in the shipbuilding business for the company to

Table of Contents

NORTHROP GRUMMAN CORPORATION

negotiate fixed-price production follow-on contracts before the development effort has been completed and learning curves fully realized on existing flexibly priced development contracts.

n The Company Uses Estimates When Accounting for Contracts. Changes In Estimates Could Affect The Company's Profitability and Its Overall Financial Position.

Contract accounting requires judgment relative to assessing risks, estimating contract revenues and costs, and making assumptions for schedule and technical issues. Due to the size and nature of many of the company's contracts, the estimation of total revenues and costs at completion is complicated and subject to many variables. For example, assumptions have to be made regarding the length of time to complete the contract because costs also include expected increases in wages and prices for materials. Similarly, assumptions have to be made regarding the future impact of company initiated efficiency initiatives and cost reduction efforts. Incentives, awards, or penalties related to performance on contracts are considered in estimating revenue and profit rates, and are recorded when there is sufficient information to assess anticipated performance.

Because of the significance of the judgments and estimation processes described above, it is possible that materially different amounts could be obtained if different assumptions were used or if the underlying circumstances were to change. Changes in underlying assumptions, circumstances or estimates may have a material adverse effect upon future period financial reporting and performance. See Critical Accounting Policies, Estimates, and Judgments in Part II, Item 7.

n The Company's Operations Are Subject to Numerous Domestic and International Laws, Regulations and Restrictions, and Noncompliance With These Laws, Regulations and Restrictions Could Expose the Company to Fines, Penalties, Suspension or Debarment, Which Could Have a Material Adverse Effect on the Company's Profitability and Its Overall Financial Position.

The company has thousands of contracts and operations in many parts of the world subject to U.S. and foreign laws and regulations. Prime contracts with various agencies of the U.S. Government and subcontracts with other prime contractors are subject to numerous procurement regulations, including the False Claims Act and the International Traffic in Arms Regulations promulgated under the Arms Export Control Act, with noncompliance found by any one agency possibly resulting in fines, penalties, debarment, or suspension from receiving additional contracts with all U.S. Government agencies. Given the company's dependence on U.S. Government business, suspension or debarment could have a material adverse effect on the company.

In addition, international business subjects the company to numerous U.S. and foreign laws and regulations, including, without limitation, regulations relating to import-export control, technology transfer restrictions, repatriation of earnings, exchange controls, the Foreign Corrupt Practices Act, and the anti-boycott provisions of the U.S. Export Administration Act. Failure by the company or its sales representatives or consultants to comply with these laws and regulations could result in administrative, civil, or criminal liabilities and could, in the extreme case, result in suspension or debarment from government contracts or suspension of the company's export privileges, which could have a material adverse effect on the company. Changes in regulation or political environment may affect the company's ability to conduct business in foreign markets including investment, procurement, and repatriation of earnings.

The company operates in a highly regulated environment and is routinely audited by the U.S. Government and others. On a regular basis, the company monitors its policies and procedures with respect to its contracts to ensure consistent

application under similar terms and conditions and to assess compliance with all applicable government regulations. Negative audit findings could result in termination of a contract, forfeiture of profits, or suspension of payments. From time to time the company is subject to U.S. Government investigations relating to its operations. Government contractors that are found to have violated the law such as the False Claims Act or the Arms Export Control Act, or are indicted or convicted for violations of other federal laws, or are found not to have acted responsibly as defined by the law, may be subject to significant fines. Such convictions could also result in suspension or debarment from government

Table of Contents

NORTHROP GRUMMAN CORPORATION

contracting for some period of time. Given the company's dependence on government contracting, suspension or debarment could have a material adverse effect on the company.

n The Company's Business Is Subject to Disruption Caused By Issues With Its Suppliers, Subcontractors, Workforce, Natural Disasters and Other Factors That Could Adversely Affect the Company's Profitability and Its Overall Financial Position.

The company may be affected by delivery or performance issues with key suppliers and subcontractors, as well as other factors that may cause operating results to be adversely affected. Changes in inventory requirements or other production cost increases may also have a negative effect on the company's consolidated financial position or results of operations.

Performance failures by a subcontractor of the company or difficulty in maintaining complete alignment of the subcontractor's obligations with the company's prime contract obligations may adversely affect the company's ability to perform its obligations on the prime contract, which could reduce the company's profitability due to damages or other costs that may not be fully recoverable from the subcontractor or from the customer and could result in a termination of the prime contract and have an adverse effect on the company's ability to compete for future contracts. If the recent period of adverse economic conditions and credit market volatility continues, the company's profitability may be negatively impacted by the inability of certain of the company's subcontractors and key suppliers to continue providing their products and/or services.

Operating results are heavily dependent upon the company's ability to attract and retain sufficient personnel with requisite skill sets and/or security clearances. The successful negotiation of collective bargaining agreements and avoidance of organized work stoppages are also critical to the ongoing operations of the company.

The company has significant operations located in regions of the U.S. that may be exposed to damaging storms and other natural disasters. While preventative measures typically help to minimize harm to the company, the damage and disruption resulting from certain storms or other natural disasters may be significant. Although no assurances can be made, the company believes it can recover costs associated with natural disasters through insurance or its contracts.

Natural disasters such as storms and earthquakes can disrupt electrical and other power distribution networks and cause adverse effects on profitability and performance, including computer and internet operation and accessibility. Computer viruses and similar harmful software programs, as well as network outages, disruptions and attacks also may have a material adverse effect on the company's profitability and performance unless quarantined or otherwise prevented.

n Changes In Future Business Conditions Could Cause Business Investments and/or Recorded Goodwill to Become Impaired, Resulting In Substantial Losses and Write-Downs That Would Reduce the Company's Operating Income.

As part of its overall strategy, the company will, from time to time, acquire a minority or majority interest in a business. These investments are made upon careful target analysis and due diligence procedures designed to achieve a desired return or strategic objective. These procedures often involve certain assumptions and judgment in determining acquisition price. After acquisition, unforeseen issues could arise which adversely affect the anticipated returns or which are otherwise not recoverable as an adjustment to the purchase price. Even after careful integration efforts, actual operating results may vary significantly from initial estimates. Goodwill accounts for approximately half of the

company's recorded total assets. The company evaluates goodwill amounts for impairment annually, or when evidence of potential impairment exists. The annual impairment test is based on several factors requiring judgment. Principally, a significant decrease in expected cash flows or changes in market conditions may indicate potential impairment of recorded goodwill. Adverse equity market conditions and the resulting decline in market multiples and the company's stock price led to a

Table of Contents**NORTHROP GRUMMAN CORPORATION**

non-cash, after-tax charge of \$3.1 billion for impairment of goodwill at Shipbuilding and Space Technology. If the current economic conditions continue to deteriorate causing further decline in the company's stock price, additional impairments to one or more businesses could occur in future periods whether or not connected to the annual impairment analysis. The company will continue to monitor the recoverability of the carrying value of its goodwill and other long-lived assets. See Critical Accounting Policies, Estimates, and Judgments in Part II, Item 7.

- n ***The Company Is Subject to Various Claims and Litigation That Could Ultimately Be Resolved Against The Company Requiring Material Future Cash Payments and/or Future Material Charges Against the Company's Operating Income and Materially Impairing the Company's Financial Position.***

The size and complexity of the company's business make it highly susceptible to claims and litigation. The company is subject to environmental claims, income tax matters and other litigation, which, if not resolved within established accruals, could have a material adverse effect on the company's consolidated financial position, results of operations, or cash flows. See Legal Proceedings in Part I, Item 3, and Critical Accounting Policies, Estimates, and Judgments in Part II, Item 7.

- n ***Pension and Medical Expense Associated with the Company's Retirement Benefit Plans May Fluctuate Significantly Depending Upon Changes in Actuarial Assumptions and Future Market Performance of Plan Assets.***

A substantial portion of the company's current and retired employee population is covered by pension and post-retirement benefit plans, the costs of which are dependent upon the company's various assumptions, including estimates of rates of return on benefit related assets, discount rates for future payment obligations, rates of future cost growth and trends for future costs. In addition, funding requirements for benefit obligations of the company's pension and post-retirement benefit plans are subject to legislative and other government regulatory actions. Variances from these estimates could have a material adverse effect on the company's consolidated financial position, results of operations, and cash flows. Recent volatility in the financial markets has resulted in lower than expected returns on the company's pension plan assets, resulting in potentially higher pension costs in future periods.

- n ***The Company's Insurance Coverage May Be Inadequate to Cover All of Its Significant Risks or Its Insurers May Deny Coverage of Material Losses Incurred By the Company, Which Could Adversely Affect The Company's Profitability and Overall Financial Position.***

The company endeavors to identify and obtain in established markets insurance agreements to cover significant risks and liabilities (including, among others, natural disasters, product liability and business interruption). Not every risk or liability can be protected against by insurance, and, for insurable risks, the limits of coverage reasonably obtainable in the market may not be sufficient to cover all actual losses or liabilities incurred. In some, but not all, circumstances the company may receive indemnification from the U.S. Government. Because of the limitations in overall available coverage referred to above, the company may have to bear substantial costs for uninsured losses that could have an adverse effect upon its consolidated results of operations and its overall consolidated financial position. Additionally, disputes with insurance carriers over coverage may affect the timing of cash flows and, where litigation with the carrier becomes necessary, an outcome unfavorable to the company may have a material adverse effect on the company's consolidated results of operations. See Note 15 to the consolidated financial statements in Part II, Item 8.

- n ***Current Trends in U.S. Government Procurement May Adversely Affect Cash Flows or Program Profitability.***

The company, like others in the defense industry, is aware of a potential problem presented by strict compliance with the Defense Federal Acquisition Regulation Supplement preference for enumerated specialty metals sourced domestically or from certain foreign countries. Subcontractors and lower-tier suppliers have made disclosures indicating inability to comply with the rule as written. Subject to limitations,

-17-

Table of Contents

NORTHROP GRUMMAN CORPORATION

inability to certify that all enumerated specialty metals in a product comply with sourcing requirements can lead to U.S. Government customers preventing delivery of materiel and products critical to national defense.

- n ***Current levels of market volatility are unprecedented and adverse capital and credit market conditions may affect the company's ability to access cost-effective sources of funding.***

The capital and credit markets have been experiencing extreme volatility and disruption in late 2008 and early 2009. Historically, the company has occasionally accessed these markets to support certain business activities including acquisitions, capital expansion projects, refinancing existing debt, and issuing letters of credit. In the future, the company may not be able to obtain capital market financing or credit availability on similar terms, or at all, which could have a material adverse effect on the company's consolidated financial position, results of operations, and cash flows.

- n ***The Company is Subject to Changes in United States and Global Market Conditions That Are Beyond the Company's Control and May Have a Material Effect on the Company's Business and Results of Operations.***

The United States and global economies are currently experiencing a period of substantial economic uncertainty with wide-ranging effects, including the current disruption in global financial markets. Possible effects of these economic events are described in the preceding risk factors, including those relating to U.S. Government defense spending, business disruptions caused by suppliers or subcontractors, impairment of goodwill and other long-lived assets, pension costs and access to capital and credit markets. Although governments worldwide, including the U.S. Government, have initiated sweeping economic plans, the company is unable to predict the impact, severity, and duration of these economic events, which could have a material effect on the company's consolidated financial position, results of operations, or cash flows.

Item 1B. Unresolved Staff Comments

The company has no unresolved comments from the SEC.

FORWARD-LOOKING STATEMENTS AND PROJECTIONS

Statements in this Form 10-K that are in the future tense, and all statements accompanied by terms such as believe, project, expect, trend, estimate, forecast, assume, intend, plan, target, guidance, anticipate, variations thereof and similar terms are intended to be forward-looking statements as defined by federal securities law. Forward-looking statements are based upon assumptions, expectations, plans and projections that are believed valid when made, but that are subject to the risks and uncertainties identified under Risk Factors in Part I, Item 1A, that may cause actual results to differ materially from those expressed or implied in the forward-looking statements.

The company intends that all forward-looking statements made will be subject to safe harbor protection of the federal securities laws pursuant to Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934.

Forward-looking statements are based upon, among other things, the company's assumptions with respect to:

- n impact of domestic and global economic uncertainties on financial markets, access to capital, value of goodwill or other assets, and changes in government funding;

- n future revenues;
- n expected program performance and cash flows;
- n compliance with technical, operational, and quality requirements;
- n returns or losses on pension plan assets and variability of pension actuarial and related assumptions and regulatory requirements;

- n the outcome of litigation, claims, appeals, bid protests, and investigations;
- n hurricane-related insurance recoveries;
- n environmental remediation;

Table of Contents

NORTHROP GRUMMAN CORPORATION

- n the success of acquisitions and divestitures of businesses;
- n performance issues with, and financial viability of, joint ventures, and other business arrangements;
- n performance issues with, and financial viability of, key suppliers and subcontractors;
- n product performance and the successful execution of internal plans;
- n successful negotiation of contracts with labor unions;
- n the availability and retention of skilled labor;
- n allowability and allocability of costs under U.S. Government contracts;
- n effective tax rates and timing and amounts of tax payments;
- n the results of any audit or appeal process with the Internal Revenue Service; and
- n anticipated costs of capital investments.

You should consider the limitations on, and risks associated with, forward-looking statements and not unduly rely on the accuracy of predictions contained in such forward-looking statements. As noted above, these forward-looking statements speak only as of the date when they are made. The company does not undertake any obligation to update forward-looking statements to reflect events, circumstances, changes in expectations, or the occurrence of unanticipated events after the date of those statements. Moreover, in the future, the company, through senior management, may make forward-looking statements that involve the risk factors and other matters described in this Form 10-K as well as other risk factors subsequently identified, including, among others, those identified in the company's filings with the SEC on Form 10-Q and Form 8-K.

Item 2. Properties

At December 31, 2008, the company had approximately 57 million square feet of floor space at approximately 526 separate locations, primarily in the U.S., for manufacturing, warehousing, research and testing, administration and various other uses. At December 31, 2008, the company leased to third parties approximately 696,000 square feet of its owned and leased facilities, and had vacant floor space of approximately 648,000 square feet.

At December 31, 2008, the company had major operations at the following locations:

Information & Services Huntsville, AL; Carson, McClellan, Rancho Carmel, Redondo Beach, San Diego, and San Jose, CA; Aurora and Colorado Springs CO; Washington D.C.; Warner Robins, GA; Lake Charles, LA; Elkridge and Columbia, MD; and Chantilly, Chester, Fairfax, Herndon, McLean, and Reston, VA.

Aerospace Carson, El Segundo, Manhattan Beach, Mojave, Palmdale, Redondo Beach, and San Diego, CA; Melbourne and St. Augustine, FL; Bethpage, NY; and Clearfield, UT.

Electronics Huntsville, AL; Azusa, Sunnyvale and Woodland Hills, CA; Norwalk, CT; Apopka, FL; Rolling Meadows, IL; Annapolis, Baltimore, Elkridge, Hagerstown, Linthicum and Sykesville, MD; Williamsville, NY; Cincinnati, OH; Salt Lake City, UT; and Charlottesville, VA. Locations outside the U.S. include France, Germany, and Italy.

Shipbuilding Avondale, Harahan, New Orleans and Tallulah, LA; Gulfport and Pascagoula, MS; and Hampton, Newport News, and Suffolk, VA.

Corporate and other locations Los Angeles, CA; Irving, TX; York, PA; and Arlington, VA. Locations outside the U.S. include the United Kingdom and Canada.

Table of Contents**NORTHROP GRUMMAN CORPORATION**

The following is a summary of the company's floor space at December 31, 2008:

<i>Square feet (In thousands)</i>	Owned	Leased	U.S. Government	Total
			Owned/Leased	
Information & Services	841	12,534	62	13,437
Aerospace	6,747	4,713	2,023	13,483
Electronics	8,091	3,723		11,814
Shipbuilding	13,144	4,028	197	17,369
Corporate	629	599		1,228
Total	29,452	25,597	2,282	57,331

The company believes its properties are well maintained and in good operating condition and that the productive capacity of the company's properties is adequate to meet current contractual requirements and those for the foreseeable future.

Item 3. Legal Proceedings

U.S. Government Investigations and Claims Departments and agencies of the U.S. Government have the authority to investigate various transactions and operations of the company, and the results of such investigations may lead to administrative, civil or criminal proceedings, the ultimate outcome of which could be fines, penalties, repayments or compensatory or treble damages. U.S. Government regulations provide that certain findings against a contractor may lead to suspension or debarment from future U.S. Government contracts or the loss of export privileges for a company or an operating division or subdivision. Suspension or debarment could have a material adverse effect on the company because of its reliance on government contracts.

As previously disclosed, in October 2005, the U.S. Department of Justice and a restricted U.S. Government customer apprised the company of potential substantial claims relating to certain microelectronic parts produced by the Space and Electronics Sector of former TRW Inc., now a part of the company. In the third quarter of 2006, the company proposed to settle the claims and any associated matters and recognized a pre-tax charge of \$112.5 million to cover the cost of the settlement proposal and associated investigative costs. The U.S. Government has advised the company that if continuing settlement discussions are not successful it will pursue its claims through litigation. On November 26, 2008, the U.S. Department of Justice filed a Notice of Intervention in a False Claims Act case that remains under seal in the U.S. District Court for the Central District of California. Because of the highly technical nature of the issues involved and their restricted status, because of the significant disagreement of the company with the allegations of the underlying qui tam complaint, and because of the significant disagreement between the company and the U.S. Government as to the U.S. Government's theories of liability and damages (including a material difference between the U.S. Government's damage theories and the company's offer), final resolution of this matter could take a considerable amount of time, particularly if litigation should ensue. If the U.S. Government were to be ultimately successful on its theories of liability and damages, which could be trebled under the Federal False Claims Act, the effect upon the company's consolidated financial position, results of operations, and cash flows would materially exceed the amount provided by the company. Based upon the information available to the company to date, the company believes that it has substantive defenses but can give no assurance that its views will prevail. Accordingly, the ultimate disposition of this matter cannot presently be determined.

As previously disclosed, in the second quarter of 2007, the U.S. Coast Guard issued a revocation of acceptance under the Deepwater Program for eight converted 123-foot patrol boats (the vessels) based on alleged hull buckling and shaft alignment problems and alleged nonconforming topside equipment on the vessels. The company submitted a written response that argued that the revocation of acceptance was improper, and in late December 2007, the Coast Guard advised Integrated Coast Guard Systems (the contractors joint venture for performing the Deepwater Program) that the Coast Guard is seeking \$96.1 million from the Joint Venture as a

Table of Contents

NORTHROP GRUMMAN CORPORATION

result of the revocation of acceptance of the eight vessels delivered under the 123-foot conversion program. The majority of the costs associated with the 123-foot conversion effort are associated with the alleged structural deficiencies of the vessels, which were converted under contracts with the company and a subcontractor to the company. In May 2008, the Coast Guard advised the Joint Venture that the Coast Guard would support an investigation by the U.S. Department of Justice of the Joint Venture and its subcontractors instead of pursuing its \$96.1 million claim independently. The Department of Justice had previously issued subpoenas related to the Deepwater Program, pursuant to which the company has provided responsive documents. The company recently learned that a civil False Claims Act complaint naming it as a defendant was filed under seal. The relationship between the allegations in the complaint and the U.S. Department of Justice's investigation is unclear to the company. Based upon the information available to the company to date, the company believes that it has substantive defenses to any potential claims but can give no assurance that its views will prevail.

In August 2008, the company disclosed to the Antitrust Division of the U.S. Department of Justice possible violations of federal antitrust laws in connection with the bidding process for certain maintenance contracts at a military installation in California. In February 2009, the company and the Department of Justice signed an agreement admitting the company into the Corporate Leniency Program. As a result of the company's acceptance into the Program, the company will be exempt from federal criminal prosecution and criminal fines relating to the matters the company reported to the Department of Justice if the company complies with certain conditions, including its continued cooperation with the government's investigation and its agreement to make restitution if the government was harmed by the violations.

Based upon the available information regarding matters that are subject to U.S. Government investigations, other than as set out above, the company believes, but can give no assurance, that the outcome of any such matters would not have a material adverse effect on its consolidated financial position, results of operations, or cash flows.

Litigation Various claims and legal proceedings arise in the ordinary course of business and are pending against the company and its properties. Based upon the information available, the company believes that the resolution of any of these various claims and legal proceedings would not have a material adverse effect on its consolidated financial position, results of operations, or cash flows.

As previously disclosed, the U.S. District Court for the Central District of California consolidated two separately filed Employee Retirement Income Security Act (ERISA) lawsuits, which the plaintiffs seek to have certified as class actions, into the In Re Northrop Grumman Corporation ERISA Litigation. On August 7, 2007, the Court denied plaintiffs' motion for class certification, and the plaintiffs appealed the Court's decision on class certification to the U.S. Court of Appeals for the Ninth Circuit. On October 11, 2007, the Ninth Circuit granted appellate review, which delayed the commencement of trial previously scheduled to begin January 22, 2008. The company believes that the outcome of these matters would not have a material adverse effect on its consolidated financial position, results of operations, or cash flows.

Other Matters

In the event of contract termination for the government's convenience, contractors are normally protected by provisions covering reimbursement for costs incurred under the contract. As previously disclosed, the company received a termination for convenience notice on the Tri-Service Standoff Attack Missile (TSSAM) program in 1995. In December 1996, the company filed a lawsuit against the U.S. Government in the U.S. Court of Federal Claims seeking the recovery of approximately \$750 million for uncompensated performance costs, investments and a reasonable profit on the program. Prior to 1996, the company had charged to operations in excess of \$600 million

related to this program. The company is unable to predict whether it will realize some or all of its TSSAM claims, none of which are recorded on its consolidated statement of financial position.

As previously disclosed, the company is pursuing legal action against an insurance provider arising out of a disagreement concerning the coverage of certain losses related to Hurricane Katrina (see Note 15 to the consolidated financial statements in Part II, Item 8). The company commenced the action against Factory Mutual Insurance Company (FM Global) on November 4, 2005, which is now pending in the U.S. District Court for

Table of Contents

NORTHROP GRUMMAN CORPORATION

the Central District of California, Western Division. In August 2007, the district court issued an order finding that the excess insurance policy provided coverage for the company's Katrina-related loss. In November 2007, FM Global filed a notice of appeal of the district court's order. On August 14, 2008, the U.S. Court of Appeals for the Ninth Circuit reversed the earlier summary judgment order in favor of the company, holding that the FM Global excess policy unambiguously excludes damage from the storm surge caused by Hurricane Katrina under its Flood exclusion. The Court of Appeals remanded the case to the district court to determine whether the California efficient proximate cause doctrine affords the company coverage under the policy even if the Flood exclusion of the policy is unambiguous. The company filed a Petition for Rehearing En Banc, or in the Alternative, For Panel Rehearing with the Court of Appeals on August 27, 2008. On January 6, 2009, the Court of Appeals ordered FM Global to respond to the Petition for Rehearing by January 30, 2009. FM Global filed its opposition to the Petition for Rehearing and the company now awaits the Court of Appeal's decision. Based on the current status of the assessment and claim process, no assurances can be made as to the ultimate outcome of this matter.

Item 4. Submission of Matters to a Vote of Security Holders

No items were submitted to a vote of security holders during the fourth quarter of 2008.

Table of Contents**NORTHROP GRUMMAN CORPORATION****PART II****Item 5.****Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***(a) Market Information.*

The company's common stock is listed on the New York Stock Exchange.

The following table sets forth, for the periods indicated, the high and low closing sale prices of the company's common stock as reported in the consolidated reporting system for the New York Stock Exchange Composite Transactions:

	2008		2007	
January to March	\$ 82.57	to \$ 76.41	\$ 75.72	to \$ 66.95
April to June	\$ 79.12	to \$ 66.53	\$ 77.87	to \$ 72.68
July to September	\$ 71.68	to \$ 60.54	\$ 79.86	to \$ 74.67
October to December	\$ 56.86	to \$ 34.20	\$ 84.48	to \$ 77.09

(b) Holders.

The approximate number of common shareholders was 35,269 as of February 6, 2009.

(c) Dividends.

Quarterly dividends per common share for the most recent two years are as follows:

	2008	2007
January to March	\$ 0.37	\$ 0.37
April to June	0.40	0.37
July to September	0.40	0.37
October to December	0.40	0.37
	\$ 1.57	\$ 1.48

The quarterly dividend paid to the holders of the mandatorily redeemable preferred shares was \$1.75 per share for the first quarter of 2008 and each quarter in 2007.

Common Stock

The company has 800,000,000 shares authorized at a \$1 par value per share, of which 327,012,663 and 337,834,561 shares were outstanding as of December 31, 2008 and 2007, respectively.

Preferred Stock

The company had 10,000,000 mandatorily redeemable shares authorized with a liquidation value of \$100 per share, of which zero and 3.5 million shares (designated as Series B Convertible Preferred Stock) were issued and outstanding as of December 31, 2008 and 2007, respectively.

On February 20, 2008, the company's Board of Directors approved the redemption of the 3.5 million shares of Series B Convertible Preferred Stock on April 4, 2008. Prior to the redemption date, substantially all of the preferred shares were converted into common stock at the election of shareholders. All remaining non-converted shares were redeemed by the company on the redemption date. As a result of the conversion and redemption the company issued approximately 6.4 million shares of common stock.

Table of Contents

NORTHROP GRUMMAN CORPORATION

(d) *Annual Meeting of Stockholders.*

The Annual Meeting of Stockholders of Northrop Grumman Corporation will be held on May 20, 2009, at the Space Technology Presentation Center, One Space Park, Redondo Beach, California 90278.

(e) *Stock Performance Graph.*

**COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN
AMONG NORTHROP GRUMMAN CORPORATION, S&P 500 INDEX
AND S&P AEROSPACE/DEFENSE INDEX**

- (1) Assumes \$100 invested at the close of business on December 31, 2003, in Northrop Grumman Corporation common stock, Standard & Poor's (S&P) 500 Index, and the S&P Aerospace/Defense Index.
- (2) The cumulative total return assumes reinvestment of dividends.
- (3) The S&P Aerospace/Defense Index is comprised of The Boeing Company, General Dynamics Corporation, Goodrich Corporation, Honeywell International Inc., L-3 Communications, Lockheed Martin Corporation, Northrop Grumman Corporation, Precision Castparts Corp., Raytheon Company, Rockwell Collins, Inc., and United Technologies Corporation.
- (4) The total return is weighted according to market capitalization of each company at the beginning of each year.

Table of Contents**NORTHROP GRUMMAN CORPORATION***(f) Purchases of Equity Securities by the Issuer and Affiliated Purchasers.*

The table below summarizes the company's repurchases of common stock during the three months ended December 31, 2008.

Period	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Numbers of Shares Purchased as of Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 through October 31, 2008	285,840	\$ 62.47	285,840	\$ 945 million
November 1 through November 30, 2008				
December 1 through December 31, 2008				
Total	285,840	\$ 62.47	285,840	\$ 945 million⁽¹⁾

(1) On December 19, 2007, the company's Board of Directors authorized a share repurchase program of up to \$2.5 billion of its outstanding common stock. As of December 31, 2008, the company has \$945 million authorized for share repurchases.

Share repurchases take place at management's discretion or under pre-established non-discretionary programs from time to time, depending on market conditions, in the open market, and in privately negotiated transactions. The company retires its common stock upon repurchase and has not made any purchases of common stock other than in connection with these publicly announced repurchase programs.

(g) Securities Authorized for Issuance Under Equity Compensation Plans.

For a description of securities authorized under the company's equity compensation plans, see Note 18 of the consolidated financial statements in Part II, Item 8.

Table of Contents**NORTHROP GRUMMAN CORPORATION****Item 6. Selected Financial Data**

The data presented in the following table is derived from the audited financial statements and other company information adjusted to reflect the current application of discontinued operations. See also Business Acquisitions and Business Dispositions in Part II, Item 7.

Selected Financial Data

<i>\$ in millions except per share</i>	Year Ended December 31				
	2008	2007	2006	2005	2004
Sales and Service Revenues					
United States Government	\$ 30,892	\$ 28,848	\$ 27,242	\$ 27,253	\$ 26,268
Other customers	2,995	2,980	2,749	2,611	2,496
Total revenues	\$ 33,887	\$ 31,828	\$ 29,991	\$ 29,864	\$ 28,764
Goodwill Impairment	\$ (3,060)				
Operating (loss) income	(111)	\$ 3,018	\$ 2,494	\$ 2,227	\$ 1,987
(Loss) earnings from continuing operations	(1,281)	1,811	1,593	1,413	1,080
Basic (loss) earnings per share, from continuing operations	\$ (3.83)	\$ 5.30	\$ 4.61	\$ 3.96	\$ 3.00
Diluted (loss) earnings per share, from continuing operations	(3.83)	5.18	4.51	3.89	2.96
Cash dividends declared per common share	1.57	1.48	1.16	1.01	.89
Year-End Financial Position					
Total assets	\$ 30,197	\$ 33,373	\$ 32,009	\$ 34,214	\$ 33,303
Notes payable to banks and long-term debt	3,944	4,055	4,162	5,145	5,158
Total long-term obligations and preferred stock	10,853	9,254	8,641	9,412	10,438
Financial Metrics					
Free cash flow ⁽¹⁾	\$ 2,420	\$ 2,071	\$ 947	\$ 1,811	\$ 1,266
Net working capital (deficit)	(235)	365	(4)	(397)	707
Current ratio	0.97 to 1	1.06 to 1	1.00 to 1	.95 to 1	1.11 to 1
Notes payable to banks and long-term debt as a percentage of shareholders equity	33.1%	22.9%	25.0%	30.6%	30.9%

Other Information

Company-sponsored research and development expenses	\$	576	\$	534	\$	569	\$	533	\$	501
Maintenance and repairs		440		335		358		428		394
Payroll and employee benefits		13,665		12,888		12,455		12,140		12,398
Number of employees at year-end		123,600		121,700		121,400		122,800		124,600

(1) Free cash flow is calculated as net cash provided by continuing operations less capital expenditures and outsourcing contract and related software costs. See Liquidity and Capital Resources Free Cash Flow in Part II, Item 7 for more information on this measure.

Table of Contents

NORTHROP GRUMMAN CORPORATION

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

OVERVIEW

Business

Northrop Grumman provides technologically advanced, innovative products, services, and integrated solutions in information and services, aerospace, electronics, and shipbuilding to its global customers. As a prime contractor, principal subcontractor, partner, or preferred supplier, Northrop Grumman participates in many high-priority defense and commercial technology programs in the U.S. and abroad. Northrop Grumman conducts most of its business with the U.S. Government, principally the DoD. The company also conducts business with local, state, and foreign governments and has domestic and international commercial sales.

Notable Events

Certain notable events or activity affecting the company's 2008 consolidated financial results included the following:

Financial highlights

- n Sales increased 6 percent to a record \$33.9 billion.
- n Cash from operations increased to a record \$3.2 billion after \$200 million pension pre-funding.
- n Total backlog at a record \$78.1 billion, driven by record contract awards of \$48.3 billion.
- n Share repurchases totaled \$1.6 billion.

Notable events

- n Non-cash, after-tax charge of \$3.1 billion for impairment of goodwill at Shipbuilding and Space Technology, primarily caused by the effects of adverse equity market conditions that caused a decrease in market multiples and the company's stock price at November 30, 2008.
- n Pre-tax charge of \$326 million in the first quarter of 2008 associated with the LHD-8 and other ships, of which \$63 million was reversed in the second half of 2008 – see Note 7 to the consolidated financial statements in Part II, Item 8.
- n Increased quarterly common stock dividend from \$.37 to \$.40 per share beginning in the second quarter of 2008.
- n Contract award of \$1.2 billion by U.S. Navy for a BAMS Unmanned Aircraft System.
- n Pension plan assets negative return of approximately 16% contributing to \$4.5 billion pre-tax loss in accumulated other comprehensive loss – see page 34
- n Conversion and redemption of 3.5 million shares of mandatorily redeemable convertible preferred stock in exchange for 6.4 million shares of common stock – see Note 8 to the consolidated financial statements in Part II, Item 8.

Outlook

The United States and global economies are currently undergoing a period of substantial economic uncertainty, and the related financial markets are experiencing unprecedented volatility. If the future economic environment continues to be less favorable than it has been in recent years, the company could experience difficulties if the financial viability

of certain of its subcontractors and key suppliers is impaired. In addition, the volatility in the financial markets has affected the valuation of the company's pension assets, resulting in higher pension costs in future periods. Adverse equity market conditions and the resulting decline in market multiples and the company's stock price have led to a non-cash, after-tax charge of \$3.1 billion for impairment of goodwill at Shipbuilding and Space Technology. If the financial markets continue to deteriorate causing further decline in the company's stock price and market capitalization, further impairments of goodwill and other long-lived assets may become necessary.

The company's business is conducted primarily with U.S. Government customers under long-term contracts and there have been no material changes to the company's product and service offerings due to the current economic conditions. The U.S. Government's budgetary processes give the company good visibility regarding future

Table of Contents

NORTHROP GRUMMAN CORPORATION

spending and the threat areas that they are addressing. Management believes that the company's current contracts, and its strong backlog of previously awarded contracts are well aligned with the direction of its customer's future needs, and this provides the company with good insight regarding future cash flows from its businesses. Nonetheless, management recognizes that no business is completely immune to the current economic situation and these economic conditions and the transition to a new presidential administration could adversely affect future defense spending levels which could lead to lower than expected revenues for the company in future years. Certain programs in which the company participates may be subject to potential reductions due to a slower rate of growth in the U.S. Defense Budget forecasts and funds being utilized to support the on-going Global War on Terrorism.

Despite the trend of slower growth rates in the U.S. defense budget, the company believes that its portfolio of technologically advanced, innovative products, services, and integrated solutions will generate revenue growth in 2009 and beyond. Based on total backlog (funded and unfunded) of approximately \$78 billion as of December 31, 2008, the company expects sales in 2009 of approximately \$34.5 billion. The major industry and economic factors that may affect the company's future performance are described in the following paragraphs.

Industry Factors

Northrop Grumman is subject to the unique characteristics of the U.S. defense industry as a monopsony, and by certain elements peculiar to its own business mix. Northrop Grumman, along with Lockheed Martin Corporation, The Boeing Company, Raytheon Company, and General Dynamics Corporation are among the largest companies in the U.S. defense industry at this time. Northrop Grumman competes against these and other companies for a number of programs, both large and small. Intense competition and long operating cycles are both key characteristics of Northrop Grumman's business and the defense industry. It is common in this industry for work on major programs to be shared among a number of companies. A company competing to be a prime contractor may, upon ultimate award of the contract to another party, turn out to be a subcontractor for the ultimate prime contracting party. It is not uncommon to compete for a contract award with a peer company and simultaneously perform as a supplier to or a customer of such competitor on other contracts. The nature of major defense programs, conducted under binding contracts, allows companies that perform well to benefit from a level of program continuity not common in many industries.

The company's success in the competitive defense industry depends upon its ability to develop and market its products and services, as well as its ability to provide the people, technologies, facilities, equipment, and financial capacity needed to deliver those products and services with maximum efficiency. It is necessary to maintain, as the company has, sources for raw materials, fabricated parts, electronic components, and major subassemblies. In this manufacturing and systems integration environment, effective oversight of subcontractors and suppliers is as vital to success as managing internal operations.

Similarly, there is intense competition among many companies in the information and services markets which is generally more labor intensive with competitive margin rates over contract periods of shorter duration. Competitors in the information and services markets include the defense industry participants mentioned above as well as many other large and small entities with expertise in various specialized areas. The company's ability to successfully compete in the information and services markets depends on a number of factors; most important is the capability to deploy skilled professionals, many requiring security clearances, at competitive prices across the diverse spectrum of these markets. Accordingly, various workforce initiatives are in place to ensure the company is successful in attracting, developing and retaining sufficient resources to maintain or improve its competitive position within these markets.

Liquidity Trends In light of the current economic situation, the company has also evaluated its future liquidity needs, both from a short-term and long-term basis. The company believes that cash on hand plus cash generated from

operations along with cash available under credit lines are expected to be sufficient in 2009 to service debt, finance capital expansion projects, pay federal, foreign, and state income taxes, fund pension and other post-retirement benefit plans, and continue paying dividends to shareholders. The company has a committed

Table of Contents

NORTHROP GRUMMAN CORPORATION

\$2 billion revolving credit facility, with a maturity date of August 10, 2012, that can be accessed on a same-day basis.

To provide for long-term liquidity, the company believes it can obtain additional capital, if necessary, from such sources as the public or private capital markets, the sale of assets, sale and leaseback of operating assets, and leasing rather than purchasing new assets. The company has an effective shelf registration on file with the SEC.

Recent Developments in U.S. Cost Accounting Standards (CAS) Pension Recovery Rules On September 2, 2008, the CAS Board published an Advance Notice of Proposed Rulemaking (ANPRM) that if adopted would provide a framework to partially harmonize the CAS rules with the Pension Protection Act of 2006 (PPA) requirements. The proposed CAS rule includes provisions for a transition period from the existing CAS requirement to a partially harmonized CAS requirement. After the PPA effective date for eligible government contractors (including Northrop Grumman), which were granted a delay in their PPA effective date, the proposed rule would partially mitigate the near-term mismatch between PPA-amended ERISA minimum contribution requirements which would not yet be recoverable under CAS. However, unless the final rule is revised, government contractors maintaining defined benefit pension plans in general would still experience a timing mismatch between required contributions and the CAS recoverable pension costs. It is anticipated that contractors will be entitled to seek an equitable adjustment to prices of previously negotiated contracts subject to CAS for increased contract costs which result from mandatory changes required by the final rule. The CAS Board is required to issue its final rule no later than January 1, 2010.

Economic Opportunities, Challenges, and Risks

The defense of the U.S. and its allies requires the ability to respond to one or more regional conflicts, terrorist acts, or threats to homeland security and is increasingly dependent upon early threat identification. National responses to those threats may require unilateral or cooperative initiatives ranging from dissuasion, deterrence, active defense, security and stability operations, or peacekeeping. The company believes that the U.S. Government will continue to place a high priority on the protection of its engaged forces and citizenry and on minimizing collateral damage when force must be applied in pursuit of national objectives. As a result, the U.S. and its military coalitions increasingly rely on sophisticated systems providing long-range surveillance and intelligence, battle management, and precision strike capabilities combined with the ability to rapidly deploy effective force to any region. Accordingly, defense procurement spending is expected to be weighted toward the development and procurement of military platforms and systems demonstrating the stealth, long-range, survivability, persistence and standoff capabilities that can overcome such obstacles to access. Additionally, advanced electronics and software that enhance the capabilities of individual systems and provide for the real-time integration of individual surveillance, information management, strike, and battle management platforms will also be required.

While the upward trend in overall defense spending may slow, the company does not expect defense requirements to change significantly in the foreseeable future. Many allied countries are focusing their development and procurement efforts on advanced electronics and information systems capabilities to enhance their interoperability with U.S. forces. The size of future U.S. and international defense budgets is expected to remain responsive to the international security environment. While the political environment currently does not allow for a thorough insight into the fiscal 2010 budget, it is expected defense spending will continue to grow in the near term, though probably more modestly than in the past. It is possible the new Administration's proposed budget will include reductions in certain programs in which the company participates or for which the company expects to compete, however the company believes that spending on recapitalization and modernization of homeland security and defense assets will continue to be a national priority, with particular emphasis on areas involving intelligence, persistent surveillance, cyber space, energy-saving technologies and non-conventional warfare capabilities.

U.S. Government programs in which the company either participates, or strives to participate, must compete with other programs for consideration during the U.S. budget formulation and appropriation processes. Budget

Table of Contents

NORTHROP GRUMMAN CORPORATION

decisions made in this environment will have long-term consequences for the size and structure of the company and the entire defense industry.

Substantial new competitive opportunities for the company include the next-generation long-range bomber, space radar, unmanned vehicles, satellite communications systems, restricted programs, technical services and information technology contracts, and numerous international and homeland security programs. In pursuit of these opportunities, Northrop Grumman continues to focus on operational and financial performance for continued growth in 2010 and beyond.

Northrop Grumman has historically concentrated its efforts in high technology areas such as stealth, airborne and space surveillance, battle management, systems integration, defense electronics, and information technology. The company has a significant presence in federal and civil information systems; the manufacture of combatant ships including aircraft carriers and submarines; space technology; C4ISR; and missile systems. The company believes that its programs are a high priority for national defense. Nevertheless, under budgetary pressures, there remains the possibility that one or more of them may be reduced, extended, or terminated by the company's U.S. Government customers.

The company provides certain product warranties that require repair or replacement of non-conforming items for a specified period of time. Most of the company's product warranties are provided under government contracts, the costs of which are generally incorporated into contract pricing.

Prime contracts with various agencies of the U.S. Government and subcontracts with other prime contractors are subject to numerous procurement regulations, including the False Claims Act and the International Traffic in Arms Regulations promulgated under the Arms Export Control Act, with noncompliance found by any one agency possibly resulting in fines, penalties, debarment, or suspension from receiving additional contracts with all U.S. Government agencies. Given the company's dependence on U.S. Government business, suspension or debarment could have a material adverse effect on the company.

See Risk Factors located in Part I, Item 1A for a more complete description of risks faced by the company and the defense industry.

BUSINESS ACQUISITIONS

2008 In October 2008, the company acquired 3001 International, Inc. (3001) for approximately \$92 million in cash. 3001 provides geospatial data production and analysis, including airborne imaging, surveying, mapping and geographic information systems for U.S. and international government intelligence, defense and civilian customers. The operating results of 3001 are reported in the Information Technology segment from the date of acquisition. The consolidated financial statements reflect preliminary estimates of the fair value of the assets acquired and liabilities assumed and the related allocation of the purchase price for the entities acquired. Management does not expect adjustments to these estimates, if any, to have a material effect on the company's consolidated financial position or results of operations.

2007 During the third quarter of 2007, the company acquired Xinetics Inc., reported in the Space Technology segment, and the remaining 61 percent of Scaled Composites, LLC, reported in the Integrated Systems segment, for an aggregate amount of approximately \$100 million in cash.

In July 2007, the company and Science Applications International Corporation (SAIC) reorganized the AMSEC, LLC joint venture (AMSEC), by dividing AMSEC along customer and product lines. AMSEC is a full-service supplier that provides engineering, logistics and technical support services primarily to Navy ship and aviation programs. Under the reorganization plan, the company retained the ship engineering, logistics and technical service businesses under the AMSEC name (the AMSEC Businesses) and, in exchange, SAIC received the aviation, combat systems and strike force integration services businesses from AMSEC (the Divested Businesses). This reorganization was treated as a step acquisition for the acquisition of SAIC's interests in the AMSEC Businesses, with the company recognizing a pre-tax gain of \$23 million for the effective sale of its interests in the

Table of Contents

NORTHROP GRUMMAN CORPORATION

Divested Businesses. From the date of this reorganization, the operating results of the AMSEC Businesses, and transaction gain, have been reported on a consolidated basis in the Shipbuilding segment. Prior to the reorganization, the company accounted for AMSEC, LLC under the equity method.

In January 2007, the company acquired Essex Corporation (Essex) for approximately \$590 million in cash, including the assumption of debt totaling \$23 million. Essex provides signal processing services and products, and advanced optoelectronic imaging for U.S. government intelligence and defense customers. The operating results of Essex are reported in the Mission Systems segment.

2006 There were no significant acquisitions during 2006.

BUSINESS DISPOSITIONS

2008 In April 2008, the company sold its Electro-Optical Systems (EOS) business for \$175 million in cash to L-3 Communications Corporation and recognized a gain of \$19 million, net of taxes of \$39 million. EOS, formerly a part of the Electronics segment, produces night vision and applied optics products. Sales for this business in the years ended December 31, 2008, 2007, and 2006, were approximately \$53 million, \$190 million, and \$122 million, respectively. Operating results of this business are reported as discontinued operations in the consolidated statements of operations and comprehensive (loss) income for all periods presented.

2007 During the second quarter of 2007, management announced its decision to exit the remaining Interconnect Technologies (ITD) business reported within the Electronics segment. Sales for this business in the years ended December 31, 2007 and 2006, were \$14 million and \$35 million, respectively. The shut-down was completed during the third quarter of 2007 and costs associated with the shut-down were not material. The results of this business are reported as discontinued operations in the consolidated statements of operations and comprehensive (loss) income for all periods presented.

2006 During the second quarter of 2006, the Enterprise Information Technology (EIT) business, formerly reported in the Information Technology segment, was shut down and costs associated with the exit activities were not material. The results of operations of this business are reported as discontinued operations in the consolidated statements of operations and comprehensive (loss) income for all periods presented.

The company sold the assembly business unit of ITD during the first quarter of 2006 and Winchester Electronics (Winchester) during the second quarter of 2006 for net cash proceeds of \$26 million and \$17 million, respectively, and recognized after-tax gains of \$4 million and \$2 million, respectively, in discontinued operations. Each of these business units was associated with the Electronics segment. The results of operations of the assembly business unit of ITD are reported as discontinued operations in the consolidated statements of operations and comprehensive (loss) income. The results of operations of Winchester were not material to any of the periods presented and have therefore not been reclassified as discontinued operations.

CONTRACTS

The majority of the company's business is generated from long-term government contracts for development, production, and service activities. Government contracts typically include the following cost elements: direct material, labor and subcontracting costs, and certain indirect costs including allowable general and administrative costs. Unless otherwise specified in a contract, costs billed to contracts with the U.S. Government are determined under the

requirements of the Federal Acquisition Regulation (FAR) and Cost Accounting Standards (CAS) regulations as allowable and allocable costs. Examples of costs incurred by the company and not billed to the U.S. Government in accordance with the requirements of the FAR and CAS regulations include, but are not limited to, certain legal costs, lobbying costs, charitable donations, and advertising costs.

The company's long-term contracts typically fall into one of two broad categories:

Flexibly Priced Contracts Includes both cost-type and fixed-price incentive contracts. Cost-type contracts provide for reimbursement of the contractor's allowable costs incurred plus a fee that represents profit. Cost-type

Table of Contents**NORTHROP GRUMMAN CORPORATION**

contracts generally require that the contractor use its best efforts to accomplish the scope of the work within some specified time and some stated dollar limitation. Fixed-price incentive contracts also provide for reimbursement of the contractor's allowable costs, but are subject to a cost-share limit which affects profitability. Fixed-price incentive contracts effectively become firm fixed-price contracts once the cost-share limit is reached.

Firm Fixed-Price Contracts A firm fixed-price contract is a contract in which the specified scope of work is agreed to for a price that is a pre-determined, negotiated amount and not generally subject to adjustment regardless of costs incurred by the contractor. Time-and-materials contracts are considered firm fixed-price contracts as they specify a fixed hourly rate for each labor hour charged.

The following table summarizes 2008 revenue recognized by contract type and customer:

<i>(\$ in millions)</i>	U.S. Government	Other Customers	Total	Percent of Total
Flexibly priced	\$ 22,534	\$ 184	\$ 22,718	67%
Firm fixed-price	8,358	2,811	11,169	33%
Total	\$ 30,892	\$ 2,995	\$ 33,887	100%

Contract Fees Negotiated contract fee structures, for both flexibly priced and fixed-price contracts include, but are not limited to: fixed-fee amounts, cost sharing arrangements to reward or penalize for either under or over cost target performance, positive award fees, and negative penalty arrangements. Profit margins may vary materially depending on the negotiated contract fee arrangements, percentage-of-completion of the contract, the achievement of performance objectives, and the stage of performance at which the right to receive fees, particularly under incentive and award fee contracts, is finally determined.

Positive Award Fees Certain contracts contain provisions consisting of award fees based on performance criteria such as: cost, schedule, quality, and technical performance. Award fees are determined and earned based on an evaluation by the customer of the company's performance against such negotiated criteria. Fees that can be reasonably assured and reasonably estimated are recorded over the performance period of the contract. Award fee contracts are widely used throughout the company's operating segments. Examples of significant long-term contracts with substantial negotiated award fee amounts are the KEI, F-35 SDD, Global Hawk Engineering and Manufacturing Development (EMD), LPD, DDG-1000 programs and the majority of satellite contracts.

Compliance and Monitoring On a regular basis, the company monitors its policies and procedures with respect to its contracts to ensure consistent application under similar terms and conditions as well as compliance

Revenue

	3,822
	2,112
	3,086
	1,792
	2,379
	(60
)	13,131
	(4.8
)	0.4
Direct costs	
	(925
)	(450
)	(709
)	(396
)	
Table of Contents	67

	(545
)	
	58
	(2,967
)	
Customer costs	
	(750
)	
	(447
)	
	(773
)	
	(456
)	
	(471
)	
	2
	(2,895
)	

Operating expenses

	(897
)	
	(495
)	
	(935
)	
	(466
)	
	(629
)	
	(3,422
)	

Adjusted EBITDA

1,250

720

Table of Contents

69

669

474

734

3,847

(2.5

)

1.1

Adjusted EBITDA margin

	32.7
%	
	34.1
%	
	21.7
%	
	26.5
%	
	30.9
%	
	29.3
%	

30 September 2014

Mobile in-bundle revenue

1,728

994

1,264

884

1,234

6,104

Mobile out-of-bundle revenue

481

552

640

264

673

2,610

Mobile incoming revenue

129

148

Table of Contents

74

	178
	57
	198
	710
Fixed line revenue	
	1,490
	322
	647
	288
	174
Table of Contents	75

Other service revenue

169

97

148

77

101

(37

)

555

Service revenue

Table of Contents

76

	3,997
	2,113
	2,877
	1,570
	2,380
	(37
)	12,900
Other revenue	293
	219
	129
	104
Table of Contents	77

149

(3

)

891

Revenue

4,290

2,332

3,006

1,674

2,529

(40

)

13,791

Direct costs

	(999
)	
	(505
)	
	(719
)	
	(378
)	
	(541
)	
	38
	(3,104
)	

Customer costs

	(914
)	
	(448
)	

Table of Contents

	(785
)	
	(539
)	
	(489
)	
	2
	(3,173
)	
Operating expenses	
	(995
)	
	(593
)	
	(864
)	
	(450
)	
	(667
)	
Table of Contents	80

(3,569

)

Adjusted EBITDA

1,382

786

638

307

832

3,945

Adjusted EBITDA margin

	32.2
%	
	33.7
%	
	21.2
%	
	18.3
%	

32.9

%

28.6

%

Change at constant exchange rates

%

%

%

%

%

Mobile in-bundle revenue

(0.8

)

5.4

Table of Contents

84

6.7

(0.6

)

4.8

Mobile out-of-bundle revenue

(11.3

)

(20.9

)

(12.5

)

(13.6

)

(13.7

)

Mobile incoming revenue

(6.8

)

(1.9

)

(9.7

)

3.3

2.8

Fixed line revenue

	0.1
	4.0
	12.4
	97.0
	59.1
Other service revenue	
	8.9
	9.8
	(1.7
)	
	1.4
Table of Contents	87

Service revenue

	(1.5
)	
	(2.0
)	
	2.2
	15.4
	3.9

Other revenue

12.8

31.6

12.1

78.7

22.5

Revenue

(0.5

)

1.2

Table of Contents

89

2.7

19.4

5.0

Direct costs

(3.5

)

0.6

1.3

(16.3

)

(13.0

)

Customer costs

8.4

(11.4

)

1.5

5.5

(7.3

)

Operating expenses

)	(0.6
)	6.6
)	(8.2
)	(15.6
)	(5.1
Adjusted EBITDA	1.0
	2.3
	4.9
	72.1
Table of Contents	92

)

Adjusted EBITDA margin movement (pps)

0.5

0.4

0.5

8.1

(2.1)

)

FINANCIAL RESULTS

Revenue decreased by 4.8%. M&A activity, including Ono and HOL, contributed a 3.3 percentage point positive impact, while foreign exchange movements contributed an 8.5 percentage point negative impact. On an organic basis, service revenue declined 1.3%*, driven primarily by price competition.

Adjusted EBITDA decreased by 2.5%, including a 5.7 percentage point positive impact from M&A activity and a 9.3 percentage point negative impact from foreign exchange movements. On an organic basis adjusted EBITDA increased 1.1%*, as good cost control offset the continued fall in service revenue.

	Organic* change %	M& A and other activity pps	Foreign exchange pps	Reported change %
Europe revenue	0.4	3.3	(8.5)	(4.8)
Service revenue				
Germany	(1.5)		(10.3)	(11.8)
Italy	(2.0)		(10.3)	(12.3)
UK	(0.1)	2.3		2.2
Spain	(3.8)	19.2	(11.8)	3.6
Other Europe	1.0	2.9	(10.7)	(6.8)
Europe service revenue	(1.3)	3.4	(8.3)	(6.2)
Adjusted EBITDA				
Germany	1.0		(10.6)	(9.6)
Italy	2.3		(10.7)	(8.4)
UK	(5.0)	9.9		4.9
Spain	16.3	55.8	(17.7)	54.4
Other Europe	(3.4)	1.8	(10.2)	(11.8)
Europe adjusted EBITDA	1.1	5.7	(9.3)	(2.5)

Notes:

* All amounts in this document marked with an * represent organic growth which presents performance on a comparable basis, both in terms of merger and acquisition activity and movements in foreign exchange rates. See page 41 for Use of non-GAAP financial information .

1 The Group has amended its reporting to reflect changes in the internal management of its Enterprise business. The primary change has been that on 1 April 2015, the Group redefined its segments to report international voice transit revenue and costs within common functions rather than within the results disclosed for each country and region. The results presented for the six months ended 30 September 2014 have been restated onto a comparable basis. There is no impact on total Group revenue or cost.

Germany

Service revenue declined 1.5%* (Q1: -1.2%*; Q2: -1.8%*). Underlying year-on-year trends in each quarter were similar, excluding the impact of one-off items on reported results.

Mobile service revenue fell 2.4%*. Consumer contract revenue stabilised in Q2, supported by consistent growth in contract net adds and an increased focus on Vodafone branded channels, although the impact of price reductions in prior years continued to put pressure on ARPU. The enterprise market became increasingly competitive in H1, leading to a deteriorating revenue trend despite good contract wins as a strong churn performance could not offset falling ARPU. We have made further strong progress on network investment, with 81% 4G coverage and dropped call rates falling 28% year-on-year. In October, the ComputerBILD test ranked Vodafone the best voice network in Germany.

Fixed service revenue growth was 0.1%*, with continued strong growth in cable offsetting a decline in DSL-related revenue. Cable net adds growth continued to be strong throughout H1, supplemented by ongoing migrations from the DSL base. Broadband ARPU was down year-on-year in a promotional market, but stable through the course of H1. The integration of KDG continued as planned, including the rebranding of the business as Vodafone in September. In November, we launched Vodafone RedOne, our fully integrated fixed, mobile and TV service combining high speed mobile and cable.

Adjusted EBITDA grew 1.0%*, with the adjusted EBITDA margin improving by 0.5* percentage points. This reflects the achievement of KDG synergies, and savings in commercial costs and other operating expenses offsetting the increased network opex from Project Spring.

FINANCIAL RESULTS

Italy

Service revenue declined 2.0%* (Q1: -2.0%*; Q2: -2.0%*). The mobile business is on a steady recovery path, while fixed line performance continues to be positive despite increased competition in recent months.

Mobile service revenue fell 3.1%*, as a recovery in ARPU supported by strong data demand only partially offset the year-on-year decline in the customer base. Churn in the market has reduced in recent quarters and the customer base is stable quarter-on-quarter. Enterprise continued to perform well in a stable market, although roaming revenue fell in Q2 after a very strong comparable period last year. We now have 91% population coverage with our 4G network, and have recently launched a network service promise to underline our confidence in network performance.

Fixed service revenue was up 4.0%*, driven by sustained commercial momentum. We added a further 67,000 broadband customers in H1, and a third of our gross adds are now taking a fibre service. Of our base of 1.9 million broadband customers, 148,000 are fibre customers. We have now built out our own fibre network to nearly 12,000 cabinets, more than doubling our footprint in the last six months.

Adjusted EBITDA was up 2.3%*, as we successfully offset the decline in service revenue with savings in commercial costs and operating expenses. The adjusted EBITDA margin expanded by 0.4* percentage points.

UK

Service revenue declined 0.1%* (Q1: 0.2%*; Q2: -0.5%*), with improving trends in fixed line and enterprise offset by a slowdown in consumer mobile after a period of strong growth. The organic growth rate excludes one-off settlements with other network operators in Q2.

Mobile service revenue grew 0.1%*. We continued to achieve good contract customer growth, reflecting the increased number of Vodafone-branded stores. Revenue trends in Q2 were impacted by the pricing and usage of 08XX numbers following the introduction of Non Geographic Call Services regulation, and a focus on giving customers more control of their out-of-bundle data spend. As a result, in-bundle revenue and demand for data add-ons continued to grow. Enterprise mobile service revenue was broadly stable in H1 despite increased competition. National 4G coverage reached 82% (based on the OFCOM definition), and 99% in London. A recent independent test by P3 ranked our network number one in London for combined voice and data. We achieved significant growth in 4G customers, with 5.3 million at the period end (September 2014: 1.1 million).

Fixed service revenue declined 0.9%*. Excluding carrier services, fixed revenue was stable in Q2, including an improving performance in Enterprise. After regional trials during the summer, we launched our consumer broadband service to 22 million premises across the UK (95% of BT's fibre footprint) in October, with our new TV service to follow in Q4.

Adjusted EBITDA declined 5.0%*, with a 1.1* percentage point decline in the adjusted EBITDA margin. The decline in margin was mainly the result of the phasing of central costs allocated to the UK business, which were heavily weighted to H2 last year but are more evenly spread this year. Reported adjusted EBITDA benefited from one-off settlements with other network operators.

Spain

Service revenue declined 3.8%* (Q1: -5.5%*; Q2: -2.0%*), with mobile revenue recovering steadily despite the negative effect of handset financing, and continued positive momentum in fixed.

Mobile service revenue fell 8.1%*. The contract customer base continued to grow in a more stable market, despite increased promotional activity around the start of the new football season, and aggressive cross-selling of mobile to TV customers by a competitor. Although unit prices continue to fall, we have been increasing data bundle sizes at slightly higher monthly fees. Our new commercial strategy on data, offering customers the opportunity to buy additional bundles for up to 10 per month, has been very successful. Our 4G population coverage reached 80% at September 2015 and we have 4.3 million 4G customers.

Fixed service revenue rose 7.4%*, supported by consistent growth in broadband net additions. The integration of Ono is proceeding strongly, with the MVNO migrated to the Vodafone network seven months ahead of schedule and the very successful launch in May of Vodafone One, our fully integrated cable, mobile and TV service. At September 2015 we already have nearly 800,000 customers on Vodafone One. Including our joint fibre network build with Orange, we now reach 8 million premises with fibre.

Adjusted EBITDA increased 16.3%* year-on-year, as strong cost control, the benefit to margin from handset financing and the cost synergies from the Ono acquisition more than offset rising TV costs. The organic improvement in the adjusted EBITDA margin was 3.7* percentage points year-on-year.

FINANCIAL RESULTS

Other Europe

Service revenue rose 1.0%* (Q1: 0.6%*; Q2: 1.5%*), with the Netherlands, Ireland, Greece, Romania, the Czech Republic and Hungary all growing in H1, and trends in Portugal clearly improving.

In the Netherlands, service revenue was up 1.1%*, with consumer fixed line and enterprise as the main drivers of growth. After reaching 100% 4G coverage last year we are now expanding 4G+ presence and have reached 130 municipalities. We had 73,000 consumer fixed line customers at September 2015.

In Portugal, despite ongoing pressure in convergence pricing, fixed revenue continues to grow strongly and mobile is recovering, driven by migration from prepay to contract and recovery in enterprise. Our fibre to the home network now reaches 2.1 million homes. Ireland returned to service revenue growth in Q2, with strong momentum in fixed line and an improving trend in mobile. The 4G roll-out is complete with 95% population coverage. In Greece we saw a slight slowdown in Q2 as a result of the macroeconomic environment, which increased pressure on consumer contract ARPU in particular. The HOL integration is on track, with the business rebranded in October.

Adjusted EBITDA declined 3.4%*, with a 1.8* percentage point decline in adjusted EBITDA margin, mainly driven by lower margins in Portugal, Ireland and Romania.

FINANCIAL RESULTS

Africa, Middle East and Asia Pacific¹

	India £m	Vodacom £m	Other AMAP £m	Eliminations £m	AMAP £m	% change Reported	Organic
30 September 2015							
Mobile in-bundle revenue	509	562	843		1,914		
Mobile out-of-bundle revenue	1,286	873	619		2,778		
Incoming revenue	238	87	240		565		
Fixed line revenue	97	67	251	(7)	408		
Other service revenue	83	81	60		224		
Service revenue	2,213	1,670	2,013	(7)	5,889	1.8	6.4
Other revenue	8	401	313		722		
Revenue	2,221	2,071	2,326	(7)	6,611	3.0	8.2
Direct costs	(661)	(281)	(751)	7	(1,686)		
Customer costs	(100)	(580)	(389)		(1,069)		
Operating expenses	(800)	(441)	(589)		(1,830)		
Adjusted EBITDA	660	769	597		2,026	4.2	8.8
Adjusted EBITDA margin	29.7%	37.1%	25.7%		30.6%		
30 September 2014							
Mobile in-bundle revenue	377	528	792		1,697		
Mobile out-of-bundle revenue	1,249	958	669		2,876		
Incoming revenue	293	102	246		641		
Fixed line revenue	77	1	253		331		
Other service revenue	47	131	61		239		
Service revenue	2,043	1,720	2,021		5,784		
Other revenue	10	382	243		635		
Revenue	2,053	2,102	2,264		6,419		
Direct costs	(643)	(304)	(751)		(1,698)		
Customer costs	(88)	(598)	(333)		(1,019)		
Operating expenses	(715)	(465)	(577)		(1,757)		
Adjusted EBITDA	607	735	603		1,945		
Adjusted EBITDA margin	29.6%	35.0%	26.6%		30.3%		
Change at constant exchange rates							
Mobile in-bundle revenue	32.3	15.3	18.4				
Mobile out-of-bundle revenue	0.9	(2.1)	(2.2)				
Incoming revenue	(20.6)	(8.2)	6.2				
Fixed line revenue	25.1		11.9				
Other service revenue	78.7	(36.6)	8.3				
Service revenue	6.3	4.2	8.8				
Other revenue	(21.9)	12.4	47.7				
Revenue	6.1	5.7	12.8				
Direct costs	(1.0)	1.5	(9.7)				
Customer costs	(11.1)	(4.3)	(35.3)				
Operating expenses	(9.6)	(0.6)	(11.7)				
Adjusted EBITDA	6.7	13.2	5.9				
	0.1	2.4	(1.6)				

**Adjusted EBITDA margin movement
(pps)**

15

FINANCIAL RESULTS

Revenue increased by 3.0%, with strong organic growth offset by a 5.1 percentage point adverse impact from foreign exchange movements, particularly with regards to the South African rand, Egyptian pound and Turkish lira. On an organic basis service revenue was up 6.4%* driven by growth in the customer base, increased voice and data usage, and continued good commercial execution. Overall growth was offset by MTR cuts and other regulatory charges, mainly in India.

Adjusted EBITDA increased by 4.2%, including a 4.6 percentage point adverse impact from foreign exchange movements. On an organic basis, adjusted EBITDA grew 8.8%* driven by growth in all major markets.

	Organic* change %	M&A and other activity pps	Foreign exchange pps	Reported change %
AMAP revenue	8.2	(0.1)	(5.1)	3.0
Service revenue				
India	6.3		2.0	8.3
Vodacom	4.2		(7.1)	(2.9)
Other AMAP	8.8		(9.2)	(0.4)
AMAP service revenue	6.4		(4.6)	1.8
Adjusted EBITDA				
India	6.7		2.0	8.7
Vodacom	13.2		(8.6)	4.6
Other AMAP	5.9		(6.9)	(1.0)
AMAP adjusted EBITDA	8.8		(4.6)	4.2

Notes:

* All amounts in this document marked with an * represent organic growth which presents performance on a comparable basis, both in terms of merger and acquisition activity and movements in foreign exchange rates. See page 41 for Use of non-GAAP financial information .

1 The Group has amended its reporting to reflect changes in the internal management of its Enterprise business. The primary change has been that on 1 April 2015, the Group redefined its segments to report international voice transit revenue and costs within common functions rather than within the results disclosed for each country and region. The results presented for the six months ended 30 September 2014 have been restated onto a comparable basis. There is no impact on total Group revenue or cost.

India

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Service revenue increased 6.3%* (Q1: 6.9%*; Q2: 5.6%*) as customer base growth and strong demand for 3G data was partially offset by a number of regulatory changes, including MTR cuts, roaming price caps and an increase in service tax. Excluding these impacts, service revenue growth in H1 was 11.2%*.

We added 4.4 million customers in the period, taking the total to 188.2 million. Growth in total minutes of use accelerated in H1 but this was offset by a decline in revenue per minute as a result of ongoing competition on voice business.

Data growth continues to be very strong, with data usage over the network up 74% year-on-year in H1, and the active data customer base increasing 16% to 66.5 million. The 3G customer base grew to 23.8 million, up 75% year-on-year, and smartphone penetration in our four biggest urban areas is now 49%. Data pricing has recently become more competitive after price rises earlier in the year. In Q2, browsing revenue represented 18.9% of local service revenue, up from 13.5% in the equivalent quarter last year.

Since the launch of Project Spring we have added over 22,000 new 3G sites, taking the total to nearly 40,000 and our population coverage to 94% of target urban areas. We plan to launch 4G in five key circles in the coming months.

Our M-Pesa business continues to expand, with 665,000 active customers at September 2015, and 97,000 agents. In August, the Reserve Bank of India granted us in principle approval to set up a payments bank.

Adjusted EBITDA grew 6.7%*, with a 0.1* percentage point improvement in adjusted EBITDA margin as the benefits of service revenue growth offset the ongoing increase in operating costs related to Project Spring, higher acquisition costs and the translation effects of non-rupee operating costs.

We have recently begun preparations for a potential IPO of Vodafone India, subject to market conditions.

FINANCIAL RESULTS

Vodacom

Vodacom Group service revenue increased 4.2%* (Q1: 4.5%*; Q2: 3.9%*), supported by strong momentum in both South Africa and the International operations.

In South Africa, organic service revenue grew 2.9%* (Q1: 2.8%*; Q2: 3.0%*), with the consumer and enterprise businesses both performing well. We continued to focus on building brand and network differentiation, with our performance driven by strong demand for data, the success of voice and data bundles, and very low contract churn. Data revenue growth accelerated to 33.3%* in H1 and is now 35% of local service revenue compared to 27% a year ago. The 3G customer base grew 25.2% year-on-year, supported by the increasing affordability of smartphones: we sold 1.3 million Vodafone branded devices in H1, representing 24% of total volume. We accelerated our network build in H1, taking coverage to 47% on 4G and 98% on 3G.

Service revenue growth in Vodacom's operations outside South Africa was 9.5%*, driven by customer base growth, data take-up and M-Pesa. Active data customers reached 10.5 million, up 14.2% year-on-year, and M-Pesa customers totalled 6.8 million, all benefiting from sustained network investment.

Vodacom Group adjusted EBITDA increased 13.2%*, with a 2.4* percentage point improvement in adjusted EBITDA margin. This strong performance was driven by operating leverage and a significant cost reduction programme put in place in H2 last year.

Other AMAP

Service revenue increased 8.8%* (Q1: 6.8%*; Q2: 10.8%*), with strong growth in Turkey, Egypt and Ghana partially offset by a decline in Qatar.

Service revenue in Turkey was up 17.6%*, reflecting continued strong growth in consumer contract and enterprise revenue, driven by growth in both the customer base and ARPU. Fixed line momentum was also good, with 183,000 fixed broadband customers at the end of the period. In Egypt, service revenue was up 8.4%* driven by continued strong growth in data and voice usage. New Zealand sustained its improving trend of recent quarters, returning to service revenue growth in Q2 supported by good year-on-year growth in the mobile contract customer base and improving fixed line ARPU.

Adjusted EBITDA grew 5.9%*, driven by the strong revenue performance.

Associates

Safaricom, Vodafone's 40% associate which is the number one mobile operator in Kenya, achieved local currency service revenue growth of 12.3% driven by data and M-Pesa. 14 out of 16 targeted regions now have 4G coverage.

Vodafone Hutchison Australia (VHA), in which Vodafone owns a 50% stake, is performing well, with service revenue growth supported by ongoing growth in the contract customer base and a slight increase in ARPU. Strong adjusted EBITDA growth was driven by the improving top line and reduced commercial costs.

Indus Towers, the Indian towers company in which Vodafone has a 42% interest, achieved local currency revenue growth of 5.6%. Indus owns 117,579 towers, with a tenancy ratio of 2.22.

FINANCIAL RESULTS

Statement of financial position

Assets

Goodwill and other intangible assets

Goodwill and other intangible assets increased by £2.9 billion to £46.4 billion at 30 September 2015. The increase primarily arose as a result of £5.2 billion of additions, including £4.5 billion for spectrum purchased in India, Germany and Spain, partly offset by £2.1 billion of amortisation and £0.2 billion as a result of unfavourable movements in foreign exchange rates.

Property, plant and equipment

Property, plant and equipment increased by £0.1 billion to £26.7 billion at 30 September 2015, principally as a result of £3.0 billion of additions, largely offset by £2.5 billion of depreciation charges and £0.4 billion of adverse foreign exchange movements.

Other non-current assets

Other non-current assets decreased by £0.9 billion to £31.7 billion at 30 September 2015 mainly due to decrease in deferred tax assets primarily due to the reduction of tax losses in Luxembourg (see note 4 for further details).

Current assets

Current assets decreased by £4.2 billion to £15.7 billion at 30 September 2015 mainly due to a decrease in cash and cash equivalents of £2.6 billion, and £2.2 billion lower short-term investments.

Total equity and liabilities

Total equity

Total equity decreased by £3.2 billion to £64.5 billion mainly due to the total comprehensive expense for the period of £1.1 billion and dividends paid to equity shareholders and non-controlling interests of £2.2 billion.

Non-current liabilities

Non-current liabilities increased by £1.6 billion to £27.5 billion at 30 September 2015 primarily due to a £1.3 billion increase in long-term borrowings and a £0.6 billion increase in trade and other payables.

Current liabilities

Current liabilities decreased by £0.5 billion to £28.4 billion at 30 September 2015 mainly due to a £1.1 billion decrease in trade and other payables being offset by £0.5 billion of additional short-term borrowings.

Inflation

Inflation has not had a significant effect on the Group's consolidated results of operations and financial condition during the six months ended 30 September 2015.

LIQUIDITY AND CAPITAL RESOURCES**Cash flows and funding**

	Six months ended 30 September	
	2015 £m	2014 £m
Adjusted EBITDA	5,786	5,884
Working capital	(1,203)	(1,072)
Other	56	45
Cash generated by operations (excluding restructuring and other costs)¹	4,639	4,857
Cash capital expenditure ²	(4,287)	(3,907)
Capital expenditure	(3,708)	(3,901)
Working capital movement in respect of capital expenditure	(579)	(6)
Disposal of property, plant and equipment	32	62
Operating free cash flow¹	384	1,012
Taxation	(430)	(418)
Dividends received from associates and investments		127
Dividends paid to non-controlling shareholders in subsidiaries	(131)	(140)
Interest received and paid	(364)	(580)
Free cash flow¹	(541)	1
Licence and spectrum payments	(2,104)	(127)
Acquisitions and disposals ³	(62)	(6,679)
Equity dividends paid	(2,020)	(1,979)
Foreign exchange	297	843
Other ⁴	(2,222)	(191)
Net debt increase	(6,652)	(8,132)
Opening net debt	(22,271)	(13,700)
Closing net debt	(28,923)	(21,832)

Notes:

1 Cash generated by operations for the six months ended 30 September 2015 excludes £70 million (2014: £167 million) of restructuring costs, £nil (2014: £365 million) UK pensions contribution payment, £nil (2014: £116 million) of KDG incentive scheme payments that vested upon acquisition and £41 million (2014: £nil) of other amounts received. See also note 4 below.

2 Cash capital expenditure comprises cash payments in relation to the purchase of property, plant and equipment and intangible assets, other than licence and spectrum payments, during the period.

3 Acquisitions and disposals for the six months ended 30 September 2014 primarily includes a £2,945 million payment in relation to the acquisition of the entire share capital of Ono plus £2,858 million of associated net debt acquired, a £563 million payment in relation to the acquisition of the remaining 10.97% equity interest in Vodafone India and £131 million payment in relation to acquisition of the entire share capital of Cobra plus £40 million of associated debt acquired.

4 Other cash flows for the six months ended 30 September 2015 include £2,034 million (2014:£nil) of debt recognised in respect of spectrum in India, £70 million (2014: £167 million) of restructuring costs, £nil (2014: £365 million) UK pensions contribution payment, £nil (2014: £359 million) of Verizon Wireless tax dividends received after the completion of the disposal, £nil (2014: £328 million) of interest paid on the settlement of the Piramal option, £nil (2014: £116 million) of KDG incentive scheme payments that vested upon acquisition and a £50 million (2014: £100 million) payment in respect of the Group's historic UK tax settlement.

Cash generated by operations excluding restructuring and other costs decreased 4.5% to £4.6 billion, primarily driven by lower adjusted EBITDA and working capital movements.

Capital expenditure decreased £0.2 billion to £3.7 billion reflecting continued investment in the Group's networks as a result of Project Spring.

Free cash outflow was £0.5 billion, a decline in £0.5 billion from the prior year, reflecting the phasing of payments for the Group's Project Spring investment.

Licence and spectrum payments include amounts relating to the purchase of spectrum in Germany of £1.4 billion and £0.6 billion in India. In addition, net debt at 30 September 2015 includes liabilities of £3.9 billion (31 March 2015: £1.8 billion) relating to acquisitions or renewals of spectrum in India and Germany.

A foreign exchange gain of £0.3 billion was recognised on net debt as losses on the euro were more than offset by favourable exchange rate movements on the South African rand and India rupee.

LIQUIDITY AND CAPITAL RESOURCES**Analysis of net debt:**

	30 September 2015 £m	31 March 2015 £m
Cash and cash equivalents	4,240	6,882
Short-term borrowings		
Bonds	(1,709)	(1,786)
Commercial paper ¹	(4,975)	(5,077)
Put options over non-controlling interests	(1,360)	(1,307)
Bank loans	(2,345)	(1,876)
Other short-term borrowings ²	(2,766)	(2,577)
	(13,155)	(12,623)
Long-term borrowings		
Put options over non-controlling interests	(6)	(7)
Bonds, loans and other long-term borrowings	(23,715)	(22,428)
	(23,721)	(22,435)
Other financial instruments ³	3,713	5,905
Net debt	(28,923)	(22,271)

Notes:

1 At 30 September 2015 US\$532 million (31 March 2015: US\$3,321 million) was drawn under the US commercial paper programme and 6,257 million (31 March 2015: 3,928 million) was drawn under the euro commercial paper programme.

2 At 30 September 2015 the amount includes £2,733 million (31 March 2015: £2,542 million) in relation to cash received under collateral support agreements.

3 Comprises mark-to-market adjustments on derivative financial instruments which are included as a component of trade and other receivables (30 September 2015: £4,655 million; 31 March 2015: £4,005 million) and trade and other payables (30 September 2015: £1,634 million; 31 March 2015: £984 million) and short-term investments primarily in index linked government bonds and a managed investment fund included as a component of other investments (30 September 2015: £692 million; 31 March 2015: £2,884 million).

The following table sets out the Group's undrawn committed bank facilities:

Maturity	30 September 2015 £m
----------	----------------------------

US\$3.9 billion committed revolving credit facility ^{1, 2}	February 2020	2,600
3.9 billion committed revolving credit facility ¹	March 2020	2,852
Other committed credit facilities	Various	1,337
Undrawn committed facilities		6,789

Notes:

1 Both facilities support US and euro commercial paper programmes of up to US\$15 billion and £8.0 billion, respectively.

2 US\$155 million of this facility matures March 2016.

Dividends

The directors have announced an interim dividend per share of 3.68 pence, representing a 2.2% increase over the prior financial year's interim dividend. The ex-dividend date for the interim dividend is 19 November 2015 for ordinary shareholders, the record date is 20 November 2015 and the dividend is payable on 3 February 2016. Dividend payments on ordinary shares will be paid directly into a nominated bank or building society account.

REGULATION

Introduction

Our operating companies are generally subject to regulation governing the operation of their business activities. Such regulation typically takes the form of industry specific law and regulation covering telecommunications services and general competition (antitrust) law applicable to all activities.

The following section describes the regulatory frameworks and the key regulatory developments at the global and supranational level and in selected countries in which we have significant interests during the six months ended 30 September 2015 and should be read in conjunction with the information contained under Regulation on pages 195 to 201 of the Group's annual report on Form 20-F for the year ended 31 March 2015. Many of the regulatory developments reported in the following section involve ongoing proceedings or consideration of potential proceedings that have not reached a conclusion. Accordingly, we are unable to attach a specific level of financial risk to our performance from such matters.

European Union (EU)

The regulation proposed by the European Commission in September 2013, that has become known as the Telecoms Single Market Package, has been adopted by the European Parliament and the European Council and is expected to enter into force on 13 November 2015. The regulation requires the abolition of retail roaming surcharges by June 2017 and introduces net neutrality rules.

In May 2015, the European Commission published the Digital Single Market strategy, aimed at producing a true digital single market. The strategy has three pillars: (i) better access for consumers and businesses to online e-goods and services across Europe; (ii) creating the right conditions for digital networks and services to flourish; and (iii) maximising the growth potential of the European digital economy. The Commission is currently conducting various consultations which in many cases will lead to the revision of existing legislation or the adoption of new legislation.

These consultations include a consultation dealing with the revision of the EU telecoms regulatory framework that covers five areas: access regulation, spectrum, rules for communications services, universal service and the institutional set-up and governance. There is a clear focus on incentivising (fibre) investment (including access for mobile backhaul), the further harmonisation of spectrum regulation and the creation of a fair and level playing field for competing services. The consultation on broadband needs aims to develop a view on how to support investors to deploy future-proof connectivity networks and ensure that all users are able to participate in a digital economy and society.

Other consultations address the adoption of a Priority ICT standards plan, platforms, data, cloud and the sharing economy and how and whether to regulate platforms as well as consultations on geo-blocking and on modernising VAT for cross-border e-commerce.

Europe region

Germany

In June 2015, Vodafone Germany acquired 110 MHz out of the 270 MHz made available in the spectrum auction conducted by BNetzA, Germany's national telecommunications regulator. This consisted of 2x10MHz of 700MHz band, 2x10MHz of 900MHz band, 1x20MHz of 1500MHz band and 2x25MHz of 1800MHz band for a total consideration of 2,091 million. Total auction bids amounted to 5,081 million. Other successful bidders were Deutsche Telekom and Telefónica. Spectrum rights are valid until the end of 2033.

In April 2015, BNetzA finally approved new Mobile Termination Rates (MTRs) with retrospective effect. From 1 December 2014 to 30 November 2015 the MTR is set at 1.72 eurocents per minute which then reduces to 1.66 eurocents per minute from 1 December 2015 until 30 November 2016.

Further to the opening of the vectoring register in July 2014, and Deutsche Telekom's subsequent request to BNetzA in February 2015 for permission to deploy VDSL vectoring equipment in its near range street cabinets and for BNetzA to prevent other operators from deploying their own VDSL equipment at the exchange, BNetzA is expected to make a decision on the matters in November 2015.

In October 2015, the European Commission released a statement on BNetzA's draft remedy decision for market 3b (wholesale central access provided at a fixed location for mass-market products). The statement required that BNetzA provide additional support for its proposed price regulation and the possible substitution of Layer-2-Ethernet bitstream for unbundled local loop. BNetzA's response is expected by the end of November 2015.

REGULATION

Italy

In May 2014, the Regional Administrative Tribunal confirmed the anti-trust decision finding that Telecom Italia had abused its dominant position in the fixed broadband market. Telecom Italia subsequently paid a 104 million fine and filed an appeal before the Council of State. The Council of State has since upheld the Regional Administrative Tribunal's decision.

In September 2015, Vodafone obtained 1 of the 2 L band TDD blocks equal to 20 MHz at just under 232 million.

In September 2015, AGCOM, the national telecommunications regulator, published the final decision on setting the fully symmetric MTRs for both Mobile and Mobile Virtual Network Operators until 2017 by confirming the 0.98 eurocent/min already in force with regard to the calls originated in UE/EEA, leaving the MTRs related to the calls originated outside UE/EEA to the commercial agreements.

In September 2015, AGCOM notified the European Commission of its draft decision for the wholesale access market. The draft decision proposes applying the same remedies and prices to the entire national market, foresees cost orientation for all wholesale copper and fibre access services and price reductions from 2015 to 2017: VULA FTTC (-36%) and copper bit-stream (-18%). In publishing its findings, the European Commission did not raise any specific concerns, opening the way for AGCOM to adopt the final decision.

United Kingdom

In September 2015, the national regulator Ofcom published its final decision revising the annual licence fees payable on licences for the use of spectrum in the 900MHz and 1800MHz bands to reflect full market value following the completion of the 4G auction. From 31 October 2016, after the end of a 12-month period beginning on 31 October 2015 during which transitional fees will apply, Vodafone UK will pay annual fees of approximately £50m for the spectrum.

In October 2015, British Telecom's proposed acquisition of mobile network operator Everything Everywhere received provisional approval from the UK's Competition and Markets Authority (CMA). Vodafone UK will submit its detailed comments on the proposed acquisition, including wider market concerns relating to the impact on the fixed wholesale market. The CMA has extended the deadline for the final report to the 18 January 2016. The acquisition of Telefonica's UK business by Hutchison 3G is still subject to review by the CMA.

In September 2015, the proposed Hutchison acquisition of Telefonica UK (O2) was formally notified to the European Commission competition authority with the request from the CMA for it to be referred back to them for investigation. In October 2015 the European Commission opened its own investigation and is due to make a decision by 18 April 2016.

Spain

In June 2015, in response to the National Markets and Competition Commission's (CNMC) conditional approval of Telefonica's acquisition of DTS, Vodafone Spain appealed to the high court and requested the adoption of precautionary measures requiring an increase in the amount of premium content made available to other operators from 50% to 75% and including football within the same pricing mechanism as other premium content. Vodafone Spain has also made a submission to the CNMC requesting the modification of the regulatory ex ante price squeeze test run on Telefonica's retail offers to ensure it is capable of being replicated by other operators. The CNMC started a review of this request in October 2015.

In October 2015, the European Commission approved Orange's proposed acquisition of Jazztel, based on an agreement to sell a certain amount of JazzTel's fibre-optic assets to Masmovil.

Portugal

In August 2015, the National Communications Regulator (Anacom) published its final decision on MTRs, which set a glide path with a maximum of 0.83 eurocents from August 2015 onwards, falling to 0.80 eurocents by July 2016 and 0.73 eurocents by July 2017, subject to corrections for inflation and the consumer price index.

REGULATION

Greece

In June 2015, the national regulatory authority, the National Telecommunications and Post Commission (EETT), approved OTE s Reference Offer for services provided via optical fibre network in two out of three areas identified for the project. INTRAKAT has undertaken construction in the remaining area. The wholesale services included in OTE s Reference Offer are access to passive optical infrastructure, capacity (ethernet) and bitstream. According to the proposed schedule, the network providers are due to provide services from the end of 2016.

In October 2015, responses to the public consultations for the 2.6GHz spectrum due to expire in December 2015 and for 1800MHz spectrum expiring in August 2016 were due to the EETT. The award process for 2.6GHz is expected to be held before December, however as EETT is currently without a president, an extension may be granted. The award process for 1800MHz is expected to be held during the first quarter of 2016. A second consultation will then be launched to define the terms and price of the award process. In the initial consultation, EETT proposed three options for the 1800MHz award process, the first and second option include an auction process and the third includes a renewal for 4 years and 4 months to align all three operators spectrum terms.

Czech Republic

In June 2015, the former fixed and mobile incumbent (O2 Czech Republic a.s.) announced the voluntary separation of their network and service enterprises however the new Reference Access Offer from the newly created wholesale entity has not provided more favourable terms.

Albania

In June 2015, Vodafone Albania secured an additional 2 x 0.6 MHz of 900 MHz spectrum for 0.3 million, the licence expires in June 2030.

Africa, Middle East and Asia Pacific region

India

In May 2015, the Supreme Court dismissed Vodafone India s appeal against the Department of Telecommunications (DoT) refusal to extend its existing spectrum licences in Delhi, Mumbai and Kolkata.

In September 2015, both Spectrum Sharing and Spectrum Trading were approved by the Union Cabinet however the current policy and guidelines provide only limited opportunity for Vodafone India.

In September 2015, the Telecommunications Regulatory authority of India (TRAI) commenced its consultation on compensating consumers for dropped calls. On 16 October 2015, the TRAI announced its decision. The decision requires that consumers are compensated 1 Rupee per dropped call, limited to 3 dropped calls a day, and that operators must notify customers of the applied credit by text or on their next post-paid bill. Vodafone India has expressed concerns regarding the decision and continues to discuss the issue with TRAI.

Vodacom: South Africa

In May 2014, Vodacom entered into a sale and purchase agreement under which it would acquire 100% of the issued share capital of Neotel as well as Neotel s shareholders loan and liabilities. The transaction remains subject to the fulfilment of a number of conditions precedent, foremost of which are regulatory approvals from both the Independent Communications Authority of South Africa s (ICASA) and the Competition Commission of South Africa (CompCom). Decisions regarding these approvals are expected by the end of March 2016.

In September 2015, further to its IMT Radio Frequency Spectrum Assignment Plans (RFSAP) published in March 2015, the ICASA published an Information Memorandum (IM) on the prospective licensing of the 700MHz, 800MHz and 2600MHz High Demand Spectrum bands. The IM is a precursor to an Invitation to Apply (ITA). Vodacom has raised its concerns that the IM does not provide sufficient detail on some of the critical aspects of the auction design and process.

Vodacom: Democratic Republic of Congo

In September 2015, the Regulating Authority for Post and Telecommunications (ARPTC) issued regulations which retained the existing MTR (US\$3.40 cents per minute) rather than reduce MTR with the glide path regulation issued in September 2014.

In September 2015, ARPTC retained the current on-net voice price floor at US\$5.10 cents per minute and off net US\$8.50 cents per minute set in March 2015, and extended the price floor to cover international outgoing calls and promotions.

The Ministry of Communications is consulting on a new communications bill, which includes significant changes to the licence regime. Vodacom is working with industry participants to provide joint comments and engaging with key stakeholders.

REGULATION

Vodacom: Tanzania

In June 2015, Millicom announced that it had agreed to acquire an 85% shareholding in Zantel from Etisalat, subject to regulatory approvals. Should it receive these approvals, Millicom would have majority control of 3 licensees Tigo, Telesis, and Zantel. Millicom has publicly stated its intention to operate Zantel brand separate to the other licensees, while leveraging technical and operational efficiencies. To date, the Tanzanian Communications Regulatory Authority and the Fair Competition Commission have not published decisions on this transaction.

In August 2015, the Minister of Communications gazetted final regulations which set out voluntary requirements for all telecommunications licensees to list a minimum of 20% of their ordinary share capital held by Tanzanian investors on the Dar Stock Exchange, or pay 0.6% of gross annual revenue to an Information and Communications Technology development fund within 12 months of the effective date of the regulation.

Vodacom: Mozambique

In September 2015, a new customer registration regulation was issued, permitting an electronic registration process and requiring all customers to be registered by 28 November 2015.

Vodacom: Lesotho

In September 2015, the Lesotho Communications Authority confirmed in writing to Vodacom Lesotho that its service licence will be renewed when it expires in June 2016. Vodacom Lesotho is working with the Lesotho Communications Authority to convert its current mobile communications licence into a new unified communication licence in accordance with the communications law.

In September 2015, the Lesotho Communications Authority issued a new MTR three year regulatory glide path effective from 15 October 2015, reducing from Maluti 0.38 to Maluti 0.20 by October 2017.

International roaming in Africa

In September 2015, further to Southern African Development Community (SADC) Ministers of Communications requirements that the National Regulatory Authorities (NRAs) implement international roaming wholesale and retail five-year glide paths, the Communications Regulators Association of Southern Africa (CRASA) issued Regulatory Guidance and accompanying Policy.

The CRASA requested that NRAs implement the glide paths from 1 October 2015 and transparency measures in accordance with their applicable national law. The Policy recognised that the glide paths should not take prices below underlying cost and that member countries should take steps to reduce issues which increase costs, notably taxes on international incoming calls. Vodacom is participating in the processes conducted by NRAs in SADC member states.

Turkey

Further to Vodafone's letter of objection and appeal in the administrative court to the announcement by the Communications Technologies Authority (ICTA) in August 2014 that the scope of the 3G coverage must be broadened to include new metropolitan areas, on 12 March 2015 the Council of State adopted a motion for the stay of execution of the ICTA's action. The lawsuit is pending and this issue is being discussed as part of the Concession Agreements Amendment Process determined in 4.5G Tender Specifications.

In May 2015, after the Electronic Trade Law came into force, secondary legislations were finalised by both the Ministry of Customs and Trade (MoCT) and the ICTA. Under the new regulations, operators will only be permitted to use the marketing database for operator related marketing reasons. Mobile operators will no longer be able to sell targeted SMSs for third parties. Third parties are able to send one time SMSs to mobile operators' databases asking their customers to opt-into their database up to and including 15 September 2015.

In August 2015, the 4.5G (IMT Advanced) auction was completed grossing total revenue of EUR 3.36 billion excluding taxes, compared to reserve prices of EUR 2.3 billion. Only three mobile operators bid for the spectrum bands and there were no bids for the 2.6 MHz block reserved for a fourth operator. Vodafone Turkey will pay a total of 778 million for 82.8 MHz (2x10MHz in the 800MHz band, 2x1.4MHz in 900 MHz band, 2x10 MHz in 1800 MHz band, 2x15 MHz FDD in the 2.6GHz band and 1x10MHz TDD in the 2.6GHz band). The operators will be required to launch 4.5G services by April 2016.

Australia

In May 2015, new MTRs were set at AUD 1.7 cents per minute commencing 1 January 2016 to 30 June 2019, down from 3.6 cents per minute in 2015. SMS termination rates will be regulated for the first time at 0.03 cents per SMS.

Egypt

The Administrative Court ruling in favour of Vodafone Egypt in the case filed against Telecom Egypt and the national regulator (NTRA) regarding the NTRA's authority to set MTRs between operators has been partially implemented with Mobinil and Telecom Egypt, however, an arbitration case is pending with Etisalat Misr.

REGULATION

Ghana

On 5 October 2015, the National Communications Authority (NCA) issued requests for application of interest in the forthcoming auction of spectrum in the 800MHz band.

The request follows months of engagement with stakeholders to auction two lots of spectrum blocks in the 800MHz band. The NCA made revisions to the minimum reserve price, blocks to be auctioned and the local minimum ownership eligibility criteria in response to the comments raised by operators during the public consultation exercise in July 2015.

The spectrum blocks to be auctioned comprise two lots of 2x10MHz (technology and service neutral) at a reserve price of USD\$67.5m per lot instead of the previous reserve price of USD\$92m. Entities that apply to participate in the auction are required to have a minimum of 35% private indigenous Ghanaian shareholders or meet that requirement within 13 months of being issued the spectrum.

The auction for the two blocks is expected to take place on 2 November 2015 under a Simple Multiple Round Simultaneous Auction process. The third lot of spectrum in the 800MHz band will be auctioned at a later date when the spectrum is freed from the existing TV operator and Code-Division Multiple Access operator. Ghana has 6 mobile network operators and 4 mobile broadband wireless access operators; however, the dynamics in the market are expected to change since new entrants are not excluded from this auction.

New Zealand

In March 2015, the New Zealand government announced the expansion of the existing Ultra-fast Broadband FTTP initiative from 75% to 80% of premises passed at a projected cost of between NZ\$152m and NZ\$210m. In addition, the government announced a further NZ\$150m of funding to improve broadband coverage in rural areas and address mobile blackspots. Competitive tenders for these initiatives are expected to be completed in 2016.

Safaricom: Kenya

Safaricom continues to operate on a periodically renewed trial licence for the 2x15MHz 800MHz band spectrum granted in February 2015 until the Communications Authority of Kenya (CA) is ready to issue the full Commercial Licence.

The CA has announced its intention to commission a study on competition within the telecommunications sector. The timeline for when the review will commence has not been published.

Qatar

From 1 October 2015 new rates have been set for MTRs, FTRs and wholesale leased lines. MTRs are QAR 0.09 from 1 October 2015, QAR 0.0831 from 1 January 2016 and QAR 0.0762 from 1 January 2017. FTRs are QAR 0.019, QAR 0.0182 and 0.0175 for the same periods.

LEGAL PROCEEDINGS

The following section describes developments in legal proceedings which may have, or have had, during the six months ended 30 September 2015, a significant effect on the financial position or profitability of the Company and its subsidiaries. This section should be read in conjunction with the information contained under Legal proceedings on pages 168 to 170 of the Group's Annual Report on Form 20-F for the year ended 31 March 2015.

Telecom Egypt arbitration

Refer to Commitments and contingent liabilities on page 38.

Indian tax cases

Refer to Commitments and contingent liabilities on page 38.

Indian regulatory cases

Refer to Commitments and contingent liabilities on page 38 and 39.

British Telecom (Italy) v Vodafone Italy

Refer to Commitments and contingent liabilities on page 39.

Papistas Holdings SA, Mobile Trade Stores (formerly Papistas SA) and Athanasios and Loukia Papistas v Vodafone Greece, Vodafone Group Plc and certain Directors and Officers of Vodafone

Refer to Commitments and contingent liabilities on page 39.

GH Investments (GHI) v Vodacom Congo

Refer to Commitments and contingent liabilities on page 39.

CWN v Vodacom

Refer to Commitments and contingent liabilities on page 39.

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated income statement

	Note	Six months ended 30 September 2015 £m	2014 £m
Revenue	2	20,266	20,752
Cost of sales		(14,893)	(15,476)
Gross profit		5,373	5,276
Selling and distribution expenses		(1,725)	(1,707)
Administrative expenses		(2,639)	(2,499)
Share of result of equity accounted associates and joint ventures		(3)	(35)
Other income and expense		(73)	(118)
Operating profit	2	933	917
Non-operating income and expense		(1)	(26)
Investment income		145	305
Financing costs		(845)	(790)
Profit before taxation		232	406
Income tax (expense)/credit	4	(1,816)	5,095
(Loss)/profit for the financial period		(1,584)	5,501
Attributable to:			
Owners of the parent		(1,698)	5,422
Non-controlling interests		114	79
(Loss)/profit for the financial period		(1,584)	5,501
Earnings per share			
Basic	5	(6.40)p	20.48p
Diluted	5	(6.40)p	20.37p

The accompanying notes are an integral part of the unaudited condensed financial statements.

Consolidated statement of comprehensive income

	Six months ended 30 September 2015 £m	2014 £m
(Loss)/profit for the financial period	(1,584)	5,501
Other comprehensive income:		
<i>Items that may be reclassified to profit or loss in subsequent periods</i>		
Gains on revaluation of available-for-sale investments, net of tax	1	5
Foreign exchange translation differences, net of tax	189	(3,016)
Foreign exchange losses/(gains) transferred to the income statement	70	(1)
Fair value loss transferred to the income statement		(4)
Other, net of tax	109	(149)
Total items that may be reclassified to profit or loss in subsequent periods	369	(3,165)

Items that will not be reclassified to profit or loss in subsequent periods

Net actuarial gains/(losses) on defined benefit pension schemes, net of tax	154	(13)
Total items that will not be reclassified to profit or loss in subsequent periods	154	(13)
Other comprehensive income/(expense)	523	(3,178)
Total comprehensive (expense)/income for the financial period	(1,061)	2,323
Attributable to:		
Owners of the parent	(1,056)	2,221
Non-controlling interests	(5)	102
	(1,061)	2,323

The accompanying notes are an integral part of the unaudited condensed financial statements.

CONSOLIDATED FINANCIAL STATEMENTS**Consolidated statement of financial position**

	Note	30 September 2015 £m	31 March 2015 £m
Non-current assets			
Goodwill		22,549	22,537
Other intangible assets		23,854	20,953
Property, plant and equipment		26,656	26,603
Investments in associates and joint ventures	8	(63)	(3)
Other investments		3,558	3,757
Deferred tax assets		22,664	23,845
Post employment benefits		212	169
Trade and other receivables		5,337	4,865
		104,767	102,726
Current assets			
Inventory		574	482
Taxation recoverable		598	575
Trade and other receivables		8,552	8,053
Other investments		1,688	3,855
Cash and cash equivalents		4,240	6,882
		15,652	19,847
Total assets		120,419	122,573
Equity			
Called up share capital		3,792	3,792
Additional paid-in capital		117,111	117,054
Treasury shares		(6,955)	(7,045)
Accumulated losses		(53,295)	(49,471)
Accumulated other comprehensive income		2,457	1,815
Total attributable to owners of the parent		63,110	66,145
Non-controlling interests		1,435	1,595
Put options over non-controlling interests		(6)	(7)
Total non-controlling interests		1,429	1,588
Total equity		64,539	67,733
Non-current liabilities			
Long-term borrowings		23,721	22,435
Deferred tax liabilities		419	595
Post employment benefits		428	567
Provisions		1,125	1,082
Trade and other payables		1,834	1,264
		27,527	25,943
Current liabilities			
Short-term borrowings		13,155	12,623
Taxation liabilities		543	599
Provisions		807	767
Trade and other payables		13,848	14,908
		28,353	28,897

Total equity and liabilities	120,419	122,573
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The accompanying notes are an integral part of the unaudited condensed financial statements.

CONSOLIDATED FINANCIAL STATEMENTS**Consolidated statement of changes in equity**

	Share capital £m	Additional paid-in capital ¹ £m	Treasury shares £m	Accumulated comprehensive income ² £m	Equity attributable to the owners £m	Non-controlling interests £m	Total equity £m
1 April 2014	3,792	116,973	(7,187)	(42,776)	70,802	979	71,781
Issue or reissue of shares		1	124	(97)	28		28
Share-based payments		45			45		45
Transactions with non-controlling interests in subsidiaries				(755)	(755)	616	(139)
Comprehensive income				2,221	2,221	102	2,323
Dividends				(1,975)	(1,975)	(150)	(2,125)
Other		(7)		5	(2)		(2)
30 September 2014	3,792	117,012	(7,063)	(43,377)	70,364	1,547	71,911
1 April 2015	3,792	117,054	(7,045)	(47,656)	66,145	1,588	67,733
Issue or reissue of shares		1	90	(81)	10		10
Share-based payments		56			56		56
Transactions with non-controlling interests in subsidiaries				(30)	(30)	(14)	(44)
Comprehensive expense				(1,056)	(1,056)	(5)	(1,061)
Dividends				(2,020)	(2,020)	(139)	(2,159)
Other				5	5	(1)	4
30 September 2015	3,792	117,111	(6,955)	(50,838)	63,110	1,429	64,539

Notes:

- 1 Includes share premium, capital redemption reserve and merger reserve. The merger reserve was derived from acquisitions made prior to 31 March 2004 and subsequently allocated to additional paid-in capital on adoption of IFRS.
- 2 Includes accumulated losses and accumulated other comprehensive income.

The accompanying notes are an integral part of the unaudited condensed financial statements.

CONSOLIDATED FINANCIAL STATEMENTS**Consolidated statement of cash flows**

	Note	Six months ended 30 September 2015 £m	2014 £m
Net cash flow from operating activities	9	4,130	3,691
Cash flows from investing activities			
Purchase of interests in subsidiaries, net of cash acquired	7	(14)	(2,936)
Purchase of interests in associates and joint ventures		(2)	(4)
Purchase of intangible assets		(2,837)	(937)
Purchase of property, plant and equipment		(3,554)	(3,103)
Purchase of investments		(94)	(92)
Disposal of interests in associates and joint ventures			27
Disposal of property, plant and equipment		32	62
Disposal of investments		2,149	1,031
Dividends received from associates and joint ventures			485
Dividends received from investments			1
Interest received		121	131
Net cash flow from investing activities		(4,199)	(5,335)
Cash flows from financing activities			
Issue of ordinary share capital and reissue of treasury shares		10	28
Net movement in short-term borrowings		(95)	2,354
Proceeds from issue of long-term borrowings		1,818	2,169
Repayment of borrowings		(1,614)	(3,232)
Equity dividends paid	6	(2,020)	(1,979)
Dividends paid to non-controlling shareholders in subsidiaries		(131)	(140)
Other transactions with non-controlling interests in subsidiaries		(45)	(718)
Other movements in loans with associates and joint ventures		(18)	
Interest paid		(485)	(1,039)
Net cash flow used in financing activities		(2,580)	(2,557)
Net cash flow		(2,649)	(4,201)
Cash and cash equivalents at beginning of the financial period	11	6,861	10,112
Exchange gain/(loss) on cash and cash equivalents		3	(118)
Cash and cash equivalents at end of the financial period	11	4,215	5,793

The accompanying notes are an integral part of the unaudited condensed financial statements.

Notes to the unaudited condensed financial statements

For the six months ended 30 September 2015

1 Basis of preparation

The unaudited condensed consolidated financial statements for the six months ended 30 September 2015:

- were prepared in accordance with International Accounting Standard 34 Interim Financial Reporting (IAS 34);
- are presented on a condensed basis as permitted by IAS 34 and therefore do not include all disclosures that would otherwise be required in a full set of financial statements and should be read in conjunction with the Group s annual report for the year ended 31 March 2015;
- apply the same accounting policies, presentation and methods of calculation as those followed in the preparation of the Group s consolidated financial statements for the year ended 31 March 2015, which were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board and were also prepared in accordance with IFRS adopted by the European Union (EU), the Companies Act 2006 and Article 4 of the EU IAS Regulations. Income taxes are accrued using the tax rate that is expected to be applicable for the full financial year, adjusted for certain discrete items which occurred in the interim period in accordance with IAS 34.
- include all adjustments, consisting of normal recurring adjustments, necessary for a fair statement of the results for the periods presented;
- do not constitute statutory accounts within the meaning of section 434(3) of the Companies Act 2006; and
- were approved by the Board of directors on 10 November 2015.

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The information relating to the year ended 31 March 2015 is an extract from the Group's published annual report for that year, which has been delivered to the Registrar of Companies, and on which the auditors' report was unqualified and did not contain any emphasis of matter or statements under section 498(2) or 498(3) of the UK Companies Act 2006.

After reviewing the Group's budget for the remainder of the financial year, and longer term plans, the directors are satisfied that, at the time of approving the unaudited condensed consolidated financial statements, it is appropriate to continue to adopt a going concern basis of accounting.

The preparation of the condensed consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the end of the reporting period, and the reported amounts of revenue and expenses during the reporting period. Actual results could vary from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

On 1 April 2015, the Group adopted certain new accounting policies where necessary to comply with amendments to IFRS, none of which had a material impact on the consolidated results, financial position or cash flows of the Group; further details are provided in the Group's annual report for the year ended 31 March 2015.

Notes to the unaudited condensed financial statements

For the six months ended 30 September 2015

2 Segmental analysis

The Group has a single group of related services and products being the supply of communications services and products. Revenue is attributed to a country or region based on the location of the Group company reporting the revenue.

	Segment revenue £m	Intra-region revenue £m	Regional revenue £m	Inter-region revenue £m	Group revenue £m	Adjusted EBITDA £m
Six months ended 30 September 20151						
Germany	3,822	(12)	3,810	(3)	3,807	1,250
Italy	2,112	(9)	2,103	(1)	2,102	720
UK	3,086	(7)	3,079		3,079	669
Spain	1,792	(11)	1,781		1,781	474
Other Europe	2,379	(21)	2,358	(1)	2,357	734
Europe	13,191	(60)	13,131	(5)	13,126	3,847
India	2,221	(7)	2,214	(6)	2,208	660
Vodacom	2,071		2,071		2,071	769
Other AMAP	2,326		2,326	(9)	2,317	597
AMAP	6,618	(7)	6,611	(15)	6,596	2,026
Other2	570	(1)	569	(25)	544	(87)
Group	20,379	(68)	20,311	(45)	20,266	5,786
Six months ended 30 September 20141						
Germany	4,290	(6)	4,284	(8)	4,276	1,382
Italy	2,332	(8)	2,324	(1)	2,323	786
UK	3,006	(5)	3,001	(1)	3,000	638
Spain	1,674	(10)	1,664	(3)	1,661	307
Other Europe	2,529	(11)	2,518	(1)	2,517	832
Europe	13,831	(40)	13,791	(14)	13,777	3,945
India	2,053		2,053	(1)	2,052	607
Vodacom	2,102		2,102		2,102	735
Other AMAP	2,264		2,264	(5)	2,259	603
AMAP	6,419		6,419	(6)	6,413	1,945
Other2	562		562		562	(6)
Group	20,812	(40)	20,772	(20)	20,752	5,884

Notes:

1. The Group has amended its reporting to reflect changes in the internal management of its Enterprise business. The primary change has been that on 1 April 2015, the Group redefined its segments to report international voice transit revenue and costs within common functions rather than within the results disclosed for each country and region. The results presented for the six months ended 30 September 2014 have been restated onto a comparable basis. There is no impact on total Group revenue or cost.

2. The Other segment primarily represents the results of partner markets and the net result of unallocated central Group costs.

The Group's measure of segment profit, adjusted EBITDA, excludes depreciation, amortisation, loss on disposal of fixed assets, impairment loss, restructuring costs, the Group's share of results in associates and joint ventures and other income and expense. A reconciliation of adjusted EBITDA to operating profit is shown below. For a reconciliation of operating profit to (loss)/profit for the financial period, see the consolidated income statement on page 27.

	Six months ended 30 September	
	2015	2014
	£m	£m
Adjusted EBITDA	5,786	5,884
Depreciation, amortisation and loss on disposal of fixed assets	(4,663)	(4,728)
Restructuring costs	(114)	(84)
Share of results in associates and joint ventures	(3)	(37)
Other income and expense	(73)	(118)
Operating profit	933	917

Notes to the unaudited condensed financial statements

For the six months ended 30 September 2015

3 Impairment review

Impairment testing was performed as at 30 September 2015 and 30 September 2014. No impairment charge was recognised for the six months ended 30 September 2015 or for the six months ended 30 September 2014. The methodology adopted for impairment testing for the six months ended 30 September 2015 was consistent with that disclosed on page 111 and pages 118 to 122 of the Group's annual report for the year ended 31 March 2015.

The table below shows the key assumptions used in the value in use calculations at 30 September 2015.

	Assumptions used in value in use calculation					
	Germany %		Italy %		Spain %	
Pre-tax risk adjusted discount rate	8.3		10.6		9.9	
Long-term growth rate	0.5		1.0		1.5	
Budgeted adjusted EBITDA ¹	3.2		0.8		10.7	
Budgeted capital expenditure ²	11.6	20.9	12.5	24.3	11.5	24.0

The estimated recoverable amounts of the Group's operations in Germany, Italy and Spain exceed their carrying values by £2.2 billion, £1.8 billion and £0.6 billion respectively.

The changes in the following table to assumptions used in the impairment review would, in isolation, lead to an impairment loss being recognised for the six months ended 30 September 2015:

	Change required for carrying value to equal the recoverable amount		
	Germany pps	Italy pps	Spain pps
Pre-tax risk adjusted discount rate	0.7	2.2	0.5
Long-term growth rate	(0.8)	(2.4)	(0.5)
Budgeted adjusted EBITDA ¹	(1.3)	(2.7)	(0.9)
Budgeted capital expenditure ³	6.7	9.7	3.5

Notes:

1. Budgeted adjusted EBITDA is expressed as the compound annual growth rates in the initial five years of the plans used for impairment testing.

2. Budgeted capital expenditure, which excludes licences and spectrum, is expressed as the range of capital expenditure as a percentage of revenue in the initial five years for all cash generating units of the plans used for impairment testing.
3. Budgeted capital expenditure, which excludes licences and spectrum, is expressed as a percentage of revenue in the initial five years of the plans used for impairment testing.

The recoverable amount of the Group's operation in Romania is also not materially greater than its reported carrying value at 30 September 2015.

Notes to the unaudited condensed financial statements

For the six months ended 30 September 2015

4 Taxation

	Six months ended 30 September	
	2015	2014
	£m	£m
United Kingdom corporation tax expense:1		
Current year		
Adjustments in respect of prior years	6	
Overseas current tax expense		
Current year	369	359
Adjustments in respect of prior years	15	(11)
Total current tax expense	390	348
Deferred tax on origination and reversal of temporary differences:		
United Kingdom deferred tax	15	(3)
Overseas deferred tax	1,411	(5,440)
Total deferred tax expense/(income)	1,426	(5,443)
Total income tax expense/(income)	1,816	(5,095)

Note:

1. UK operating profits are more than offset by statutory allowances for capital investment in the UK network and systems plus ongoing interest costs including those arising from the £6.8 billion of spectrum payments to the UK government in 2000 and 2013.

Overseas deferred tax charge for the six months ended 30 September 2015 includes reduction in the deferred tax assets in Luxembourg of £1,476 million resulting from the reversal of previous write downs of investments following the completion and approval of Luxembourg statutory accounts. The six months ended 30 September 2014 includes the recognition of tax losses in Luxembourg following the acquisition of Grupo Corporativo Ono, S.A. (£3,341 million) and losses arising from the write down of investments following the completion and approval of Luxembourg statutory accounts (£2,127 million).

The Group expects to use its losses in Luxembourg over a period of between 50 and 65 years and the losses in Germany over a period of between 10 and 15 years; the actual use of these losses, and the period over which they may be used, is dependent on many factors which may change. These factors include the level of profitability in both Luxembourg and Germany, changes in tax law and changes to the structure of the Group. Further details about the Group's tax losses can be found in note 6 of the Group's consolidated financial statements for the year ended 31 March 2015.

5 Earnings per share

	Six months ended 30 September 2015 Million	2014 Million
Weighted average number of shares for basic earnings per share	26,529	26,470
Effect of dilutive potential shares: restricted shares and share options		145
Weighted average number of shares for diluted earnings per share	26,529	26,615

	Six months ended 30 September 2015 £m	2014 £m
Earnings for basic and diluted earnings per share	(1,698)	5,422

	Pence	Pence
Basic earnings per share	(6.40)p	20.48p
Diluted earnings per share	(6.40)p	20.37p

6 Equity dividends

	Six months ended 30 September 2015 £m	2014 £m
<i>Declared during the financial period:</i>		
Final dividend for the year ended 31 March 2015: 7.62 pence per share (2014: 7.47 pence)	2,020	1,975
<i>Proposed after the end of the reporting period and not recognised as a liability:</i>		
Interim dividend for the year ending 31 March 2016: 3.68 pence per share (2015: 3.60 pence)	977	955

Notes to the unaudited condensed financial statements

For the six months ended 30 September 2015

7 Acquisitions

The aggregate cash consideration in respect of purchases in subsidiaries, net of cash acquired, is as follows:

	Six months ended 30 September	
	2015	2014
	£m	£m
Cash consideration paid:		
Grupo Corporativo Ono, S.A.		2,945
Other acquisitions	15	136
	15	3,081
Net cash acquired	(1)	(145)
	14	2,936

During the six month period ended 30 September 2015 the Group completed a number of acquisitions for an aggregate net cash consideration of £14 million. The aggregate fair values of goodwill, identifiable assets, and liabilities of the acquired operations were £3 million, £12 million and £1 million, respectively. In addition, the Group completed the acquisition of certain non-controlling interests for net cash consideration of £45 million.

During the six months period ended 30 September 2014 the Group acquired the entire share capital of Ono for cash consideration of £2,945 million. The aggregate fair values of goodwill, identifiable assets, and liabilities of the acquired operations were £1,439 million, £4,989 million and £3,478 million, respectively. In addition, the Group also completed a number of other acquisitions for an aggregate net cash consideration of £136 million, all of which was paid during the period. The aggregate fair values of goodwill, identifiable assets, and liabilities of these acquired operations were £133 million, £143 million and £140 million, respectively. In addition, the Group completed the acquisition of certain non-controlling interests for net cash consideration of £718 million.

8 Investment in associates and joint arrangements

	30 September	31 March
	2015	2015
	£m	£m
Investment in joint ventures	(336)	(331)
Investment in associates	273	328
	(63)	(3)

9 Reconciliation of net cash flow from operating activities

		Six months ended 30 September	
	Note	2015 £m	2014 £m
(Loss)/profit for the financial period		(1,584)	5,501
Non-operating income and expense		1	26
Investment income		(145)	(305)
Financing costs		845	790
Income tax expense/(credit)	4	1,816	(5,095)
Operating profit		933	917
Adjustments for:			
Share based payments		56	45
Depreciation and amortisation		4,649	4,720
Loss on disposal of property, plant and equipment		14	8
Share of result of equity accounted associates and joint ventures		3	35
Other income and expense		73	118
Increase in inventory		(112)	(111)
Increase in trade and other receivables		(731)	(403)
Decrease in trade and other payables		(275)	(1,120)
Cash generated by operations		4,610	4,209
Net tax paid		(480)	(518)
Net cash flow from operating activities		4,130	3,691

Notes to the unaudited condensed financial statements

For the six months ended 30 September 2015

10 Related party transactions

The Group has a number of related parties including joint arrangements and associates, pension schemes, directors and Executive Committee members. Related party transactions with the Group's joint arrangements and associates primarily comprise fees for the use of products and services including network airtime and access charges, and cash pooling arrangements. No related party transactions have been entered into during the period which might reasonably affect any decisions made by the users of these unaudited condensed consolidated financial statements except as disclosed below.

	Six months ended 30 September	
	2015	2014
	£m	£m
Sales of goods and services to associates	2	3
Purchase of goods and services from associates	45	45
Sales of goods and services to joint arrangements	2	3
Purchase of goods and services from joint arrangements	290	273
Net interest income receivable from joint arrangements	37	1

	30 September	31 March
	2015	2015
	£m	£m
Trade balances owed:		
by associates	2	3
to associates	2	4
by joint arrangements	150	182
to joint arrangements	46	48
Other balances owed by joint arrangements	75	61
Other balances owed to joint arrangements	67	54

In the six months ended 30 September 2015 the Group made contributions to defined benefit pension schemes of £19 million (six months ended 30 September 2014: £384 million, including special contributions of £325 million to the Vodafone Group Pension Scheme and £40 million to the Cable & Wireless Worldwide Retirement Plan relating to past service representing accelerated funding amounts that would have been due for each scheme over the period to 31 March 2020).

In addition, £1.7 million of dividends were paid to Board members and executive committee members (six months ended 30 September 2014: £1.5 million). Dividends received from associates are disclosed in the consolidated statement of cash flows.

Notes to the unaudited condensed financial statements

For the six months ended 30 September 2015

11 Fair value of financial instruments

The table below sets out the valuation basis¹ of financial instruments held at fair value by the Group at 30 September 2015.

	Level 12		Level 23		Total	
	30 September 2015 £m	31 March 2015 £m	30 September 2015 £m	31 March 2015 £m	30 September 2015 £m	31 March 2015 £m

Financial assets:

Fair value through the income statement