### RISK MANAGEMENT PHILOSOPHY AND APPROACH

Risk management is a fundamental part of the Group's business strategy and effective corporate governance. The Group adopts a risk philosophy aimed at maximising business opportunities and minimising adverse outcomes, thereby enhancing shareholder value by effectively balancing risk and reward.

#### **RISK MANAGEMENT**

The identification and management of risk reduce the uncertainty associated with the execution of our business strategies and allow the Group to maximise opportunities that may arise. Risk takes on many forms and can have material adverse impacts on the Group's ability to achieve our stated objectives, by potentially impacting our reputation, operation, human resources and financial performance.

The Board is overall responsible for determining the Group's risk profile, overseeing the Group's risk management framework, reviewing the Group's key risks and mitigation strategies, and ensuring the effectiveness of risk management policies and procedures. The Finance, Investment and Risk Committee (FIRC) (1) and the Audit Committee (AC) review the management of these risks and effectiveness of mitigation strategies and controls.

The Management has the primary responsibility of identifying, managing and reporting the key risks faced by the Group to the Board. The Management is also responsible for ensuring that the risk management framework is effectively implemented within all areas of the respective business units. In addition, specialised areas such as Regulatory, Legal, Environment, Insurance, Treasury and Credit support the Group in the management of these risks.

#### Note:

(1) The Risk Committee was established, and the Finance, Investment and Risk Committee (FIRC) was renamed the Finance and Investment Committee (FIC), in May 2012. The Group's philosophy and approach towards effective risk management are underpinned by three key principles:

#### Culture

We seek to build a strong risk management and control culture by setting the appropriate tone at the top, promoting awareness, ownership and proactive management of key risks, and promoting accountability. In short, we seek to promote a risk-conscious workforce across the Group.

#### Structure

We seek to put in place an appropriate organisational structure that promotes good corporate governance, provides for proper segregation of duties, defines clearly risk-taking responsibility and authority, and promotes ownership and accountability for risk taking.

### Process

We seek to implement robust processes and systems for effective identification, quantification, monitoring, mitigation and management of risk. We seek to improve our risk management as well as internal control policies and procedures on an ongoing basis to ensure that they remain sound and relevant by benchmarking against global best practices.

Based on the above principles, the Group undertakes a continuous process of risk identification, monitoring, management and reporting of risks throughout the organisation, to provide assurance to the Board and relevant stakeholders. The effectiveness of risk management policies and processes is reviewed on a regular basis and, where necessary, improved. Independent reviews are conducted by third party consultants on a regular basis to ensure the appropriateness of the Group's risk management framework. They also report key risks to the Board as well as provide periodic support and input when undertaking specific risk assessments. Furthermore, the risk management processes facilitate alignment of the Group's strategy and annual operating plan with the management of key risks.

Risk assessment and mitigation strategy is an integral part of the Group's annual business planning and budgeting process. The key risk management activities include scenario planning, business continuity/disaster recovery management and crisis planning and management. Close monitoring and control processes, including the establishment of appropriate key risk indicators and key performance indicators, are put in place to ensure that risk profiles are managed within policy limits. The Group has in place a formal programme of risk and control self-assessment whereby line personnel are involved in the ongoing assessment and improvement of risk management and controls. Additionally, independent specialist consultants are engaged from time to time to review the Group's risk management framework and processes.

SingTel Internal Audit carries out reviews and internal control advisory activities aligned to the key risks in the Group's business. This provides independent assurance to the AC on the adequacy and effectiveness of the risk management, financial reporting processes, and internal control and compliance systems. In order to provide assurance to the Board, the CEOs of the business groups submit a report on the key risks and mitigation strategies for their respective businesses to the FIRC on a semi-annual basis. Annually, the Group CEO and Group CFO provide a written certification to the Board confirming the integrity of financial reporting, and the efficiency and effectiveness of the risk management, internal control and compliance systems.

In the course of their statutory audit, SingTel's external auditors carry out a review of the Group's material internal controls to the extent of the scope as laid out in their audit plans. Any material non-compliance and internal control weaknesses, together with the external auditors' recommendations to address them, are reported to the AC. SingTel's Management, with the assistance of SingTel Internal Audit, follows up on the external auditors'

recommendations as part of their role in reviewing the Group's system of internal controls.

The systems that are in place are intended to provide reasonable but not absolute assurance against material misstatements or loss, as well as to ensure the safeguarding of assets, the maintenance of proper accounting records, the reliability of financial information, compliance with applicable legislation, regulations and best practices, and the identification and management of business risk.

#### **RISK FACTORS**

The Group's financial performance and operations within and outside Singapore are influenced by a vast range of risk factors. Many of these risk factors affect not just our businesses but also other businesses in and outside of the telecommunications industry. These risks vary widely and many are beyond the Group's control. There may also be risks that are either presently unknown or not currently assessed as significant, which may later prove to be material. However, we aim to mitigate the exposures through appropriate risk management strategies and internal controls.

The section below sets out the principal risk types.

#### **FCONOMIC RISKS**

Changes in domestic, regional and global economic conditions may have a material adverse effect on the demand for telecommunications, IT and related services, and hence, on the Group's financial performance and operations.

The global credit and equity markets have experienced substantial dislocations, liquidity disruptions and market corrections. These and other related events have had a significant impact on economic growth as a whole, and consequently, consumer and business demand for telecommunications, IT and related services.

Our planning and management review processes involve the periodic monitoring of budgets and expenditures to minimise the risk of over-investment. The Group has continuing cost management programmes to drive improvements in our cost structure.

#### POLITICAL RISKS

Some of the countries in which the Group operates have experienced or continue to experience political instability. The continuation or re-emergence of such political instability in the future could have a material adverse effect on economic or social conditions in those countries, as well as the ownership, control and condition of the Group's assets in those areas.

## RISK MANAGEMENT PHILOSOPHY AND APPROACH

The Group is geographically diversified with earnings from Singapore, Australia and the emerging markets. We work closely with the management and our partners in the countries where the Group operates to leverage the local expertise, knowledge and ability. In this way, we ensure compliance with the laws and are able to implement risk mitigation measures.

#### REGULATORY RISKS AND LITIGATION RISKS

#### Regulatory Risks

The Group's global operations are subject to extensive government regulations, which may impact or limit our flexibility to respond to market conditions, competition, new technologies or changes in cost structures. Governments may alter their policies relating to the telecommunications, IT and related industries as well as the regulatory environment (including taxation) in which we operate. Such changes could have a material adverse effect on the Group's financial performance and operations.

In Singapore, the Infocomm Development Authority of Singapore (IDA) has, in its implementation of the Next Generation Nationwide Broadband Network (Next Gen NBN), designed a structure aimed at levelling the playing field, allowing the benefits of the Next Gen NBN to be available to all industry players. This has significantly altered the existing cost model of the industry and increased the level of competition in the market with new entrants. Another regulatory change is the revision of the Media Market Conduct Code by the Media Development Authority of Singapore (MDA) to include a Public Interest Obligation. This enables mandatory cross carriage of exclusive content in the pay TV market and promotes fair market conduct and effective competition by laying the ground rules for fair competition in the media market. Furthermore. revisions to the Telecommunications Act were passed in November 2011 with key changes including increasing the maximum penalty that can be imposed, amendments to facilitate transfer of certain rights from one Public Telecommunications Licensee (PTL) to another; amendments to the consolidation provisions; empowering the Minister to directly take over telecom network and businesses to ensure that key telecom network or services continue to function and to impose structural or operational separation on vertically integrated operators where necessary.

In Australia, the government is currently undertaking a significant reform of the fixed-line telecommunications sector, including the rollout of a national broadband network to be operated on a wholesale-only open access basis. It is possible the Australian

government's regulatory reforms, including legislation and the deployed national broadband network and commercial transactions relating to the national broadband network, could ultimately lead to a sub-optimal or negative outcome for Optus.

Our overseas investments are subject to the risk of imposition of laws and regulations restricting the level, percentage and manner of foreign ownership and investment, as well as the risk of nationalisation, any of which could materially and adversely affect our overseas investments.

Our businesses depend on statutory licences issued by governmental authorities. Failure to meet regulatory requirements could result in fines or other sanctions including, ultimately, the revocation of licences. The Group has access to appropriate regulatory expertise and staffing resources in Singapore and Australia. We regularly participate in discussions and consultations with the respective regulatory authorities and the industry to propose changes and provide feedback on regulatory reforms and developments in the telecommunications and media industry.

#### Access to Spectrum

The Group may need to access additional spectrum to support both organic growth and the development of new services. Access to spectrum is of critical importance to us in order to support our business of providing mobile voice and broadband services. The use of spectrum in most countries the Group operates in is regulated by governmental authorities and requires licences. Failure to acquire access to spectrum or new or additional spectrum on reasonable terms or at all could have a material adverse effect on the Group's business, financial performance and growth plans.

#### **Litigation Risks**

We are exposed to the risk of regulatory or litigation action by regulators or private parties. Such regulatory matters or litigation actions may have a material effect on our financial condition and results of operations. Examples of such actions which the Group is exposed to are disclosed in notes to the financial statements under 'Contingent Liabilities'.

The Group has put in place standard master supply agreements with vendors and implemented contract policies to manage contractual arrangements with customers. The policies provide the necessary empowerment framework for management executives, the CEOs, the Management Committee and the Board Committees to approve any deviations from the standard policies.

#### **COMPETITIVE RISKS**

The Group faces competitive risks in all the markets we operate.

#### Singapore Business

The telecommunications market in Singapore is highly competitive. As new players enter the market and regulation requires SingTel Singapore to allow our competitors to have access to our networks, our market share in some segments and prices for certain products and services have declined. These trends may continue and intensify for SingTel Singapore.

#### Australia Business

In the Australia mobile market in addition to the incumbent operator, a number of participants are subsidiaries of international groups and operators and have made large investments which are now sunk costs. The Group is therefore exposed to the risk of irrational pricing being introduced by such competitors. The fixed-line services market continues to be dominated by the incumbent provider which can leverage its scale and market position to restrict the development of competition. With the deployment of the Australian National Broadband Network, competition is expected to increase as new entrants enter the market.

#### **International Businesses**

The operations of our international businesses are also subject to highly competitive market conditions. Business customers enjoy a wide range of choices for many of the services the Group provides, particularly international voice and data communications. The quality and prices of these services can influence a potential business customer's decision. Prices for some of these services have declined significantly in recent years as a result of capacity additions and price competition. Such price declines are expected to continue.

The growth of our associates depends in part on increases in the mobile penetration rate in the markets where they operate. Some of these overseas markets, including Indonesia and India, have experienced and will continue to experience an increase in the number of competitors, leading to intense price competition and potential loss of market share for our associates. As these markets mature, the pace of subscriber growth may slow and new customers may not be as profitable as existing customers.

Our business models and profits are also challenged by disintermediation in the telecommunications industry by handset providers and non-traditional telecommunications service providers who provide multimedia content, applications and services directly on demand.

The Group continues to invest in innovation, technologies, new products and services, transformational initiatives in processes, new business models and customer experience to meet evolving customer needs and strengthen customer loyalty.

#### REGIONAL EXPANSION RISKS

Given the size of the Singapore and Australia markets, the future growth of the Group depends, to a large extent, on our ability to grow our overseas operations. This comes with considerable risks.

#### Partnership Relations

The success of our strategic investments depends, to a large extent, on our relationships with, and the strength of our investment partners. There is no assurance that the Group will be able to maintain these relationships or that our investment partners will remain committed to their partnerships with the Group.

#### **Acquisition Risks**

In acquisitions, the Group faces challenges arising from integrating newly acquired businesses with our own operations, managing these businesses in markets where we have limited experience, and financing these acquisitions. The Group risks not being able to generate synergies from these acquisitions and the acquisitions become a drain on the Group's management and capital resources.

We continually look for investment opportunities that can contribute to our regional expansion strategy and for the development of new revenue streams. Our efforts are challenged by the limited availability of opportunities, competition for the available opportunities from other potential investors, foreign ownership restrictions, government and regulatory policies, political considerations and the specific preferences of sellers.

In addition, the business strategy of some of our regional mobile associates involves the expansion of operations outside their home countries. These associates may enter into joint ventures and other arrangements with other parties. Such joint ventures and other arrangements involve risks, including but not limited to the possibility that the joint venture or investment partner may have economic or business interests or goals that are not consistent with those of the associates. There is no assurance that the regional mobile associates can fully generate synergies and successfully achieve their aims of regional competitiveness and building a competitive regional footprint.

The SingTel Group adopts a disciplined approach in our investment evaluation and decision process. Members of our management team are also represented as Board directors of our associates.

# RISK MANAGEMENT PHILOSOPHY AND APPROACH

In addition to sharing of network and commercial experience, best practices in the areas of corporate governance and financial reporting are shared across the Group.

#### PROJECT RISKS

The SingTel Group incurs substantial capital expenditure in constructing and maintaining our networks and systems infrastructure. These projects are subject to risks associated with the construction, supply, installation and operation of equipment and systems.

#### **Project Management**

The projects we undertake as sub-contractors to roll out infrastructure are subject to the risks of increased project costs, disputes and unexpected implementation delays, any of which can result in an inability to meet projected completion dates.

The Group is also a major IT services provider to government and large enterprises in the region. We face potential project execution risks when projects are not accurately scoped or the quality of service performance is not up to customers' specifications, resulting in over-commitments to customers and inadequate resource allocation and scheduling. These can lead to cost overruns, project delays and losses.

The Group has a project risk management framework in place, with processes for regular risk assessment, performance monitoring and reporting of key projects.

#### **Satellite Business**

The launch and operation of any satellite is subject to the risk of launch delays, cost overruns and the occurrence of other unforeseeable events, such as satellite launch failures, satellite failure to enter into designated orbital locations, in-orbit failure or any other events beyond the control of the Group. We maintain and regularly review our business continuity programme, including restoration plans, for implementation in the event of a catastrophic loss of all or part of a satellite.

#### **NEW BUSINESS RISKS**

From a traditional carriage business in Singapore and Australia, the Group is now venturing to invest in new growth areas to create new revenue streams, including mobile applications and services, pay TV, managed services, cloud services, content and ICT. There is no assurance that the Group will be successful in these ventures which may require new expertise, substantial process or systems changes, as well as organisational cultural

and mindset changes. These businesses may also expose the Group to new areas of risks associated with the media and online industries, such as content rights, customer data privacy and protection.

The Group's organisational structure, talent management and development programme seeks to respond to changing needs and new business strategies. The Group continues to update our policies, invest in processes and technologies to support the requirements of new businesses.

#### BREACH OF PRIVACY RISKS

The Group seeks to protect the privacy of voice and information on networks and systems infrastructure. Significant failure of encryption and security measures may result in customer confidence being undermined and materially impact our businesses. The Group may also be subject to the imposition of additional regulatory measures relating to the security and privacy of customer data.

The SingTel Group has in place security mechanisms such as firewalls and encryption algorithms, designed to minimise the risk of privacy breaches. We also implement and test antivirus or intrusion prevention systems, based on established security standards.

#### INFRASTRUCTURE AND TECHNOLOGY RISKS

Rapid and significant technological changes are typical in the telecommunications industry and these changes may materially affect the SingTel Group's capital expenditure and operating costs as well as the demand for our products and services.

We have invested substantial capital and other resources in the development and modernisation of our networks and systems. Technological changes continue to reduce costs and expand the capacities of new infrastructure able to deliver competing products and services. Moreover, our associates operate predominantly in emerging markets where the regulatory practices including spectrum availability may not synchronise with the technology progression path and the market demand for new technologies.

Such rapid advancements in technology may leave the Group stranded with investments that are technologically obsolete before the end of their expected useful life. These changes may require us to replace and upgrade our network infrastructure to remain competitive and as a result, incur additional capital expenditure.

The SingTel Group faces a continuing risk of market entry by new operators and service providers (including non-telecommunications players) that, by using newer or lower cost technologies, may succeed in rapidly attracting customers away from established market participants.

We may have to incur substantial development expenditure to gain access to related or enabling technologies, so that we may pursue new growth opportunities in the ICT industry. The challenge is to modify our network infrastructure in a timely and cost-effective manner to facilitate such implementation, failing which this could adversely affect our quality of service, financial condition and results of operations.

The Group continues to invest in upgrading, modernising and equipping our systems with new capabilities to ensure that we continue to deliver innovative and relevant services to our customers.

#### VENDOR RISKS

The Group relies on third party vendors in many aspects of our business. We rely on third party vendors for various purposes, including but not limited to the construction of the Group's network, the supply of handsets and equipment, systems and applications development and services, content provision and customer acquisition. Accordingly, our operations may be affected by third party vendors failing to perform their obligations. In addition, the industry is dominated by a few key vendors for such services and equipment and any failure or refusal by a key vendor to provide such services or equipment, or any consolidation of the industry, may significantly affect our business and operations.

The Group monitors closely our relationships with strategic vendors and develops new relationships to mitigate supply risks.

#### FINANCIAL RISKS

The main risks arising from the Group's financial assets and liabilities are foreign exchange, interest rate, market, liquidity, access to financing sources and increased credit risks. Financial markets continue to be volatile and this may heighten execution risk for funding activities and credit risk premiums for market participants.

The Group is exposed to foreign exchange fluctuations from our operations and through subsidiaries and associated and joint venture companies operating in foreign countries. These relate to the translation of the foreign currency earnings and carrying

values of the overseas operation. Additionally, a significant portion of associated and joint venture companies purchases and liabilities are denominated in foreign currencies, versus the local currency of the respective operations, thereby giving rise to changes in cost structures and fair value gains or losses when marked to market.

The Group has established policies, guidelines and control procedures to manage and report exposure to such risks. The Group's financial risk management is discussed in detail on page 174 in Note 38 to the Financial Statements.

#### **ELECTROMAGNETIC ENERGY RISKS**

Health concerns have been raised regarding the potential exposure to electromagnetic energy associated with the operation of mobile communications devices. While there is no substantiated evidence of public health risks from exposure to the levels of electromagnetic energy typically emitted from mobile communications devices, perceived health risks can result in reduced demand for mobile communications services or worse, litigation against the Group. In addition, government environment controls may be introduced to address this perceived risk, restricting our ability to deploy our mobile communications networks.

The Group's policy is to comply with regulatory and international safety standards.

#### NETWORK FAILURE AND CATASTROPHIC RISKS

The provision of the Group's services depends on the quality, stability, resilience and robustness of our integrated networks. We face the risk of the malfunction of, loss of, or damage to network infrastructure from natural or man-made causes. Some of the countries in which the Group operates have experienced a number of major natural catastrophes over the years, including typhoons, droughts and earthquakes. Such losses or damage may significantly disrupt our operations which may materially adversely affect our ability to deliver services to customers.

The Group has insurance policies as well as a defined crisis management and escalation process involving the CEOs and senior management to respond to emergencies and/or catastrophic events. However, our inability to operate our networks or customer support systems may have a material impact on our business.