

## CORPORATE GOVERNANCE

### Ensuring sustainability and value creation through transparency, accountability and integrity.

#### Corporate Governance Statement

StarHub is committed to continually uphold high standards of corporate governance. We recognise that a robust and sound governance framework is vital in providing a solid foundation for sustainable long-term success of our business and value creation for our stakeholders. Our corporate governance practices and policies are built on principles of transparency, accountability and integrity. These constitute an integral part of the way we choose to do business, deliver our corporate strategy and engage with our stakeholders, thereby strengthening the trust and confidence they place in StarHub.

#### Corporate Governance Report 2018

StarHub is listed on the Mainboard of the Singapore Exchange Securities Trading Limited (SGX-ST) and we have complied in all material respects with the principles and guidelines of the Code of Corporate Governance (Code) issued by the Monetary Authority of Singapore (MAS) on 2 May 2012 for the year ended 31 December 2018 (FY2018). We have also made improvements in certain areas and complied ahead of time with certain aspects of the revised Code of Corporate Governance issued by the MAS on 6 August 2018, which will apply to annual reports covering financial years commencing from 1 January 2019. The disclosures in this report set out our corporate governance framework, practices and policies for FY2018 with reference to the Code.

### 1. BOARD MATTERS

#### A. THE BOARD'S CONDUCT OF AFFAIRS

##### The Board's Role

The Board oversees the business performance and affairs of the Group. The Board leads, directs and works closely with Management to ensure the alignment of interests of the Board and Management with that of shareholders.

The Board's key roles and responsibilities are as follows:

- Provide entrepreneurial leadership and guidance to Management and steer the Group through its strategy and corporate plan;
- Ensure that the necessary financial and human resources are in place for the Group to meet its objectives;
- Establish a framework of prudent and effective controls supported by clear and robust procedures and delegated authorities, which enables risks to be assessed and managed in order to safeguard shareholders' interests and StarHub's assets;
- Regularly review the performance of Senior Management and the remuneration framework of the Board and Senior Management;
- Review and approve key operational and business initiatives, major funding and investment proposals, acquisitions and divestments;

- Recognise that the perceptions of key stakeholder groups affect StarHub's reputation, identify the key stakeholder groups (which include customers, suppliers and business partners) and guide Management in StarHub's strategy and approach in addressing the concerns of these key stakeholder groups;
- Set StarHub's values and standards (including ethical standards), to ensure that our obligations to shareholders and stakeholders are well-understood and duly met;
- Provide guidance on the social, ethical and environmental impact of the Group's activities and monitor compliance with StarHub's sustainability policies and practices; and
- Ensure the Group's compliance with all relevant laws and regulations, ethical standards and the implementation of related policies.

The Board and individual Directors act in good faith and make decisions objectively in the best interests of StarHub and all our shareholders.

The Board has established a framework on authorisation and approval limits for capital and operating expenditure, as well as specified transactions including acquisitions and disposals of investments, procurement of goods and services, bank facilities and cheque signatories. Within this framework, the Board has set relevant authority and approval sub-limits for delegation to various Management levels to optimise operational efficiency when undertaking the day-to-day running of the business.

The Chairman and the Directors support the CEO in stakeholder engagements, including with shareholders, business partners and regulators.

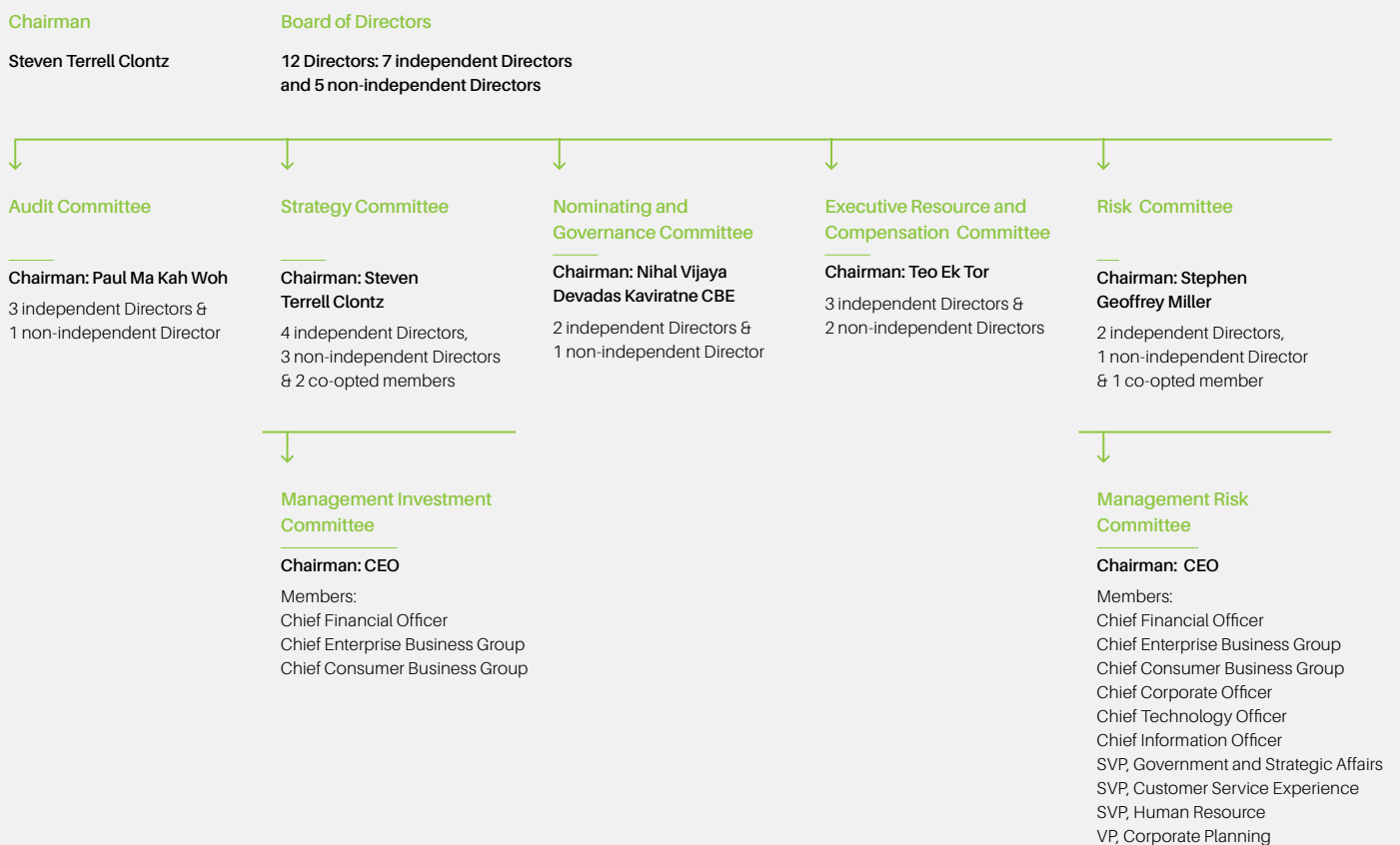
In furtherance of their duties, the Directors are given access to independent professional advice at StarHub's expense if necessary. At least once a year, non-

executive Directors (NED) meet to discuss, *inter alia*, Management's performance without the presence of Management.

**Board Committees**

The Board has constituted the following principal Board committees (Board Committees) to assist the Board in the discharge of its functions:

- the Audit Committee (AC);
- the Strategy Committee (SC);
- the Nominating and Governance Committee (NGC);
- the Executive Resource and Compensation Committee (ERCC); and
- the Risk Committee (RC).



Note: Composition reflected is as at 14 February 2019.

## CORPORATE GOVERNANCE

(Cont'd)

The composition of the Board Committees and their specific responsibilities and authority are set out in the relevant sections of this report. Each committee is required to operate and make decisions on matters within its Terms of Reference, which are available on the StarHub Investor Relations (IR) website.

Additional Board Committees may be formed to undertake specific duties if necessitated by business requirements. An ad-hoc Board Executive Committee (Board ExCo), chaired by Mr Steven Terrell Clontz, was established on 5 December 2017 to provide close support to Senior Management during the CEO transition period. It was dissolved on 7 August 2018 after Mr Peter Kaliaropoulos was appointed as CEO on 9 July 2018.

The Board Committee Chairmen provide updates to the Board at Board meetings, on key matters raised and/or decisions made at the last-held meeting of each Board Committee. For matters which require the Board's approval, the Board Committees would also recommend the course of action to the Board for its consideration and decision. Minutes of the meetings of the AC, SC and RC are also circulated to the Board for its information, while the minutes of the meetings of the NGC and ERCC are available to the Directors on request.

### Board Meetings

For FY2018, the Board held a total of six meetings, including the annual full-day Board Strategy offsite meeting to review and discuss in detail the Group's strategic direction, and to consider the Group's budget for the upcoming financial year. Additional

Board meetings were also convened to consider urgent proposals or matters which required the Board's approval.

Board and Board Committee meetings for the upcoming financial year are scheduled in advance before the end of the current financial year to enable Directors to plan ahead and attend the meetings according to the respective meeting schedules. StarHub's Constitution allows Board and Board Committee meetings to be held via audio and video conferencing to facilitate the decision-making process.

Directors' attendance at Board and Board Committee meetings as well as the Annual General Meeting (AGM) and the Extraordinary General Meeting (EGM) held in FY2018, is set out in the table below:

**Table 1 (Directors' Attendance at Board/General Meetings During FY2018)**

	Board Meetings	Board Committee Meetings					Board ExCo <sup>(6)</sup>	AGM & EGM
		AC	SC	NGC	ERCC	RC		
No. of Meetings Held	6	4	4	2	5	2	5	1
Steven Terrell Clontz <sup>(1)</sup>	6	-	4	2	-	-	5	1
Paul Ma Kah Woh	6	4	-	-	-	2	-	1
Nihal Vijaya Devadas Kaviratne CBE <sup>(2)</sup>	6	4	4	-	-	-	5	1
Teo Ek Tor	6	-	-	2	5	-	-	1
Stephen Geoffrey Miller	6	-	4	-	5	2	4	1
Michelle Lee Guthrie <sup>(3)</sup>	6	-	4	-	2	-	4	1
Nayantara Bali <sup>(4)</sup>	3	-	1	-	-	-	-	-
Ng Shin Ein <sup>(5)</sup>	1	-	-	-	-	-	-	-
Lim Ming Seong	6	4	4	-	5	-	-	1
Nasser Marafih	5	-	-	-	-	-	-	1
Naoki Wakai	6	-	-	-	-	-	-	1

Notes:

- (1) Mr Steven Terrell Clontz was appointed as SC Chairman with effect from 1 October 2018.
- (2) Mr Nihal Vijaya Devadas Kaviratne CBE was appointed as lead independent Director and NGC Chairman with effect from 1 October 2018. There were no NGC meetings held in FY2018 following his appointment as NGC Chairman.
- (3) Ms Michelle Lee Guthrie was appointed as a member of the ERCC with effect from 7 August 2018.
- (4) Ms Nayantara Bali was appointed as an independent NED with effect from 6 August 2018 and a member of the SC with effect from 7 August 2018. She was also appointed as a member of the RC after FY2018, with effect from 14 February 2019.

- (5) Ms Ng Shin Ein was appointed as an independent NED with effect from 17 September 2018, and a member of the AC with effect from 5 December 2018. She was also appointed as a member of the SC after FY2018, with effect from 31 January 2019. There were no AC meetings held in FY2018 following her appointment as a member of the AC.
- (6) Board ExCo meetings were called on an as and when needed basis. The first Board ExCo meeting was held in late FY2017 and was attended by all the Board ExCo members.
- (7) Mr Liu Chee Ming stepped down as an independent NED and a member of the SC with effect from 19 April 2018. He attended all Board and SC meetings during his tenure of service in FY2018.
- (8) Mr Tan Tong Hai stepped down as CEO, executive Director and a member of the RC with effect from 1 May 2018. He attended all Board meetings during his tenure of service in FY2018.
- (9) Ms Rachel Eng Yaag Ngee stepped down as lead independent Director, NGC Chairman and a member of the AC with effect from 30 September 2018. She attended all Board, NGC and AC meetings during her tenure of service in FY2018.
- (10) The attendance of Mr Lionel Yeo Hung Tong is not reflected in Table 1 as he was appointed as an independent NED after FY2018, with effect from 10 January 2019.

### Board Orientation and Continual Training & Development

All newly-appointed Directors participate in a comprehensive orientation that is bespoke for the Group's business and operations, including the opportunity to meet with the CEO and Senior Management, to be given an overview of the Group's business activities, strategic directions, financials, policies, governance practices, corporate culture as well as key regulatory, legal and industry developments which affect the Group. In FY2018, the orientation programme included site visits to MediaHub, a convergence hub for the Group's fixed, mobile and pay TV networks, and CuriosityLab, the Group's social media analytics lab.

All Directors are issued tablets which they can use to access the StarHub Board Portal, which provides relevant information and up-to-date guidelines and policies that will help them discharge their duties properly, including:

- Board meeting information and Board papers;
- Information on Directors' statutory and other duties and responsibilities;
- Contact details of the Board and Senior Management;
- Terms of Reference of the respective Board Committees;
- Insider trading policy and Directors' share trading policy of StarHub; and
- Key industry news and analyst reports.

The Board encourages the Directors to continually develop and refresh their professional knowledge and skills, and to keep themselves abreast of relevant developments in the Group's business and the regulatory and industry-specific environments in which the Group operates.

This enables the Directors to serve effectively on and contribute to the Board. To this end, the Company Secretaries arrange internal briefings as well as external seminars and trainings for the Directors (including those conducted by StarHub's panel of law firms and the Singapore Institute of Directors in conjunction with the SGX-ST). In addition, the Company Secretaries and members of Senior Management also provide regular updates to the Directors during Board meetings, as well as through emails and the StarHub Board Portal, on key industry, technology, legal, regulatory and accounting updates which affect the Group.

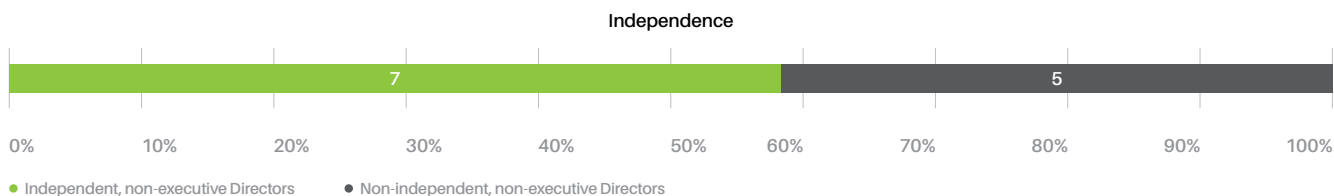
In addition, the Directors are free to conduct independent or collective discussions with Management and subject matter experts on any area of interest or concern.

**i** Further information on the provision of relevant information to the Board can be found in the Access to Information section on page 59 of this report.

## CORPORATE GOVERNANCE

(Cont'd)

## B. BOARD COMPOSITION AND GUIDANCE



Independent, Non-Executive Directors	Non-Independent, Non-Executive Directors
<b>Mr Nihal Vijaya Devadas Kaviratne CBE</b> (NGC Chairman and Lead Independent Director)	<b>Mr Steven Terrell Clontz</b> (Chairman and SC Chairman)
<b>Mr Paul Ma Kah Woh</b> (AC Chairman)	<b>Mr Stephen Geoffrey Miller</b> (RC Chairman)
<b>Mr Teo Ek Tor</b> (ERCC Chairman)	<b>Mr Lim Ming Seong</b>
<b>Ms Michelle Lee Guthrie</b>	<b>Dr Nasser Marafih</b>
<b>Ms Nayantara Bali</b>	<b>Mr Naoki Wakai</b>
<b>Ms Ng Shin Ein</b>	
<b>Mr Lionel Yeo Hung Tong<sup>1</sup></b>	

**Board Composition**

Currently, the Board comprises 12 Directors, of whom more than half are independent NEDs. The Chairman, Mr Steven Terrell Clontz, is not an independent Director (ID) within the meaning of the Code given his executive position at Singapore Technologies Telemedia Pte Ltd (ST Telemedia), a related corporation of StarHub.

During FY2018, Mr Liu Chee Ming and Ms Rachel Eng Yaag Ngee stepped down from the Board as ID and lead ID respectively. As part of StarHub's ongoing renewal of the Board, Ms Nayantara Bali, Ms Ng Shin Ein and Mr Lionel Yeo Hung Tong were appointed to the Board as independent NEDs in FY2018 and the year ending 31 December 2019 (FY2019).

With effect from 1 October 2018, the Board appointed Mr Nihal Vijaya Devadas Kaviratne CBE to succeed Ms Rachel Eng Yaag Ngee as the lead ID, whose role includes:

- Ensuring he is available to shareholders for consultation and direct communication, where they have concerns on matters where contact via the normal channels of the Chairman, the CEO or the Chief Financial Officer (CFO) has failed to resolve or is inappropriate;
- Serving as a liaison between the Chairman and the IDs; and
- Having the authority to call for and lead meetings of IDs without the presence of the other Directors and provide feedback to the Chairman. An IDs' meeting was held in FY2018.


The Board, through the NGC, annually examines its size and composition to ensure its overall effectiveness. Given the scope and nature of the Group's operations and considering the complexity and requirements of the Group's business, the Board is of the view that its current size of 12 is conducive and facilitates effective decision-making.

The Board consists of Directors who are business leaders and professionals of high calibre and integrity, with a broad range of core competencies and experience in enterprise and banking, accounting and finance, investment, risk management, legal, regulatory, technology, business and industry knowledge, management and strategic planning experience, as well as customer-based experience and knowledge. As a group, the Board

<sup>1</sup> Mr Lionel Yeo Hung Tong was appointed as an independent NED with effect from 10 January 2019 and a member of the ERCC with effect from 24 January 2019.

constantly seeks to identify areas of focus and maintain an optimal mix of expertise, experience (both local and international), knowledge, gender, culture and nationality. In this regard, the NGC has developed a skills matrix as one criterion for Director appointments, which is reviewed by the Board on a regular basis.

Following the appointments of Ms Nayantara Bali and Ms Ng Shin Ein in FY2018, the Board currently has a representation of three female Directors, out of 12 Directors. The Board refresh also reflects an improved age diversity. StarHub firmly believes that a well-balanced Board with appropriate diversity will contribute positively in overseeing the delivery of the Group's strategy, bringing fresh perspectives and providing constructive challenges to Management. The immense network of contacts across various industries has proven invaluable to StarHub.

 *The individual profiles of the Directors can be found in the Board of Directors and Directors' Particulars sections on pages 22 to 27 and 83 to 85 of the Annual Report.*

### Review of Directors' Independence

The NGC assesses the independence of each Director annually. Where a Director's tenure exceeds nine years, their independence is carefully reviewed and monitored. As at 31 December 2018, two IDs, namely Mr Nihal Vijaya Devadas Kaviratne CBE and Mr Teo Ek Tor, have served on the Board for more than nine years. After careful rigorous review, the NGC recommends<sup>2</sup>, and the Board is of the firm view<sup>2</sup>, that Mr Kaviratne and Mr Teo have each demonstrated the essential independence of mind and objectivity of judgement to act honestly and in the best interests of the Group in the discharge of their Directors' duties, and therefore the NGC and the Board considers them to be

independent. When assessing objectivity and independent judgement, the NGC and the Board would consider, *inter alia*, the approach, character and attitude of each Director and the value each Director brings, including whether such Director:

- is free from any interest and any business or other relationship which could, or could reasonably be perceived to, interfere with the exercise of the Director's independent business judgement with a view to the best interests of the Group; and
- has any material contractual relationship with the Group other than as a Director.

Any Director who has an interest or relationship which is likely to impact on his/her independence or conflict with a subject under discussion by the Board is required to immediately declare his/her interest or relationship to the Board, remove himself/herself from the information flow, and abstain from participating in any further discussion or voting on the subject matter.

### C. CHAIRMAN AND CEO

In StarHub, there is a clear division in responsibilities between the leadership of the Board and Management. The Chairman and the CEO are separate persons, ensuring an appropriate balance of powers, increased accountability and greater capacity for the Board to make independent decisions. No one individual has unfettered powers of decision-making within the Group.

The Chairman, Mr Steven Terrell Clontz, is a NED and unrelated to the CEO. He:

- Leads the Board to ensure its effectiveness on all aspects of its role;

- Sets the agenda and ensures that adequate time is available for discussion of all agenda items, in particular strategic issues;
- Promotes a culture of openness and constructive debate at the Board level;
- Ensures that the Directors receive complete, adequate and timely information. He works with the CEO in relation to the Board's requirements for information in order to contribute effectively to the Board decision-making process;
- Encourages effective communication with shareholders;
- Encourages constructive relations within the Board and between the Board and Management. As the primary link between the Board and Management, he provides continuity between Board meetings and thereby oversees the effective implementation of all Board decisions;
- Facilitates the effective contribution of NEDs; and
- Promotes high standards of corporate governance.

The CEO, Mr Peter Kaliaropoulos leads the Management and has full executive responsibility for the day-to-day running of the Group's business operations as well as the effective implementation of the Group's strategies and policies.

### D. BOARD MEMBERSHIP

The NGC has been delegated responsibility to review and make recommendations to the Board regarding Board composition. It leads and facilitates the Director nomination process based on written Terms of Reference that set out its authority and duties.

<sup>2</sup> Mr Nihal Vijaya Devadas Kaviratne CBE and Mr Teo Ek Tor abstained from participating in the NGC and Board discussions and voting on their respective status of independence in view of their conflict of interest.

## CORPORATE GOVERNANCE

(Cont'd)

### Nominating and Governance Committee

#### Membership

- Mr Nihal Vijaya Devadas Kaviratne CBE, NGC Chairman and lead independent Director
- Mr Steven Terrell Clontz, non-executive Chairman of the Board
- Mr Teo Ek Tor, independent Director

#### Key Responsibilities

- Lead and facilitate a formal and transparent process for the selection, appointment and re-appointment of Directors to the Board;
- Regularly review the size, structure and composition (including the skills, qualification, experience and diversity) of the Board and Board Committees, and recommend changes to the Board;
- Conduct an annual review of the independence of individual Directors;
- Implement and oversee the annual evaluation of the performance and effectiveness of the Board and Board Committees, including the communication of the results of such evaluations to the Board; and
- Review the adequacy of the Group's corporate governance policies and as may be appropriate, recommend to the Board any proposed changes to such policies from time to time.

All the NGC members are NEDs who are independent of Management. During FY2018, the NGC held two meetings.

The Board notes that Mr Steven Terrell Clontz is regarded as non-independent under the Code in view of his executive

role at ST Telemedia. However, after due consideration, the Board and the NGC are of the view that the said appointment does not interfere with the exercise of his independent business judgement or prevent him from acting objectively in the best interests of the Group in carrying out his duties. The Board and the NGC further note that Mr Clontz is not involved in the day-to-day running of the Group's business and operations, and is independent of Management, with a clear separation of role between Management and the deliberations of the NGC.

In proposing candidates for appointment or re-election as Directors, the NGC considers several factors, including (a) the composition, the diversity and the need for progressive renewal of the Board, (b) each candidate's competencies, commitment, contribution and performance (including attendance, preparedness, participation and candour) and (c) potential conflicts of interest. This ensures that the Board composition reflects an appropriate mix having regard to skills, experience, expertise, diversity and independence, which enables the Board to stay engaged and agile in meeting the needs of the Group. External consultants are engaged to assist with the selection process if necessary. All new appointments to the Board are also subject to the approval of StarHub's industry regulator, the Info-communications Media Development Authority of Singapore.

In the event the NGC considers that a Director is independent notwithstanding the existence of specific relationships or circumstances described in the Code that may potentially affect the Director's independent status, the NGC will provide its views to the Board for the Board's determination. The NGC will consider factors such as the Director's independent business judgement, objectivity, integrity and conduct in acting honestly in the best interests of the Group. Conversely, the NGC has the discretion to consider that a Director is not


independent even in the absence of specific relationships or circumstances described in the Code, and will similarly provide its views to the Board for the Board's determination. The NGC has considered and is of the view that all the IDs are sufficiently independent and are able to objectively exercise their judgement in the best interests of the Group.

Directors with multiple board representations and/or other principal commitments (as defined in the Code) must ensure that they are able to devote sufficient time and attention to the affairs of StarHub to adequately carry out their duties as Directors of StarHub. The NGC has reviewed the individual performance of each Director and is satisfied that all Directors have dedicated adequate time to the affairs of StarHub and have properly discharged their duties for FY2018, and will continue to do so in FY2019. Although no maximum limit has been formally set by the Board on the number of listed company board representations a Director may hold, the NGC is of the view that all Directors have fully discharged their duties as Directors of StarHub based on the time and attention devoted by each Director, their individual abilities and their respective contribution of skills, knowledge and experience as well as their commitment to the affairs of StarHub.

In accordance with StarHub's Constitution, all Directors who are appointed by the Board during the course of the financial year are required to retire and offer themselves for re-election by shareholders at the first AGM of StarHub after their appointment. In line with the Code and SGX-ST Listing Rule 720(5), StarHub also requires all Directors to retire and offer themselves for re-election by shareholders at least once every three years, if the Board, on the recommendation of the NGC, deems it appropriate that they remain in office.

The Board does not have any alternate Directors. All Directors dedicate their personal time and attention to the affairs of StarHub.



 *The principal commitments and directorships in any listed companies currently held by the Directors and in the preceding five years can be found in the Directors' Particulars section on pages 83 to 85 of the Annual Report.*

## E. BOARD PERFORMANCE

StarHub believes that Board performance is ultimately reflected in the performance of the Group. The NGC has the responsibility of assessing the effectiveness of the Board as a whole, as well as the contribution of the Board Committees and each Director to the effectiveness of the Board.

For FY2018, the Board engaged the assistance of Aon Hewitt Singapore Pte Ltd (Aon Hewitt) as independent external consultants to facilitate the annual evaluation of the performance of the Board and the Board Committees. The evaluation process identifies key issues pertaining to the effectiveness, efficiency and functioning of the Board and the Board Committees, in particular:

- Adequacy of the Board composition, including the Board size, the degree of Board independence and the mix and diversity of skills, knowledge and experience of the Board;
- Information management and Board processes, including level and timeliness of information provided to the Board;
- Integrity and corporate social responsibility of StarHub;
- Managing StarHub's performance;
- Effectiveness of Board Committees;
- CEO performance and succession planning;
- Director development and management; and
- Risk management.

As part of the evaluation process, detailed questionnaires were completed by each Director, with feedback on the key areas.

The annual review process facilitates consideration by the Board of its membership, including renewal considerations. The results of the evaluation are collected, analysed and presented to the NGC, in consultation with the Chairman. The NGC reviews and recommends to the Board the follow-up actions required to strengthen the Board's leadership in order to improve the effectiveness of the Board's oversight of StarHub. Where appropriate, Management may also be involved in the review process, and will assist in implementing the necessary measures.

## F. ACCESS TO INFORMATION

At least five business days prior to each Board or Board Committee meeting, Management provides the Directors with timely information that is relevant to matters on the agenda, save for sensitive matters to be tabled at the meeting itself. All sensitive Board materials that are communicated electronically are encrypted with passwords to safeguard their security. Throughout the financial year, the Board also receives monthly management and financial reports which provide updates on key performance indicators and a financial analysis of the Group, as well as regular analysts' reports and media articles on StarHub and the industry. Management also gives network and technology briefings to the Board from time to time. Collectively, the provision of such information enables the Directors to constantly keep abreast of key issues and developments in the industry as well as challenges and opportunities for the Group, thereby facilitating informed and sound decisions.

In addition to the provision of information as described above, Management is available at all times to answer any

queries raised by the Directors. Frequent dialogue and interactions take place between Management and the Directors. Consequently, the Directors are able to gain a deeper understanding of StarHub's operations and related information, allowing them to better strategize and guide StarHub in their role as Directors.

Furthermore, the StarHub Board Portal allows the Directors to securely access and read Board and Board Committee papers and materials electronically at their convenience.

The Directors have separate and independent access to the Company Secretaries, who are trained in legal and company secretarial practices. The Company Secretaries administer, attend and prepare minutes of all Board meetings and are responsible for ensuring that board procedures are followed and that applicable rules and regulations are complied with. Under the direction of the Chairman, they facilitate good information flows within the Board and Board Committees, between the Board and Management, and advise the Board on all legal and corporate governance matters. The Company Secretaries are the primary channel of communication between StarHub and the SGX-ST. They also facilitate the orientation of new Directors and assist in arranging professional development and training for the Directors. The appointment and removal of the Company Secretaries are subject to the Board's approval.

## 2. REMUNERATION MATTERS

### A. PROCEDURES FOR DEVELOPING REMUNERATION POLICIES

The Board has established the ERCC to ensure the due implementation of a formal and transparent procedure for developing policies on executive remuneration and determining the remuneration packages of individual Directors.



## CORPORATE GOVERNANCE

(Cont'd)

### Executive Resource and Compensation Committee

#### Membership

- Mr Teo Ek Tor, ERCC Chairman and independent Director
- Mr Stephen Geoffrey Miller, non-executive Director
- Ms Michelle Lee Guthrie, independent Director
- Mr Lionel Yeo Hung Tong, independent Director (*appointed with effect from 24 January 2019*)
- Mr Lim Ming Seong, non-executive Director

#### Key Responsibilities

- Ensure the implementation of a formal and transparent procedure for developing policies on executive remuneration and determining the remuneration packages of individual Directors;
- Succession planning for the CEO, the CFO and other key management personnel. Potential candidates for immediate, medium and long-term needs are identified each year;
- Assessing and approving restricted stock awards and performance share awards under StarHub's approved share plans, and recommending the grant of share awards to Directors and key management personnel for the Board's approval;
- Assessing and approving candidates for key appointments; and
- Overseeing the development of Management and reviewing succession plans for key positions in the Group.

Currently, the ERCC comprises five NEDs who are independent of Management, with the ERCC Chairman being an ID. During FY2018, the ERCC held five meetings.

The Board notes that Mr Stephen Geoffrey Miller and Mr Lim Ming Seong are regarded as non-independent under the Code in view of Mr Miller's executive role and Mr Lim's directorship at ST Telemedia. However, after due consideration, the Board and the NGC are of the view that the said appointments do not interfere with the exercise of independent judgement by Mr Miller and Mr Lim on the Board or prevent them from acting objectively in the best interests of the Group in carrying out their duties. The Board and the NGC further note that Mr Miller and Mr Lim are not involved in the day-to-day running of the Group's business and operations, and are independent of Management, with a clear separation of role between Management and the deliberations of the ERCC.

In overseeing StarHub's remuneration policies, the ERCC's key duties are to review and recommend the following to the Board for endorsement:

- General remuneration framework for the Group and specific remuneration packages for key management personnel (as defined in the Code); and
- Remuneration framework for each Director (including Director's fees, allowances and share-based awards).

The ERCC's review and recommendation process covers all aspects of remuneration, including Directors' fees, salaries, allowances, bonuses, options, share-based incentives and awards, as well as benefits-in-kind. The framework and packages are linked to:

- The performance of the Group and the relevant individual;
- Industry practices and compensation norms; and
- The need to attract key management personnel in order to ensure the continuing development of talent and the renewal of strong leadership for StarHub.

With regards to the CEO and key management personnel, the ERCC ensures that the remuneration paid to them is closely linked to the achievement of business and individual performance targets. The performance targets are determined by the ERCC based on realistic yet stretch levels each year to motivate them to achieve a high degree of business performance with emphasis on both short and long-term quantifiable objectives.

All decisions by the ERCC are made by a majority of votes of the ERCC members present and voting.

No ERCC member or any Director is involved in deliberations in respect of any remuneration, compensation, share-based incentives or any form of benefits to be granted to such individual, or where there are conflicts of interests. The CEO is present at all ERCC discussions on the compensation and incentive policies for StarHub's key staff (such as share awards, bonus framework, salary and other incentive schemes), save for discussions which relate to the CEO's own compensation, terms and conditions of service or the review of his performance, for which he absents himself.

The ERCC has access to expert professional advice on the remuneration of the Board

and executives. The ERCC has appointed Aon Hewitt as its remuneration consultant for FY2018 and is satisfied that the independence and objectivity of Aon Hewitt is not affected by any relationship between StarHub and Aon Hewitt respectively.

Prior to the termination of any executive Director's and/or key management personnel's contracts of service, the ERCC's approval is required. The ERCC reviews StarHub's obligations arising in the event of such termination to ensure that the contracts of service contain fair and reasonable termination clauses. The ERCC aims to be fair and avoid rewarding poor performance.

During FY2018, the ERCC engaged Aon Hewitt to conduct a Pay-for-Performance Alignment Study. The results showed that there was sufficient evidence indicating Pay-For-Performance Alignment for StarHub in both absolute and relative terms over the five-year period from the financial year ended 31 December 2013 to the financial year ended 31 December 2017. Additionally, the ERCC also took into consideration the challenges in the industry/market as well as the job complexity and found the CEO's total compensation to be aligned to the performance of StarHub.

## B. LEVEL AND MIX OF REMUNERATION DISCLOSURE ON REMUNERATION

### Non-Executive Directors' Remuneration

NEDs receive 70% of their Directors' remuneration in cash and the remaining 30% in share awards granted pursuant to the StarHub Restricted Stock Plan. This remuneration structure encourages NEDs to hold StarHub shares in order to better align their interests with the interests of shareholders and the long-term interests of the Group.



#### A. Cash Component

Each NED receives a basic retainer fee, attendance fee and travel allowance (for overseas Directors only). NEDs who perform additional services in Board Committees receive additional fees. In view of the greater responsibilities of the Board Chairman, the lead ID and the Chairman of each Board Committee, they also receive a higher fee than the other members of the Board and the respective Board Committees.

#### B. Share Component

Pursuant to the StarHub Restricted Stock Plan, the share awards are granted as fully-paid StarHub shares without any vesting conditions attached. Nonetheless, in order to encourage the alignment of the interests of the NEDs and shareholders, NEDs who receive the share awards are required to hold a minimum number of StarHub shares with a value equivalent to the lower of (a) their prevailing annual basic retainer fee or (b) the aggregate of 100% of the total number of StarHub shares awarded for the financial year ended 31 December 2011 and each subsequent financial year thereafter, and 50% of the total number of StarHub shares awarded

from the financial years ended 31 December 2007 to 31 December 2010. NEDs can only dispose of all their StarHub shares one year after ceasing to be a Director. The number of StarHub shares to be awarded to a participating NED will be determined by reference to the volume weighted average price of a StarHub share on the SGX-ST over the 14 trading days commencing on the ex-dividend date that immediately follows the forthcoming AGM. The number of StarHub shares to be awarded will be rounded down to the nearest hundred, with cash to be paid in lieu of the remaining StarHub shares.

The CEO and NEDs voluntarily agreed to a 10% fee reduction in FY2018 to demonstrate their support to the Group's strategic transformation plan, to focus on investing for growth in new business opportunities, digitisation to redefine customer experience, and improving operational efficiencies and productivity.

The total NEDs' remuneration for FY2018 (including the payment in arrears for the Board ExCo fees for the period from 5 December 2017 to 31 December 2017) amounts to \$1,610,405, and will be subject to shareholders' approval at the upcoming AGM in FY2019.

## CORPORATE GOVERNANCE

(Cont'd)

**Table 2 (Annual Fees for the Board and the Board Committees for FY2018)**

<b>Annual Fees for the Board</b>		
Board Chairman		\$148,500
Lead Independent Director		\$70,200
Non-Executive Director		\$58,500

<b>Additional Annual Fees for the Board Committees</b>		
<b>Type of Committee</b>	<b>Chairman</b>	<b>Member</b>
Audit Committee	\$38,700	\$22,500
Strategy Committee	\$27,000	\$14,400
Nominating and Governance Committee	\$27,000	\$14,400
Executive Resource and Compensation Committee	\$27,000	\$14,400
Risk Committee	\$27,000	\$14,400
Board Executive Committee <sup>(a)</sup>	\$38,700	\$22,500

(a) The ad-hoc Board ExCo fees to be paid in arrears are based on services rendered from its establishment on 5 December 2017 to its dissolution on 7 August 2018 in accordance with the Board ExCo Terms of Reference. Save for the payment in arrears for the Board ExCo fees for the period from 5 December 2017 to 31 December 2017, the total Directors' remuneration for the NEDs of the Company for FY2018 takes into account the 10% voluntary fee reduction agreed to by the NEDs in FY2018.

**Breakdown of Directors' Remuneration**

The following shows the composition of Directors' remuneration for FY2018 (including the payment in arrears for the Board ExCo fees for the period from 5 December 2017 to 31 December 2017):

<b>Name of Non-Executive Directors<sup>(k)(l)</sup></b>	<b>Non-Executive Directors' Remuneration</b>		
	<b>Cash-based (\$)</b>	<b>Share-based (\$)</b>	<b>Total<sup>(a)</sup> (\$)</b>
Steven Terrell Clontz <sup>(b)</sup>	199,206.00	85,374.00	284,580.00
Paul Ma Kah Woh	100,485.00	43,065.00	143,550.00
Nihal Vijaya Devadas Kaviratne CBE <sup>(c)</sup>	132,282.50	56,692.50	188,975.00
Teo Ek Tor	93,555.00	40,095.00	133,650.00
Stephen Geoffrey Miller <sup>(d)</sup>	122,535.00	52,515.00	175,050.00
Michelle Lee Guthrie <sup>(e)</sup>	97,692.00	41,868.00	139,560.00
Nayantara Bali <sup>(f)</sup>	30,586.50	13,108.50	43,695.00
Ng Shin Ein <sup>(g)</sup>	16,285.50	6,979.50	23,265.00
Lim Ming Seong	108,045.00	46,305.00	154,350.00
Nasser Marafih	83,125.00	35,625.00	118,750.00
Naoki Wakaj <sup>(d)(h)</sup>	56,385.00	-	56,385.00

<b>Non-Executive Directors who resigned during FY2018</b>			
Rachel Eng Yaag Ngee <sup>(i)</sup>	81,112.50	34,762.50	115,875.00
Liu Chee Ming <sup>(j)</sup>	22,904.00	9,816.00	32,720.00

(a) The total remuneration of the NEDs takes into account the 10% voluntary fee reduction.

(b) Mr Steven Terrell Clontz was appointed as SC Chairman with effect from 1 October 2018.

(c) Mr Nihal Vijaya Devadas Kaviratne CBE was appointed as lead ID and NGC Chairman with effect from 1 October 2018.

(d) Fees are payable to Director's employer company.

(e) Ms Michelle Lee Guthrie was appointed as a member of the ERCC with effect from 7 August 2018.

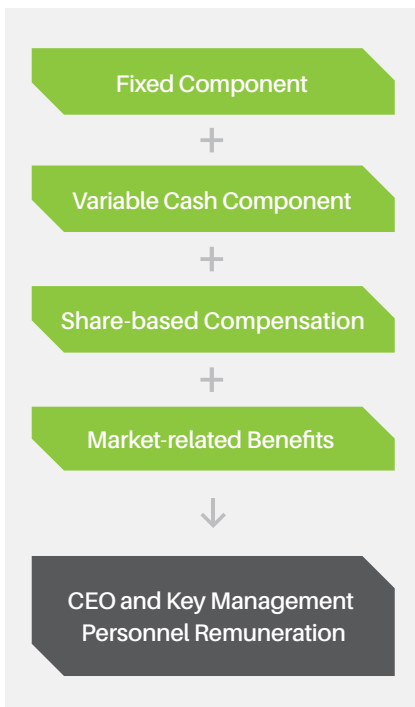
- (f) Ms Nayantara Bali was appointed as an independent NED with effect from 6 August 2018 and a member of the SC with effect from 7 August 2018. She was also appointed as a member of the RC after FY2018, with effect from 14 February 2019.
- (g) Ms Ng Shin Ein was appointed as an independent NED with effect from 17 September 2018 and a member of the AC with effect from 5 December 2018. She was also appointed as a member of the SC after FY2018, with effect from 31 January 2019.
- (h) Mr Naoki Wakai had declined the share award. He will only receive the cash component of his remuneration. Mr Wakai does not hold any StarHub shares.
- (i) Ms Rachel Eng Yaag Ngee stepped down as lead ID, NGC Chairman and a member of the AC with effect from 30 September 2018.
- (j) Mr Liu Chee Ming stepped down as an independent NED and a member of the SC with effect from 19 April 2018.
- (k) Mr Tan Tong Hai stepped down as CEO, executive Director and a member of the RC with effect from 1 May 2018. During his tenure of service in 2018, Mr Tan was remunerated as a key management personnel of StarHub and did not receive Directors' fees for his Board directorship with StarHub. Refer to page 65 of this report for details of his remuneration for FY2018 as the former CEO of StarHub.
- (l) No fees are payable to Mr Lionel Yeo Hung Tong for FY2018 as he was appointed as an independent NED after FY2018, with effect from 10 January 2019.

 Details of the share awards granted by StarHub to the NEDs under the StarHub Restricted Stock Plan can be found in the Directors' Statement section on page 146 of the Annual Report.

### CEO and Key Management Personnel Remuneration

The ERCC seeks to ensure that the level and mix of remuneration for the CEO and key management personnel are competitive and relevant, aligned with shareholders' interests and promote the long-term success of the Group.

Remuneration for the CEO and key management personnel comprises a fixed component, a variable cash component, a share-based compensation and market-related benefits:



#### A. Fixed Component:

The fixed component comprises the base salary, Annual Wage Supplement and fixed allowances.

#### B. Variable Cash Component:

The variable cash component includes the Annual Variable Bonus (AVB) and Economic Value Added (EVA) Incentive Plan.

#### Annual Variable Bonus

The AVB is a cash-based incentive for the CEO and key management personnel that is linked to the achievement of annual performance targets.

Individual performance objectives which are aligned to the overall strategic, financial and operational goals of the Group are set at the beginning of each financial year, and are cascaded down to a select group of key management personnel using scorecards, creating alignment between the performance of the Group and the individual. While the performance objectives are different for each executive, they are assessed on the same principles across the following four broad categories of targets:

- Business;
- Customer;
- Process; and
- People.

The target AVB for the CEO and key management personnel is pre-set at a fixed percentage of their annual base salary, and subsequently adjusted based on the Group's performance at the end of each financial year. The final AVB payout can range from 0 to 1.5 times of the target AVB.

#### EVA Incentive Plan (EIP)

The EIP rewards employees for sustainable shareholder value creation over the medium-term, achieved by growing profits, deploying capital efficiently as well as managing the risk profile and risk time horizon of the Group's business. A portion of the annual performance-related bonus of key management personnel is tied to the EVA achieved by the Group in the financial year.

Under the EIP, a notional EVA bank account is set up for each key management personnel, into which the annual EVA performance bonus declared and earned by him for each year is credited. One-third of the accumulated EVA performance bonus, comprising the EVA performance bonus declared for the current financial year and the balance brought forward from preceding financial years, is paid out in cash each financial year. The remaining two-thirds are carried

## CORPORATE GOVERNANCE

(Cont'd)

forward in each individual's EVA bank account, payable to him upon his resignation or termination of employment (other than for cause), subject to certain conditions being met. The balance in the EVA bank account will increase or decrease depending on StarHub's EVA performance in subsequent years. This mechanism encourages the CEO and key management personnel to work for sustainable EVA generation and adopt strategies that are aligned with the long-term interests of the Group.

Based on the ERCC's assessment that the actual performance of the Group in FY2018 had met the pre-determined targets, the resulting annual payout under the EIP was adjusted accordingly to reflect the performance level achieved.

### C. Share-based Compensation: StarHub Performance Share Plan (PSP)

The PSP serves as a long-term incentive to motivate key management personnel to strive for superior performance and to align their interests with that of shareholders.

Pursuant to the PSP, the ERCC has decided to grant contingent awards of StarHub shares on an annual basis, conditional on meeting targets set for a three-year performance period. The performance measures used in PSP grants during FY2018 are:

- Returns on Capital Invested (ROIC) growth; and
- Absolute Total Shareholder Return (TSR) against Cost of Equity hurdles (i.e. measure of Wealth Added).

A minimum threshold performance is required for any StarHub shares to be released to the recipient at the end of the performance period. The actual number of StarHub shares released will depend on the achievement of set targets over the performance period. For the performance measure of ROIC, the achievement factor ranges from 0 to 1.5 times of 35% of the conditional award. For the performance measure of Absolute TSR, the achievement factor ranges from 0 to 1.5 times of 65% of the conditional award.

The final PSP award is conditional on the vesting of the StarHub shares under the Restricted Stock Plan which have the same performance end-period.

The Group has attained an achievement factor which is reflective of not meeting the pre-determined target performance levels for PSP awards granted in FY2016 based on the performance period from 2016 to 2018.

### StarHub Restricted Stock Plan (RSP)

The RSP has been established with the objective of motivating managers and key talent to strive for sustained long-term growth and superior performance of the Group. It also aims to foster a share ownership culture among employees within the Group and to better align employees' incentives with shareholders' interests.

Pursuant to the RSP, the ERCC has decided to grant contingent awards of StarHub shares on an annual basis, conditional on the achievement of annual performance targets. The objectives are aligned to the overall

strategic, financial and operational goals of the Group.

A minimum threshold performance is required for any StarHub shares to be released to the recipient at the end of the performance period. The actual number of StarHub shares released will depend on the achievement of the pre-determined target performance levels over the performance period, to be determined by the ERCC at the end of the performance period and capped at 1.0 times of the conditional award. The StarHub shares will be released in three tranches of 50%, 25% and 25% over three consecutive years.

The Group has attained an achievement factor which is reflective of meeting the pre-determined target performance levels for RSP awards granted in FY2018 based on the performance period of 2018. The resulting shares vested were adjusted accordingly to reflect the performance level achieved.

### D. Market-related Benefits:

The benefits provided are comparable with local market practices.

### Remuneration of the CEO and Top Five Key Management Personnel

The details of the remuneration of the CEO and the top five key management personnel (who are not Directors or the CEO) are set out in Table 3 below (in bands of \$250,000 and percentage terms) for the services rendered by them to the Group for FY2018.

Table 3

	Fixed <sup>(1)</sup> (\$)	Variable <sup>(2)</sup> (\$)	Benefits <sup>(3)</sup> (\$)	Share-based Compensation <sup>(4)</sup> (\$)	Total (\$)
<b>CEO<sup>(c)</sup></b>					
Peter Kaliaropoulos <sup>(a)</sup>	494,668	714,277	49,632	179,237	1,437,814 <sup>(5)</sup>
Total paid, including shares vested based on actual performance					1,258,577

**Key Management Personnel<sup>(d)</sup>**

	Fixed <sup>(1)</sup> (%)	Variable <sup>(2)</sup> (%)	Benefits <sup>(3)</sup> (%)	Share-based Compensation <sup>(4)</sup> (%)	Total (%)	Remuneration bands <sup>(6)</sup>
Dennis Chia	44	27	4	25	100	D
Chong Yoke Sin	63	31	6	-	100	C
Johan Buse <sup>(b)</sup>	39	58	3	-	100	A
Veronica Lai	48	25	5	22	100	C
Chong Siew Loong	56	30	5	9	100	B
<b>Total including contingent shares granted but not vested, subject to performance<sup>(6)</sup></b>					<b>\$4,330,586</b>	
<b>Total paid, including shares vested based on actual performance</b>					<b>\$4,180,677</b>	

- (1) Fixed refers to base salary, Annual Wage Supplement and fixed allowances earned for FY2018. The base salary was reduced by 10% with effect from 1 October 2018 for Mr Peter Kaliaropoulos.
- (2) Variable refers to any applicable one-off incentive payments as well as incentives paid and accrued for the year pursuant to the AVB scheme and EIP for FY2018.
- (3) Benefits are stated on the basis of direct costs to StarHub, and include housing and other non-cash benefits such as leave, medical scheme and club membership.
- (4) Share awards granted under the RSP and the PSP are subject to pre-determined performance targets set over one-year and three-year performance periods respectively. The figures shown are based on the fair value of the StarHub shares at 100% of each of the RSP and PSP conditional awards, which may not be indicative of the actual value at vesting which can range from 0% to 100% of the RSP conditional award and 0% to 150% of the PSP conditional award. Over the last five financial years ended 31 December 2014 to 31 December 2018, the average number of StarHub shares vested to participants of the RSP and the PSP has been less than 100% of the conditional awards granted. Time-based share awards with a vesting period of one year were also granted under the RSP.
- (5) Refers to total remuneration including contingent shares granted but not vested, subject to performance.
- (6) Remuneration bands:  
 "A" refers to remuneration between \$250,001 and \$500,000 per annum  
 "B" refers to remuneration between \$500,001 and \$750,000 per annum  
 "C" refers to remuneration between \$750,001 and \$1,000,000 per annum  
 "D" refers to remuneration between \$1,250,001 and \$1,500,000 per annum  
 "E" refers to remuneration between \$1,500,001 and \$1,750,000 per annum
- (a) Mr Peter Kaliaropoulos joined StarHub with effect from 9 July 2018. Accordingly, the amount of actual compensation received was based on the period from 9 July 2018 to 31 December 2018. There was share-based compensation granted to Mr Kaliaropoulos as a one-off time-based restricted award of 118,700 StarHub shares.
- (b) Mr Johan Buse joined StarHub with effect from 11 September 2018. Accordingly, the amount of actual compensation received was based on the period from 11 September 2018 to 31 December 2018.
- (c) Mr Tan Tong Hai stepped down as CEO with effect from 1 May 2018. During his employment with StarHub from 1 January 2018 to 30 April 2018, the total compensation was \$1,312,369 (comprising fixed and variable remuneration, benefits-in-kind and contingent shares granted but not vested, subject to performance) for services rendered in all capacities to the Group. The total compensation paid (including shares vested based on actual performance) was \$1,634,885. Upon Mr Tan's departure, he was awarded a package of \$1,312,158 in recognition of his contribution to the Group. The outstanding conditional share awards granted to Mr Tan under the RSP and the PSP will continue to be vested to Mr Tan on a pro-rated basis according to the stipulated vesting schedule, based on the actual level of performance achievement.
- (d) Ms Jeannie Ong stepped down as Chief Strategic Partnership Officer with effect from 1 January 2019. During her employment with StarHub from 1 January 2018 to 31 December 2018, the total compensation (including fixed and variable remuneration, benefits-in-kind and contingent shares granted but not vested, subject to performance) for services rendered to the Group was within remuneration band "D". The total compensation paid (including shares vested based on actual performance and the package awarded upon her departure in recognition of her contribution to the Group) was within remuneration band "E". The outstanding conditional share awards granted to Ms Ong under the PSP in 2017 will continue to be vested to Ms Ong on a pro-rated basis according to the stipulated vesting schedule, based on the actual level of performance achievement.

## CORPORATE GOVERNANCE

(Cont'd)

If any key management personnel of StarHub (including the CEO) is involved in fraud or misconduct, which results in a re-statement of StarHub's financial results or financial loss to StarHub, the Board may reclaim the unvested components of remuneration from such individual under all incentive plans for the relevant period, to the extent such incentive has been earned but not yet released or disbursed. The Board, taking into account the ERCC's recommendation, may decide whether, and to what extent, such recoupment is appropriate, based on the specific facts and circumstances of the case. No such fraud or misconduct occurred in FY2018.

During FY2018, no employee of the Group was a substantial shareholder of StarHub, and no employee of the Group whose

remuneration exceeded \$50,000 per annum was an immediate family member of a Director, the CEO or a substantial shareholder of StarHub.

### 3. STRATEGIC MATTERS

The SC supports, advises and provides direction to the Group on the formulation, review and execution of the Group's strategies.

Currently, the SC comprises seven NEDs, one co-opted member who is independent of Management, and the CEO as an additional co-opted member. The SC members possess deep knowledge of the converging info-communications and media industries in which the Group is operating in, and collectively have relevant expertise

and experience in finance, mergers and acquisitions, legal, regulatory, technical, management, consumer enterprise and strategic planning experience. This enables the SC to fulfil its oversight responsibilities relating to the Group's intermediate and long-term strategy development and implementation.

The SC is assisted by the Management Investment Committee, comprising the CEO, CFO, Chief Enterprise Business Group and Chief Consumer Business Group.

As part of the SC's key functions, the SC guides Management on the strategic planning process to ensure that the Group's strategic plan is developed with measurable goals and time targets, and is appropriately implemented. It reviews both organic and inorganic growth opportunities, and evaluates the impact of external developments and factors on the Group's strategy and execution, such as emerging or evolving competitive activity, disruptive technologies and regulatory developments, thereby enabling the Group to adjust its strategic plan as necessary.

The SC tracks the Group's progress against strategic goals and provides constructive challenges and advice on the strategic options. These include the acquisition strategy, capital strategy, market capabilities and resource requirement, as well as the transformation strategy aimed at sustaining growth, competitiveness and innovation into the future.

During FY2018, the SC held four meetings.

#### Strategy Committee

##### Membership

- Mr Steven Terrell Clontz, SC Chairman and non-executive Chairman of the Board
- Mr Nihal Vijaya Devadas Kaviratne CBE, lead independent Director
- Mr Stephen Geoffrey Miller, non-executive Director
- Ms Michelle Lee Guthrie, independent Director
- Ms Nayantara Bali, independent Director
- Ms Ng Shin Ein, independent Director (*appointed with effect from 31 January 2019*)
- Mr Lim Ming Seong, non-executive Director
- Mr Peter Kaliaropoulos, co-opted SC member
- Mr Nikhil O. J. Eapen, co-opted SC member

##### Key Responsibilities

- Identifying and assessing significant intermediate and long-term opportunities (in terms of new frontiers of organic and inorganic growth) as well as threats in the Group's business areas and operations (including technology, competition, regulatory and financial) and the industry; and
- Providing constructive input and recommendations to the Board on any strategic matter reviewed by the SC which requires the Board's approval.



## 4. ACCOUNTABILITY AND AUDIT

### A. ACCOUNTABILITY

The Board provides a balanced and informed assessment of the Group's performance, position and prospects to shareholders in the Group's quarterly and full-year operating performance and financial results which are released via SGXNET, together with the associated press releases and accompanying presentation slides.

For FY2018, the Board has received written assurance from the CEO and the CFO that the financial statements give a true and fair view of the Group's operations and finances. For the quarterly financial statements, the Board provides a negative assurance confirmation to shareholders, in line with the requirements of the SGX-ST Listing Manual. StarHub recognises that prompt and full compliance with statutory reporting requirements is imperative in maintaining shareholder confidence and trust.

Management updates the Board with monthly management and financial reports which explain StarHub's performance (in comparison with our forecasted performance and budget) and financial position on a timely basis. Other related business reports are also provided to the Board regularly and upon request by the Board.

StarHub has also procured the relevant undertakings to comply with the SGX-ST Listing Rules from all Directors and executive officers, in compliance with SGX-ST Listing Rule 720(1).

## B. RISK MANAGEMENT AND INTERNAL CONTROLS

The Board is principally responsible for the governance of risk management and internal controls of the Group. The RC and the AC work closely to assist the Board in the discharge of this oversight responsibility. To this end, the Board has established and maintains a sound system of risk management and internal controls to safeguard shareholders' interests and the Group's assets.

### Risk Committee

#### Membership

- Mr Stephen Geoffrey Miller, RC Chairman
- Mr Paul Ma Kah Woh, independent Director
- Ms Nayantara Bali, independent Director (*appointed with effect from 14 February 2019*)
- Mr Peter Kiliaropoulos, co-opted RC member

#### Key Responsibilities


- Review and recommend to the Board the type and level of business risk that the Group undertakes in achieving its business strategy, and the appropriate risk management framework and policies for managing StarHub's risk;
- Provide oversight in the design, implementation and monitoring of the risk management framework, the system of internal controls (including operational, compliance and information technology controls), and to ensure that Management puts in place action plans to mitigate the identified risks where possible;
- Review the adequacy and effectiveness of StarHub's risk management system and system of internal controls (including operational, compliance and information technology controls);
- Review the adequacy and effectiveness of policies and procedures for timely risk identification and remediation, including disclosure requirements for regulatory compliance;
- Provide guidance on sustainability topics to be identified as material to the business and ensures the alignment and integration of our sustainability strategy and approach with our business model; and
- Set and instill in StarHub an appropriate risk-aware culture for effective risk governance.

## CORPORATE GOVERNANCE

(Cont'd)

Currently, the RC comprises three NEDs who are independent of Management, as well as the CEO who is a co-opted member. During FY2018, the RC held two meetings. The RC has authority to investigate any matter within its Terms of Reference, and has full access to and co-operation from Management. The RC also has full discretion to invite any Director or executive officer to attend its meetings, and to require Management to provide it with reasonable resources to enable it to discharge its functions properly.

The RC is assisted by the Management Risk Committee (MRC), comprising relevant members of Senior Management. The MRC oversees, co-ordinates and monitors the implementation of the enterprise-wide risk management policies and procedures across the Group, including the Group's insurance programme and the facilitation of the self-assessment exercise required of significant business units on an annual basis. The MRC also proactively identifies existing and emerging significant risks and manages them at the enterprise level within StarHub on an ongoing basis. Additionally, the MRC also maintains oversight over issues pertaining to cyber security, data ethics and governance, and sustainability. The MRC reports to the RC on a regular basis.

 Further details on StarHub's approach to sustainability can be found in the Sustainability Report on pages 100 to 138 of the Annual Report.

### Risk Management System and Internal Controls

StarHub's Enterprise Risk Management programme is centred on being inclusive and multi-disciplinary, focusing on risks and opportunities that are pertinent to the Group's business activities and that are aligned to the Group's strategic priorities. The

Group seeks to embed risk management in its decision-making processes and key business activities at all levels and adopts a comprehensive and practical approach to mitigating the Group's risks.

To improve risk management and mitigation, the RC has identified certain top risks of the Group for tracking and monitoring, which are aligned with the Group's strategic priorities. These risks include strategic, operational, regulatory, legal, information technology, human resource and financial risks. In consultation with the Board and other Board Committees, the identified risk areas are mapped and allocated to the corresponding Board Committees for oversight, further assessment and mitigation. The RC maintains an overview and provides overall guidance on the identified top risks, which are subject to in-depth discussions at quarterly MRC meetings and bi-annual RC meetings.


In terms of internal controls, independent audits are conducted by the external and internal auditors on the effectiveness of the Group's key internal control systems. The AC is responsible for reviewing the audit reports and assessing the effectiveness of the actions taken by Management in resolving any lapses or weaknesses in accordance with the recommendations made by the external and internal auditors, after taking into account Management's views.

For FY2018, the Board has received written assurance from the CEO and the CFO that (a) the financial records of the Group have been properly maintained and the financial statements give a true and fair view of the Group's operations and finances and (b) the risk management system and internal controls of the Group are adequate and

effective to address the financial, operational, compliance and information technology risks which the Group considers relevant and material to its current business environment and scope of operations.

Based on the risk management system and internal controls established and maintained by the Group, the reviews performed by Management as supported by audit findings of the external and internal auditors and the relevant written assurance from the CEO and the CFO, the Board (with the concurrence of the RC and the AC) is of the opinion that the risk management system and internal controls of the Group are adequate and effective to address the financial, operational, compliance and information technology risks as well as the risk management objectives which the Group considers relevant and material to its current business environment and scope of operations. The Group also has an event and crisis management process in place which is regularly reviewed by the MRC.

The Board notes that the risk management system and internal controls of the Group provide reasonable, but not absolute, assurance that the Group will not be adversely affected by any event that can be reasonably foreseen as it strives to achieve its business objectives. In this regard, the Board also notes that there is no risk management system and internal controls that can provide absolute assurance in this regard or against the occurrence of material errors, poor judgement in decision-making, human error, losses, fraud or other irregularities.

 Further details on StarHub's approach to enterprise risk management can be found in the Risk Management section on pages 90 to 93 of the Annual Report.

## C. AUDIT COMMITTEE

### Audit Committee

#### Membership

- Mr Paul Ma Kah Woh, AC Chairman and independent Director
- Mr Nihal Vijaya Devadas Kaviratne CBE, lead independent Director
- Ms Ng Shin Ein, independent Director
- Mr Lim Ming Seong, non-executive Director

#### Key Responsibilities

- Reviewing and approving quarterly and year-end financial results announcements and financial statements, before recommending to the Board for approval;
- Monitoring compliance with relevant statutory and listing requirements to ensure the integrity of the Group's financial statements, including the relevance and consistency of the accounting principles adopted;
- Reviewing and reporting to the Board at least annually on the adequacy and effectiveness of StarHub's internal controls (including financial controls, operational controls which impact financial controls, compliance with accounting and listing rules and regulations, as well as information technology controls relating to financial systems);
- Reviewing the adequacy, effectiveness and independence of the Group's internal audit function;
- Reviewing the adequacy, effectiveness, scope and results of the external audit, and the independence and objectivity of the external auditors (taking into account the nature, extent and cost of non-audit services provided by the external auditors during the financial year);
- Reviewing interested person transactions to ensure compliance with the SGX-ST Listing Manual and the Shareholders' Mandate for Interested Person Transactions that is renewable annually;
- Making recommendations to the Board on the proposals to shareholders for the appointment, re-appointment and removal of the external auditors, and approving the remuneration and terms of engagement of the external auditors;
- Commissioning and reviewing findings of internal investigations into suspected fraud, irregularity, failure of internal controls or violation of any law that is likely to have a material impact on the Group's results; and
- Reviewing reports made under StarHub's Whistle Blowing Policy, and where appropriate, directing the investigation of such matters and any follow-up actions to be taken.

### Authority and Duties of the AC

The AC comprises four NEDs, with a majority (including the AC Chairman) being IDs. The AC members are appropriately qualified to discharge their responsibilities and collectively have strong accounting and related financial and legal management expertise and experience. They keep abreast of changes to accounting standards and issues which affect the Group through, *inter alia*, consultation with the external and internal auditors and seminars (including those organised by the Singapore Institute of Directors).

The AC has explicit authority to investigate any matter within its Terms of Reference, with full access to and co-operation from Management. The AC also has full discretion to invite any Director or executive officer to attend its meetings, and to require Management to provide it with reasonable resources to enable it to discharge its functions properly.

During FY2018, the AC held four meetings and met with the external auditors without Management at least once.

### Key Audit Matters (KAMs)


The significant areas of focus by the AC in relation to the financial statements for FY2018 are key areas of Management's estimates and judgement applied for key financial issues, including (a) revenue recognition, (b) accruals, (c) acquisition of D'Crypt Pte Ltd (DPL) - purchase price allocation, (d) impairment assessment of goodwill and (e) valuation of investment in subsidiaries. During FY2018, the AC received updates from Management on the status of these areas, reviewed and discussed with the external auditors on the results of their audit, including their findings on the key areas of audit focus.

In assessing the KAMs, the AC took into consideration the appropriateness of revenue recognition, basis and estimates

## CORPORATE GOVERNANCE

(Cont'd)


in deriving accruals, the appropriateness of the assumptions and estimates made in goodwill impairment assessment and valuation of investment in subsidiaries, as well as the key assumptions applied in purchase price allocation in the valuation of assets acquired and liabilities assumed in the acquisition of DPL. In addition to the views from the external auditors, subject matter experts, such as independent valuers, were consulted where necessary. The AC concluded that Management's accounting treatment and estimates in each of the KAMs were appropriate.

 *Significant matters that were discussed with Management and the external auditors have been included as KAMs in the Independent Auditors' Report on pages 149 to 156 of the Annual Report.*

### External Auditors

The AC has performed a review of the independence and objectivity of the external auditors, as well as the volume and type of non-audit services provided by the external auditors during FY2018.

Based on such review, the AC is satisfied that the independence of the external auditors has not been compromised by the provision of the non-audit services and that Rules 712 and 715 of the SGX-ST Listing Manual have been complied with. The external auditors have also confirmed their independence. Accordingly, the AC has recommended to the Board that KPMG LLP be nominated for re-appointment as the Group's external auditors<sup>3</sup> at the upcoming AGM. To further maintain the independence of KPMG LLP, the AC ensures that the audit partner in-charge of the Group is rotated every five years. None of the Directors (including the AC members) or Senior Management is or has in the past two years been a former partner, director or employee of the Group's external auditors.

 *Details of the aggregate amount of external auditors' fees paid for FY2018 and the breakdown for the audit and non-audit services are set out in Note 23.3 to the Financial Statements of the Annual Report.*

### D. INTERNAL AUDIT

The internal audit function of the Group for FY2018 was carried out by PricewaterhouseCoopers Risk Services Pte. Ltd, an independent firm. The internal auditor is guided by the Standards for the Professional Practice of Internal Auditing, prescribed by the Institute of Internal Auditors.

The internal auditor reports to the AC functionally, and to the CEO and the CFO administratively. The AC approves the appointment, termination and remuneration of the internal auditor. The internal auditor has unfettered access to all of StarHub's documents, records, properties and personnel, including access to the AC.

The internal auditor adopts a risk-based auditing approach in developing the annual internal audit plan, which focuses on material internal controls across the Group's business, including financial, operational, compliance and information technology controls. The internal audit plan is submitted to the AC for its review and approval at the start of each financial year. Periodic internal audit reports are submitted to the AC detailing the internal auditor's progress in executing the internal audit plan and any major findings and corrective actions taken by Management.

The AC conducts a review of the adequacy, effectiveness and independence of the internal audit function annually, to ensure that StarHub maintains an effective internal audit function that is adequately staffed and independent of the audited activities.

During FY2018, the AC met with the internal auditor once without the presence of Management.

### 5. SHAREHOLDER RIGHTS AND RESPONSIBILITIES

StarHub respects shareholders' rights and promotes the fair and equitable treatment of all shareholders. StarHub keeps all our shareholders sufficiently informed of our corporate affairs and activities, including any changes to the Group or our business which may materially affect the price or value of StarHub shares, on a timely basis.

All new material price-sensitive information is disclosed on an adequate, accurate and timely basis via SGXNET and on the StarHub IR website. StarHub recognises that the timely release of relevant information is central to good corporate governance and assists shareholders to make informed investment decisions.

All shareholders are entitled to attend and vote at general meetings and are afforded the opportunity to participate effectively in the general meetings. Shareholders are allowed to appoint up to two proxies to attend, speak and vote in their place at general meetings. Under StarHub's Constitution and pursuant to the Companies Act, shareholders who are nominee companies, custodian banks or Central Provident Fund agent banks may appoint more than two proxies to attend, speak and vote at the upcoming AGM and at subsequent general meetings.

### 6. COMMUNICATION WITH SHAREHOLDERS

StarHub protects and facilitates the exercise of shareholders' rights. StarHub reaches out to our shareholders and the investment

<sup>3</sup> Excluding the Ensign group of companies comprising Ensign InfoSecurity Pte. Ltd., its subsidiaries and associated companies. Ensign InfoSecurity Pte. Ltd. became a subsidiary of StarHub with effect from 4 October 2018 and will be retaining Deloitte & Touche LLP as the external auditors of the Ensign group of companies pursuant to Rule 716 of the SGX-ST Listing Manual.

community through timely, accurate, fair and transparent communication.


StarHub provides regular and timely information to the investment community regarding the Group's performance, progress and prospects as well as major industry and corporate developments and other relevant information. StarHub solicits and considers the views of shareholders via (a) periodic analyst and media briefings throughout the year, (b) regular meetings between the CEO, the StarHub IR team and institutional investors through international road shows and conferences organised by major brokerage firms and (c) third-party perception studies on StarHub.

Apart from SGXNET announcements and the Annual Report, the StarHub IR website at [www.starhub.com/ir](http://www.starhub.com/ir), which is regularly updated, is the main source of information for shareholders. It houses all media releases, financial results, annual reports, SGXNET announcements, presentation materials, archived webcasts and conference calls, as well as other corporate information relating to the Group. Investors may also elect to be notified of any new updates via an email alert service. However, new material price-sensitive information such as financial results are released via SGXNET before being posted on the StarHub IR website or the conduct of any media or analyst conferences. This ensures fair and non-selective disclosure of information to all shareholders.

Shareholders may direct their queries and concerns to the StarHub IR team using the contact particulars listed on the StarHub IR website. The StarHub IR team is also prompt in keeping Management fully apprised of shareholder views and sentiments.

StarHub declares dividends on a quarterly basis, and informs its shareholders of the dividend payments in the respective quarterly and full year financial results announcements via SGXNET.

StarHub also recognises the important contribution and support of our other stakeholders, including customers, employees, suppliers and communities whom we do business with and work, in our efforts in addressing and achieving sustainability. We promote and manage our stakeholder relations through regular and proactive engagement with our stakeholders, at the corporate level and functional divisions and volunteer committees across the Group.

 Further details on StarHub's communication with our shareholders and other stakeholders can be found in the *Investor Relations section and Sustainability Report on pages 88 to 89 and 100 to 138 of the Annual Report.*

## 7. CONDUCT OF SHAREHOLDER MEETINGS

All shareholders are invited to attend and participate in StarHub's general meetings.

Notices of general meetings, together with the annual reports or circulars, are generally issued to all shareholders (including foreign shareholders) at least 21 days prior to the scheduled meetings. This provides ample time for shareholders to review the documents ahead of the meetings and appoint their proxies to attend the meetings if they wish. As part of StarHub's commitment towards more environmentally-friendly and sustainable practices, StarHub makes our annual reports and circulars available online at the StarHub IR website. Printed copies of StarHub's annual reports and circulars are made available upon request.

StarHub encourages shareholder participation at general meetings. Shareholders present are given the opportunity to seek clarification or direct questions on matters relating to the proposed resolutions before each resolution is voted on. Each specific matter is proposed as a separate resolution. All Directors (in particular the Board Chairman

and the respective Chairmen of the Board Committees) together with Senior Management and the external auditors, are present at general meetings to address shareholders' queries.

For greater transparency and efficiency in the voting process and results, electronic poll voting is conducted. The results showing the number of votes cast for and against each resolution and the respective percentages are announced via SGXNET on the same day of the general meeting. Minutes of general meetings are made available on the StarHub IR website.

## 8. OTHER CORPORATE GOVERNANCE PRACTICES AND POLICIES

### A. INTERESTED PERSON TRANSACTIONS

Interested person transactions (IPTs) entered into by any of the Group entities are governed by the Shareholders' Mandate for Interested Person Transactions (IPT Mandate) as approved by shareholders annually at StarHub's EGM, as well as the disclosure and shareholder approval requirements under Chapter 9 of the SGX-ST Listing Manual. StarHub has established review procedures to ensure that all IPTs are undertaken on an arm's length basis and on normal commercial terms, and are not prejudicial to the interests of StarHub and its minority shareholders. Under the review procedures, the IPT terms and pricing are to be (a) consistent with StarHub's usual business practices and policies and no more favourable to the interested persons than those extended to unrelated third parties and (b) fair and reasonable. StarHub will also consider factors such as specification compliance, track record, experience and expertise, as well as preferential rates or discounts for bulk purchases. An authorised senior officer who does not have any conflict of interests in relation to the IPT will determine whether the IPT terms and pricing are fair and reasonable. Where possible, competitive quotations or tenders for


## CORPORATE GOVERNANCE

(Cont'd)

purchase transactions are procured. StarHub has also put in place procedures to identify the interested persons and record the IPTs entered into by the Group. All IPTs are subject to review and approval by the appropriate approving authority, including the AC, based on pre-determined threshold limits under the IPT Mandate. The IPTs are reviewed by the internal auditors on a quarterly basis and a quarterly report on all such transactions are provided to the AC. IPT disclosures are made via SGXNET announcements on a quarterly and annual basis at the same time as the Group's quarterly and full-year results announcements.

In FY2018, there were no IPTs or related party transactions that can be classified as financial assistance to entities other than StarHub's subsidiary companies as well as associated company, SHINE Systems Assets Pte. Ltd.

StarHub does not provide loans to Directors as a matter of corporate policy and therefore no loans have been provided by StarHub to the Directors in FY2018.

 Further details on StarHub's IPTs for FY2018 can be found in the Interested Person Transactions section on page 261 of the Annual Report.

### B. SECURITIES DEALINGS

#### Insider Trading Policy

StarHub has adopted an enhanced insider trading policy with respect to dealings in StarHub securities by the Directors and Group employees. The policy imposes trading blackout periods which exceed the requirements of the SGX-ST Listing Manual, pursuant to which:

- All Directors and Group employees are prohibited from dealing in StarHub securities during the period:
  - (a) commencing two weeks prior to the announcement of the Group's results

for each of the first three quarters of our financial year and ending on the date of announcement of the relevant results; and

- (b) commencing one month prior to the announcement of the Group's full year results and ending on the date of announcement of the relevant results.
- All Management and employees directly involved in the preparation of the Group's quarterly and full year results are prohibited from dealing in StarHub securities during the period commencing one month prior to the announcement of each of the Group's quarterly and full year results and ending on the date of announcement of the relevant results.

All Directors, Management and Group employees are notified by email prior to the commencement of each trading blackout period and upon the lifting of the restrictions after the announcement of the respective financial results. The policy discourages trading on short-term considerations and reminds Directors, Management and Group employees of their obligations under insider trading laws.

#### Share Trading Policy

In addition, in order to facilitate compliance by the Directors and Senior Management, StarHub has adopted a share trading policy which requires them to give prior notice of their intended dealing in StarHub securities to the Chairman and CEO through the Company Secretaries.

StarHub has also adopted a policy which prohibits the acquisition of any StarHub shares pursuant to our Share Purchase Mandate where a price-sensitive development has occurred or been the subject of a decision, until the development has been publicly announced.

For the issue of new StarHub securities, while the SGX-ST Listing Manual permits the Board to seek a general mandate from shareholders to allot and issue up to 20% of StarHub's total issued share capital other than on a pro rata basis to existing shareholders, the Board has decided to limit such mandate to 15% only. In addition, for the specific mandate from shareholders to allot and issue StarHub shares under the RSP and the PSP, the Board has limited the aggregate number of StarHub shares available for grant under the RSP and the PSP to 8% of StarHub's total issued share capital (instead of the permitted 15% under the SGX-ST Listing Manual), taking into account any outstanding unvested share awards.

### C. WHISTLE BLOWING POLICY

StarHub does not tolerate ethical and legal violations. The Group has instituted a robust procedure which provides accessible channels for employees and external parties (such as our customers, suppliers, contractors and other stakeholders who may have a business relationship with the Group) to report in a responsible manner, any concern or complaint in relation to any irregularity, inappropriate behavior, legal or ethical violation or other serious breaches of internal processes. Such reporting channels include a dedicated whistle blowing email and a direct channel to the AC Chairman and the General Counsel (via email and/or mail).

All complaints will be promptly and thoroughly investigated in confidence and on a need-to-know basis. The investigation outcome together with a recommendation on the necessary actions to be taken will be reported to the AC Chairman and the General Counsel, who will decide on the appropriate course of action. On a quarterly basis, a consolidated report of all whistle blowing cases for the quarter (if any) will be submitted for review by the AC.



The Group's whistle blowing policy aims to encourage the reporting of such matters in good faith, by lending confidence that employees and other persons making such reports will be treated fairly and accorded due protection against reprisals. The Group's whistle blowing policy is available on StarHub's intranet and corporate website for easy access by all employees and the public.

#### D. EMPLOYEE CODE OF CONDUCT AND RULES ON BUSINESS CONDUCT

StarHub has put in place the following policies and procedures to guide employees in carrying out their duties and responsibilities with high standards of personal and corporate integrity when dealing with StarHub, our competitors, customers, suppliers and the community:

- StarHub's Employee Code of Conduct and Ethics;
- Corporate Gift and Hospitality Policy;
- Supplier Code of Conduct;
- Purchasing Procedure; and
- Request for Proposal/Tender Procedure.

These policies and procedures cover (a) business conduct (including employees' compliance with anti-corruption and anti-bribery laws), (b) conduct in the workplace, (c) protection of StarHub's assets, proprietary and confidential information as well as intellectual property, (d) conflicts of interest, (e) non-solicitation of customers and employees and (f) workplace health and safety. In parallel, the Purchasing Procedure and Request for Proposal/Tender Procedure cover internal controls on tenders, vendor selection and purchasing to ensure transparency, objectivity and compliance.

The Employee Code of Conduct and Ethics, the Corporate Gift and Hospitality Policy, the Purchasing Procedure and the Request for

Proposal/Tender Procedure are available on StarHub's intranet, while the Supplier Code of Conduct is available on StarHub's intranet and corporate website for easy access by all employees and the public.

#### E. DOCUMENT CLASSIFICATION POLICY

StarHub has a Document Classification Policy to guide employees in their handling of information and documents relating to the Group's business, activities and operations, which are required to be classified as "Confidential", "For Internal Use" or "For Public Distribution". This helps to safeguard such information and documents, and ensures that only appropriate persons have access on a need-to-know basis.

#### F. COMPLIANCE LEAVE POLICY

StarHub has voluntarily put in place a Compliance Leave Policy as an additional risk mitigation measure to enhance corporate governance. The policy is applicable to employees who hold Senior Manager positions and above, finance advocates and employees with sensitive job functions such as handling monies, inventories, payroll processing and approvals, risk management as well as purchasing of goods and services. Under the policy, relevant employees are required to go on mandatory block leave for a period of at least five consecutive working days per calendar year, thereby allowing covering officers to fully step into their duties and act as an additional check and balance against any breaches.

#### G. LAPTOP ENCRYPTION SOLUTION

StarHub continually evaluates new technologies which may further enhance the security of our confidential and sensitive information. We are in the process of implementing a Laptop Encryption Solution

which ensures that sensitive and confidential information relating to StarHub will continue to be protected if any laptop belonging to employees is lost or stolen. This measure enhances the security of confidential and commercially sensitive documents stored in such laptops.

#### 9. ACCOLADES AND AWARDS

As a testament to our unwavering commitment to continually uphold high standards of corporate governance, StarHub has been the proud recipient of numerous accolades and awards from the investment community over the years. In FY2018, StarHub was named the Top 50 Publicly Listed Company at the 2<sup>nd</sup> ASEAN Corporate Governance Awards and received Best Overall Investor Relations (Small to Mid-cap) as well as Best in Sector for Communications at the IR Magazine Awards - South East Asia 2018. Other significant accolades include coming in first in Asia Pacific and fifth globally in Equileap's 2018 Gender Equality Global Report and Ranking for our policies and commitment to gender equality, and being named a Sustainable Business winner at the Singapore Apex Corporate Sustainability Awards 2018.



# CORPORATE GOVERNANCE

## Disclosure Guide

### DISCLOSURE GUIDE - Code of Corporate Governance 2012

Guideline	Questions	How has the Company complied?
General	(a) Has the Company complied with all the principles and guidelines of the Code? If not, please state the specific deviations and the alternative corporate governance practices adopted by the Company in lieu of the recommendations in the Code.	StarHub has complied in all material respects with the principles and guidelines of the Code of Corporate Governance (Code) issued by the Monetary Authority of Singapore on 2 May 2012.
	(b) In what respect do these alternative corporate governance practices achieve the objectives of the principles and conform to the guidelines in the Code?	Not applicable.
<b>Board Responsibility</b>		
Guideline 1.5	What are the types of material transactions which require approval from the Board?	The Board has established a framework on authorisation and approval limits for capital and operating expenditure, as well as specified transactions including acquisitions and disposals of investments, procurement of goods and services, bank facilities and cheque signatories. Within this framework, the Board has set relevant authority and approval sub-limits for delegation to various Management levels to optimise operational efficiency when undertaking the day-to-day running of the business. Board approval is required for all transactions which exceed the relevant authorisation and approval limits.
<b>Members of the Board</b>		
Guideline 2.6	(a) What is the Board's policy with regard to diversity in identifying director nominees?	The Board recognises the importance and value of diversity. It constantly seeks to maintain an optimal mix of expertise, experience (both local and international), knowledge, gender, culture and nationality. A well-balanced Board with appropriate diversity will contribute positively in overseeing the delivery of the Group's strategy, bringing fresh perspectives and providing constructive challenges to Management.

Guideline	Questions	How has the Company complied?
Guideline 2.6 (Cont'd)	(b) Please state whether the current composition of the Board provides diversity on each of the following – skills, experience, gender and knowledge of the Company, and elaborate with numerical data where appropriate.	The Board consists of Directors who possess a broad range of core competencies and experience in enterprise and banking, accounting and finance, investment, risk management, legal, regulatory, technology, business and industry knowledge, management and strategic planning experience, as well as customer-based experience and knowledge. Gender diversity is also considered in relation to the Board composition. Following the appointments of Ms Nayantara Bali and Ms Ng Shin Ein in FY2018, the Board currently has a representation of three female Directors, out of 12 Directors. The Board refresh also reflects an improved age diversity. The individual profiles of the Directors can be found in the Board of Directors and Directors' Particulars sections of the Annual Report.
	(c) What steps has the Board taken to achieve the balance and diversity necessary to maximize its effectiveness?	In proposing candidates for appointment or re-election as Directors, the NGC considers several factors, including (i) the composition, the diversity and the need for progressive renewal of the Board, (ii) each candidate's competencies, commitment, contribution and performance (including attendance, preparedness, participation and candour) and (iii) potential conflicts of interest. This ensures that the Board composition reflects an appropriate mix having regard to skills, experience, expertise, diversity and independence, which enables the Board to stay engaged and agile in meeting the needs of the Group.
Guideline 4.6	Please describe the board nomination process for the Company in the last financial year for (i) selecting and appointing new directors and (ii) re-electing incumbent directors.	The NGC leads the process for the selection and appointment of new Directors and re-election of incumbent Directors, based on written Terms of Reference that set out its authority and duties. External consultants are engaged to assist with the selection process if necessary. All new appointments to the Board are also subject to the approval of StarHub's industry regulator, the Info-communications Media Development Authority of Singapore.
Guideline 1.6	(a) Are new directors given formal training? If not, please explain why.	Yes, new Directors are given formal training.

## CORPORATE GOVERNANCE

## Disclosure Guide (Cont'd)

Guideline	Questions	How has the Company complied?
Guideline 1.6 (Cont'd)	(b) What are the types of information and training provided to (i) new directors and (ii) existing directors to keep them up-to-date?	<p>(i) All newly-appointed Directors participate in a comprehensive orientation that is bespoke for the Group's business and operations, including the opportunity to meet with the CEO and Senior Management, to be given an overview of the Group's business activities, strategic directions, financials, policies, governance practices, corporate culture as well as key regulatory, legal and industry developments which affect the Group. In FY2018, the orientation programme included site visits to MediaHub, a convergence hub for the Group's fixed, mobile and pay TV networks, and CuriosityLab, the Group's social media analytics lab.</p> <p>(ii) Existing Directors are provided with regular updates on key industry, technology, legal, regulatory and accounting updates which affect the Group. The updates are given by the Company Secretaries and members of Senior Management during Board meetings, as well as through emails and the StarHub Board Portal. Directors are also encouraged to attend external seminars and trainings (including those conducted by StarHub's panel of law firms and the Singapore Institute of Directors in conjunction with the SGX-ST).</p>
Guideline 4.4	<p>(a) What is the maximum number of listed company board representations that the Company has prescribed for its directors? What are the reasons for this number?</p> <p>(b) If a maximum number has not been determined, what are the reasons?</p> <p>(c) What are the specific considerations in deciding on the capacity of directors?</p>	<p>StarHub has not prescribed a maximum number of listed company board representations that a Director may hold.</p> <p>The NGC is responsible for determining whether the Directors are able to devote sufficient time and attention to the affairs of StarHub to adequately carry out their duties as Directors of StarHub. The NGC is of the view that all Directors have fully discharged their duties as Directors of StarHub based on the time and attention devoted by each Director, their individual abilities and their respective contribution of skills, knowledge and experience as well as their commitment to the affairs of StarHub. The table of attendance can be found in the Corporate Governance section of the Annual Report.</p> <p>The specific considerations are as set out in (b) above.</p>

Guideline	Questions	How has the Company complied?
<b>Board Evaluation</b>		
Guideline 5.1	(a) What was the process upon which the Board reached the conclusion on its performance for the financial year?	<p>For FY2018, the Board engaged the assistance of Aon Hewitt Singapore Pte Ltd as independent external consultants to facilitate the annual evaluation of the performance of the Board and the Board Committees. The evaluation process identifies key issues pertaining to the effectiveness, efficiency and functioning of the Board and the Board Committees, in particular (i) adequacy of the Board composition, including the Board size, the degree of Board independence and the mix and diversity of skills, knowledge and experience of the Board, (ii) information management and Board processes, including level and timeliness of information provided to the Board, (iii) integrity and corporate social responsibility of StarHub, (iv) managing StarHub's performance, (v) effectiveness of Board Committees, (vi) CEO performance and succession planning, (vii) Director development and management and (viii) risk management. As part of the evaluation process, detailed questionnaires were completed by each Director, with feedback on the key areas.</p> <p>Feedback and comments received from the Directors are reviewed by the NGC in consultation with the Board Chairman, and tabled to the Board for discussion.</p>
	(b) Has the Board met its performance objectives?	Based on the NGC's review, the Board and the various Board Committees operate effectively, and each Director is contributing to the overall effectiveness of the Board.
<b>Independence of Directors</b>		
Guideline 2.1	Does the Company comply with the guideline on the proportion of independent directors on the Board? If not, please state the reasons for the deviation and the remedial action taken by the Company.	Yes. Currently, the StarHub Board comprises 12 Directors, of which more than half are independent non-executive Directors.
Guideline 2.3	(a) Is there any director who is deemed to be independent by the Board, notwithstanding the existence of a relationship as stated in the Code that would otherwise deem him not to be independent? If so, please identify the director and specify the nature of such relationship.	There is no Director who is deemed to be independent by the Board, notwithstanding the existence of a relationship as stated in the Code that would otherwise deem him not to be independent.
	(b) What are the Board's reasons for considering him independent? Please provide a detailed explanation.	Not applicable.

## CORPORATE GOVERNANCE

### Disclosure Guide (Cont'd)

Guideline	Questions	How has the Company complied?
Guideline 2.4	Has any independent director served on the Board for more than nine years from the date of his first appointment? If so, please identify the director and set out the Board's reasons for considering him independent.	As at 31 December 2018, two independent Directors, namely Mr Nihal Vijaya Devadas Kaviratne CBE and Mr Teo Ek Tor, have served on the Board for more than nine years. After careful rigorous review, the NGC recommends, and the Board is of the firm view, that Mr Kaviratne and Mr Teo have each demonstrated the essential independence of mind and objectivity of judgement to act honestly and in the best interests of the Group in the discharge of their Directors' duties, and therefore the NGC and the Board considers them to be independent. When assessing objectivity and independent judgement, the NGC and the Board would consider, <i>inter alia</i> , the approach, character and attitude of each Director and the value each Director brings, including whether such Director (i) is free from any interest and any business or other relationship which could, or could reasonably be perceived to, interfere with the exercise of the Director's independent business judgement with a view to the best interests of the Group and (ii) has any material contractual relationship with the Group other than as a Director. Mr Kaviratne and Mr Teo abstained from participating in the NGC and Board discussions and voting on their respective status of independence in view of their conflict of interest.

#### Disclosure on Remuneration

Guideline 9.2	Has the Company disclosed each director's and the CEO's remuneration as well as a breakdown (in percentage or dollar terms) into base/fixed salary, variable or performance-related income/bonuses, benefits in kind, stock options granted, share-based incentives and awards, and other long-term incentives? If not, what are the reasons for not disclosing so?	Yes, the details of each Director's and the CEO's remuneration are fully disclosed.
---------------	---	---

Guideline	Questions	How has the Company complied?
Guideline 9.3	(a) Has the Company disclosed each key management personnel's remuneration, in bands of S\$250,000 or in more detail, as well as a breakdown (in percentage or dollar terms) into base/fixed salary, variable or performance-related income/bonuses, benefits in kind, stock options granted, share-based incentives and awards, and other long-term incentives? If not, what are the reasons for not disclosing so?	Yes, the details of each key management personnel's remuneration are fully disclosed.
	(b) Please disclose the aggregate remuneration paid to the top five key management personnel (who are not directors or the CEO).	The aggregate remuneration paid to the top five key management personnel (who are not Directors or the CEO) is as disclosed in the Corporate Governance section of the Annual Report.
Guideline 9.4	Is there any employee who is an immediate family member of a director or the CEO, and whose remuneration exceeds S\$50,000 during the year? If so, please identify the employee and specify the relationship with the relevant director or the CEO.	No.
Guideline 9.6	(a) Please describe how the remuneration received by executive directors and key management personnel has been determined by the performance criteria.	The ERCC seeks to ensure that the level and mix of remuneration for the CEO and key management personnel are competitive and relevant, aligned with shareholders' interests and promote the long-term success of the Group. Remuneration for the CEO and key management personnel comprises a fixed component, a variable cash component, a share-based component and market-related benefits. The ERCC ensures that the remuneration paid to them is closely linked to the achievement of business and individual performance targets. The performance targets are determined by the ERCC based on realistic yet stretch levels each year to motivate them to achieve a high degree of business performance with emphasis on both short and long-term quantifiable objectives.
	(b) What were the performance conditions used to determine their entitlement under the short-term and long-term incentive schemes?	Please refer to the performance conditions used to determine the CEO's and key management personnel's entitlement under the short-term and long-term incentive schemes as set out in the Corporate Governance section of the Annual Report.
	(c) Were all of these performance conditions met? If not, what were the reasons?	Not all performance conditions were met. The reason was due to declining performance of Total Shareholder Return.

# CORPORATE GOVERNANCE

## Disclosure Guide (Cont'd)

Guideline	Questions	How has the Company complied?
<b>Risk Management and Internal Controls</b>		
Guideline 6.1	What types of information does the Company provide to independent directors to enable them to understand its business, the business and financial environment as well as the risks faced by the Company? How frequently is the information provided?	<p>Throughout the financial year, the Board receives monthly management and financial reports which provide updates on key performance indicators and a financial analysis of the Group, as well as regular analysts' reports and media articles on StarHub and the industry. Management also gives network and technology briefings to the Board from time to time. Other related business reports are also provided to the Board regularly and upon request by the Board. Collectively, the provision of such information enables the Directors to constantly keep abreast of key issues and developments in the industry as well as challenges and opportunities for the Group, thereby facilitating informed and sound decisions.</p> <p>At least five business days prior to each Board or Board Committee meeting, Management provides the Directors with timely information that is relevant to matters on the agenda, save for sensitive matters to be tabled at the meeting itself. This is to give Directors sufficient time to review and consider the matters being tabled and/or discussed. The Board also receives updates from the Board Committee Chairmen at Board meetings, on key matters raised and/or decisions made at the last-held meeting of each Board Committee. For matters which require the Board's approval, the Board Committees would also recommend the course of action to the Board for its consideration and decision. Minutes of the meetings of the AC, SC and RC are also circulated to the Board for its information, while the minutes of the meetings of the NGC and ERCC are available to the Directors on request.</p> <p>The Board has access to Management at all times to answer any queries raised by the Directors. Frequent dialogue and interactions take place between Management and the Directors.</p>
Guideline 13.1	Does the Company have an internal audit function? If not, please explain why.	Yes, the Company has an internal audit function.



Guideline	Questions	How has the Company complied?
Guideline 11.3	<p>(a) In relation to the major risks faced by the Company, including financial, operational, compliance, information technology and sustainability, please state the bases for the Board's view on the adequacy and effectiveness of the Company's internal controls and risk management systems.</p> <hr/> <p>(b) In respect of the past 12 months, has the Board received assurance from the CEO and the CFO as well as the internal auditor that: (i) the financial records have been properly maintained and the financial statements give true and fair view of the Company's operations and finances; and (ii) the Company's risk management and internal control systems are effective? If not, how does the Board assure itself of points (i) and (ii) above?</p>	<p>Based on the risk management system and internal controls established and maintained by the Group, the reviews performed by Management as supported by audit findings of the external and internal auditors and the relevant written assurance from the CEO and the CFO, the Board (with the concurrence of the RC and the AC) is of the opinion that the risk management system and internal controls of the Group are adequate and effective to address the financial, operational, compliance and information technology risks as well as the risk management objectives which the Group considers relevant and material to its current business environment and scope of operations. The Group also has an event and crisis management process in place which is regularly reviewed by the MRC.</p> <p>In assessing the adequacy and effectiveness of the internal controls, the Board ensures that material assets are properly safeguarded, integrity and availability of critical information and systems (including accounting records) are maintained, and reliable financial information is prepared in compliance with applicable internal policies, laws and regulations.</p> <hr/> <p>Yes. For FY2018, the Board has received written assurance from the CEO and the CFO that: (i) the financial records of the Group have been properly maintained and the financial statements give a true and fair view of the Group's operations and finances and (ii) the risk management system and internal controls of the Group are adequate and effective to address the financial, operational, compliance and information technology risks which the Group considers relevant and material to its current business environment and scope of operations. In addition, Management adopts an enhanced process to sign off assurance to the CEO and the CFO, in order to enhance the current processes for supporting the Board's opinion on the adequacy and effectiveness of the risk management system and internal controls of the Group.</p>

## CORPORATE GOVERNANCE

## Disclosure Guide (Cont'd)

Guideline	Questions	How has the Company complied?
Guideline 12.6	(a) Please provide a breakdown of the fees paid in total to the external auditors for audit and non-audit services for the financial year.	The aggregate amount of external auditors' fees for FY2018 and the breakdown for the audit and non-audit services are set out in Note 23.3 to the Financial Statements of the Annual Report.
	(b) If the external auditors have supplied a substantial volume of non-audit services to the Company, please state the bases for the Audit Committee's view on the independence of the external auditors.	The AC has performed a review of the independence and objectivity of the external auditors, as well as the volume and type of non-audit services provided by the external auditors during FY2018. Based on such review, the AC is satisfied that the independence of the external auditors has not been compromised by the provision of the non-audit services and that Rules 712 and 715 of the SGX-ST Listing Manual have been complied with. The external auditors have also confirmed their independence.
<b>Communication with Shareholders</b>		
Guideline 15.4	(a) Does the Company regularly communicate with shareholders and attend to their questions? How often does the Company meet with institutional and retail investors?	StarHub, through its Investor Relations (IR) team, communicates regularly with shareholders and the investment community through timely, accurate, fair and transparent communication, including regular dialogues and timely disclosures of material and other pertinent information via SGXNET announcements.
	(b) Is this done by a dedicated investor relations team (or equivalent)? If not, who performs this role?	Yes, StarHub has a dedicated IR team.
	(c) How does the Company keep shareholders informed of corporate developments, apart from SGXNET announcements and the annual report?	<p>Apart from SGXNET announcements and the annual report, the StarHub IR website at <a href="http://www.starhub.com/ir">www.starhub.com/ir</a>, which is regularly updated, is the main source of information for shareholders. It houses all media releases, financial results, annual reports, SGXNET announcements, presentation materials, archived webcasts and conference calls, as well as other corporate information relating to the Group. Investors may also elect to be notified of any new updates via an email alert service.</p> <p>The CEO and the StarHub IR team also have regular meetings with institutional investors through international road shows and conferences organised by major brokerage firms.</p>
Guideline 15.5	If the Company is not paying any dividends for the financial year, please explain why.	Not applicable. StarHub has been paying dividends on a quarterly basis for FY2018.

## DIRECTORS' PARTICULARS

Directorships in other listed companies and principal commitments, both present and past (held over the last 5 years)			
Director	Age in Year 2019	Present	Past (over the last 5 years from 1 Jan 2014 to 31 Dec 2018)
<b>Steven Terrell Clontz</b>	69	CenturyLink, Inc.* (Director) Commerce Parent, Inc. (Director) Commerce Topco, LLC (Director) Armor Defense Inc. (Director) Virgin Mobile Latin America, Inc. (Director) Cloud9 Technologies, LLC (Director) STT GDC Pte. Ltd. (Director) PSA International Pte Ltd (Director) Singapore Technologies Telemedia Pte Ltd (Advisor)	-
<b>Paul Ma Kah Woh</b>	72	PACC Offshore Services Holdings Ltd* (Director) Mapletree North Asia Commercial Trust Management Ltd (Director) Mapletree Investments Pte Ltd (Director)	Mapletree Logistics Trust Management Ltd (Director)
<b>Nihal Vijaya Devadas Kaviratne CBE</b>	75	DBS Group Holdings Ltd* (Director) Olam International Limited* (Director) GlaxoSmithKline Pharmaceuticals Limited* (Director) DBS Bank Limited (Director) Bain & Company South East Asia / Indonesia (Advisory Board Member) DBS Foundation Ltd. (Director) Caraway Pte. Ltd. (Chairman) McKinsey & Company, Inc. (Member of the Global Corporate Resilience Advisory Council)	SATS Ltd.* (Director) Akzo Nobel India Limited* (Chairman)

\* Listed companies

## DIRECTORS' PARTICULARS

(Cont'd)

Directorships in other listed companies and principal commitments, both present and past (held over the last 5 years)			
Director	Age in Year 2019	Past (over the last 5 years from 1 Jan 2014 to 31 Dec 2018)	
		Present	
<b>Teo Ek Tor</b>	66	PrimeFounders Pte Ltd (Director) PrimePartners Group Pte Ltd (Chairman) PrimePartners Corporate Finance Pte Ltd (Director) Aris PrimePartners Asset Management Pte Ltd (Chairman) WhiteRock Medical Company Pte Ltd (Director) Prime Agri Limited (Director)	-
<b>Stephen Geoffrey Miller</b>	56	TeleChoice International Limited* (Director) Singapore Technologies Telemedia Pte Ltd (President & CEO and Director) Asia Mobile Holdings Pte. Ltd. (Director) STT GDC Pte. Ltd. (Director)	Advanced Info Service Public Company Limited* (Director)
<b>Michelle Lee Guthrie</b>	54	-	Auckland International Airport Limited* (Director) Australian Broadcasting Corporation (Managing Director)
<b>Nayantara Bali</b>	53	ANV Consulting Pte Ltd (Director)	SingX Pte Ltd (Advisor) Procter & Gamble (Vice-President Beauty Care Asia-Pacific)
<b>Ng Shin Ein</b>	45	Yanlord Land Group Limited* (Director) First Resources Limited* (Director) Avara Limited* (Director) Dreamscape Networks Ltd* (Director) Blue Ocean Associates Pte Ltd (Managing Director)	Eu Yan Sang International Ltd* (delisted in 2016) (Director) NTUC Fairprice Cooperative Limited (Director) Sabana Real Estate Investment Management Ltd (Director)

\* Listed companies

Directorships in other listed companies and principal commitments, both present and past (held over the last 5 years)			
Director	Age in Year 2019	Past (over the last 5 years from 1 Jan 2014 to 31 Dec 2018)	
		Present	
<b>Lionel Yeo Hung Tong</b>	47	GrabTaxi Holdings Pte Ltd (CEO Advisor) Raffles Institution (Member, Board of Governors)	Singapore Tourism Board (Chief Executive and Board Member) Mandai Park Holdings Pte. Ltd. (Director) Sentosa Development Corporation (Director) National Healthcare Group Pte Ltd (Director) Urban Redevelopment Authority of Singapore (Board Member)
<b>Lim Ming Seong</b>	72	CSE Global Limited* (Chairman) First Resources Limited* (Chairman) Singapore Technologies Telemedia Pte Ltd (Director) STT Communications Ltd (Director) Amplus Communications Pte Ltd (Director) STT GDC Pte. Ltd. (Director) U Mobile Sdn. Bhd. (Director)	Singapore Technologies Kinetics Pte Ltd (Director)
<b>Nasser Marafih</b>	58	Ooredoo Group (Director and Advisor to Board Chairman)	-
<b>Naoki Wakai</b>	54	NTT Singapore Pte Ltd. (President & CEO)	-

\* Listed companies

## AWARDS AND INDUSTRY HONOURS

### Advertising/ Branding/ Customer Experience/ Marketing

#### 2018 Global Excellence PromaxBDA

- Silver: Clip-Based Program Spot: Sports [FIG World Cup]
- Bronze: Clip-Based Program Spot: Sports [WTA Japan]
- Bronze: Program Spot or Campaign [Golf Campaign]
- Bronze: Sports Program Image Spot [Golf Campaign]

#### 2018 PromaxBDA Asia Awards

- Gold: Best Entertainment Promo  
[VOD Campaign – Entertainment Awaits]
- Gold: Best Promo Not Using Programme Footage  
[VOD Campaign – Entertainment Awaits]
- Gold: Best Out-Of-House Station Image  
[VOD Campaign – Entertainment Awaits]
- Silver: Best Sound Design [StarHub Golf]

#### The Brand Finance Top 100 Singapore Brands Report 2018

- Ranked 9<sup>th</sup> in the list of Singapore's most valuable brand: StarHub
- A 24% YoY growth in brand value saw the company enter the top 10 for the first time

#### HWM+HardwareZone.com Tech Awards 2018

- Best Pay TV Service (Singapore): StarHub TV
- 8<sup>th</sup> consecutive win

#### IAS Hall of Fame Awards 2018

- Three Golds: Best Integrated Media Campaign, Best Use of Content and Best Use of Influencers [The World's Fastest Band]
- Silver: Best Use of Consumer Insights [Grades Before the Grades]

#### Loyalty & Engagement Awards 2018

- Gold: Best Use of Relationship Marketing B2C  
[#LoveNoMatterWhat]
- Bronze: Best Use of Social for Campaign [Jay Chou: The Audition]

#### New York Festivals 2018

- Gold: Art Direction: Promotion/Open & IDs  
[Hub Sports Image Versus Starts Here]
- Gold: Special Visual Effects: Promotion/Open & IDs  
[Hub Sports Image Versus Starts Here]
- Silver: Station/Image Promotion  
[Hub Sports Image Versus Starts Here]
- Silver: Sound Design: Promotion/Open & IDs  
[WTA Japan Open 2017]
- Silver: Sports Program Promotion [WTA Finals Singapore 2017]
- Silver: Interactive Promotion [NSG 2017]
- Bronze: Art Direction: Promotion/Open & IDs  
[WTA Japan Open 2017]

#### Singapore Creative Circle Awards 2018

- Grand Prix: World's Fastest Band
- Gold: Brand Experience & Activation Gongs – Best Use of Digital-Led Brand Experience & Activation [World's Fastest Band]
- Gold: Craft Gongs – Film & Branded Content: Cinematography [World's Fastest Band]
- Gold: Film and Branded Content Gongs – Best Use of Cultural Insights [#LoveNoMatterWhat]
- Gold: Film and Branded Content Gongs – Best Use of Influencers [World's Fastest Band]
- Gold: Mobile & Digital Gongs – Best Use of Social & Messaging Platforms [World's Fastest Band]
- Silver: Craft Gongs – Film & Branded Content: Casting [World's Fastest Band]
- Silver: Mobile And Digital Gongs – Best Use of Online Advertising and Best Integrated Mobile and/or Digital-Led Campaign [World's Fastest Band]
- Bronze: PR Gongs – Best Use of Cultural Insights [#LoveNoMatterWhat]

## Corporate

### ASEAN Capital Markets Forum's ASEAN

#### Corporate Governance Scorecard

- Named one of ASEAN's top 50 public-listed companies for demonstrating excellence in corporate governance

### Equileap's 2018 Gender Equality Global Report and Ranking

- Ranked 1<sup>st</sup> in Asia Pacific
- Ranked 5<sup>th</sup> globally

### The Cybersecurity Awards 2018

- Leader Award: Dr Lim Woo Lip, Vice President of Cyber Security & SmartHub, StarHub
- The awards recognised individuals and organisations for their outstanding achievements and contributions to the cyber security profession and the wider ecosystem

### IR Magazine Awards - South East Asia 2018

- Best overall Investor Relations (small to mid-cap)
- Best in sector: Communications

### The Legal 500 GC Powerlist

#### Southeast Asia: Teams 2018

- StarHub's Legal & Secretariat team identified as one of the most influential and innovative in-house counsel in Southeast Asia

### National Volunteer & Philanthropy Centre's Champions of Good 2018

- One of 60 companies recognised as catalysts of change for corporate giving, for the second year running

### NTUC May Day Awards 2018

- Partner of Labour Movement: StarHub

### People's Association Community Spirit Awards 2018

- Excellence Award for Community Partnership: StarHub
- In recognition of the company's outstanding contributions towards the community

### Singapore Apex Corporate Sustainability Awards 2018

- Sustainable Business winner: StarHub
- The company was conferred the same title in 2016

### Singapore Environment Council's Project:

#### Eco-Office Certification

- 2018 Roll of Honour: StarHub

### StrategicRISK Asia-Pacific Risk Management Awards 2018

- Risk Management New Starter of the Year: Nigel Tay, Team Lead of Enterprise Risk Management and Corporate Planning, StarHub
- The award recognised individuals at the beginning of their career in corporate risk and insurance management, who have contributed to the measurement, management and mitigation of risk at their organisation

## Technology

### NetworkWorld Asia Information Management Awards 2018

- Winner: Data Centre Infrastructure Management

### NetworkWorld Asia Readers' Choice Product Excellence 2018

- Winner: IP Services Infrastructure, for the fourth consecutive year

### OpenSignal's State of Mobile Networks: Singapore (May 2018)

- Fastest 4G and 3G networks: StarHub
- StarHub's average 4G speed score of 51Mbps was three times the global average
- Singapore topped the global 4G speed analysis of 88 countries

### OpenSignal's Mobile Networks Update:

#### Singapore (November 2018)

- Clinched four of seven awards: 4G and 3G download, 4G upload and overall download speeds
- StarHub is the first local telco to cross the 40Mbps threshold in overall download speed measurements

## INVESTOR RELATIONS

In 2018, StarHub underwent manifold changes including a change in our CEO and key members on the management team, the establishment of a cyber security pure-play joint venture with Temasek Holdings, to the implementation of a Strategic Transformation programme.

It was imperative for the Investor Relations (IR) team to maintain even closer ties to the investment community, proactively engaging and informing our stakeholders of our journey, and the impetus behind each initiative.

### Open, Transparent and Credible

We are steadfast in our belief to articulate our story in an honest and forthright manner, both through rosy times and adversity, to engender our investors' continued confidence in the company.

Our IR engagement programme remains comprehensive and dynamic. StarHub conducted more than 210 engagements across a plethora of platforms, including participation in non-deal roadshows, multi-day conferences and one-on-one analyst meetings.

These gave our investors the opportunity to personally interact directly with and gain clarity from our CEO and management on our strategy, financial performance, transformation roadmap, challenges, opportunities and outlook for StarHub.

The engagements also provided a good platform to introduce our Chief of Enterprise Business, Dr Chong Yoke Sin, who shared her insights on the burgeoning opportunities in data analytics, AI and in particular, cyber security. Additionally, we organised a session, hosted by our CFO Dennis Chia, for the sell-side analysts, to explain the implications of adopting the new SFRS(I) accounting standards for FY2018.

### Top of Mind Concerns

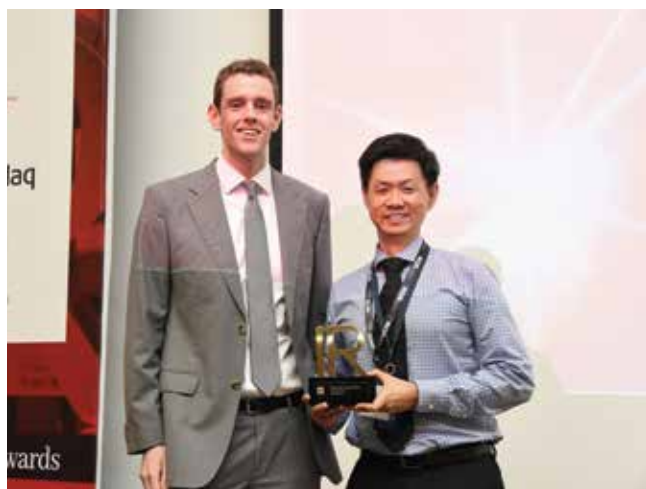
Foremost on the minds of our investors is the impact of Singapore's competitive landscape and evolving technology on StarHub. Without a doubt, change is a certainty, and StarHub has dared to embark on a bold and comprehensive multi-year transformation journey commencing in 2018, to upgrade into a leaner and more agile organisation. This journey sweeps through

simplification of our key product lines – mobile and pay TV, as well as a refresh of our support backbone and processes in Information Services and networks.

At the heart of our transformation is our customers – how to serve them with services they want, in the manner they like, in the most cost-efficient yet effective way. We have thus commenced on taking firm deliberate steps to digitalise our operations to serve a more connected and digital savvy customer base.

Our balance sheet is strong, with headroom for expansion and inorganic growth. In this regard, StarHub has demonstrated our willingness and ability to invest in key areas that add new service capabilities which complement our core business.

Indeed, as the only other operator to have laid its own fibre network to commercial buildings, we remain the only true competition to the incumbent in the enterprise market and have consistently demonstrated high growth rates in the enterprise space.



StarHub won the 'Best Overall IR (Small to Mid-Cap) Award' at the IR Magazine South East Asia 2018 Awards



StarHub hosted a session for the sell-side analysts to explain the implications of adopting the new SFRS(I) accounting standards



**We remain committed to be accessible and highly responsive to all questions from the investment community.**

Another frequently asked question is the sustainability of our dividend payment policy. Over the years, StarHub has been consistent in returning cash to shareholders as soon as practical. In line with past practice, StarHub remains the only local telco that pays dividends quarterly since 2005, with one of the highest yields in 2018.

Our Board continues to prudently consider a multi-year view of our earnings, free cash flow, growth prospects, investment needs and an optimal balance sheet, when deciding on our dividend policy. For FY2019, we have committed to pay 9 cents dividend per share, or at least 80% of our net profit attributable to shareholders.

#### The Way Forward

We remain committed to be accessible and highly responsive to all questions from the investment community.

We are happy to note that our efforts have not gone unnoticed. We are humbled and heartened to receive the "Best Overall Investor Relations (Small to Mid-Cap) Award" and the "Best in Sector: Communications Award" at the IR

Magazine South East Asia 2018 Awards. StarHub was also recognised at the ASEAN Capital Markets Forum's ASEAN Corporate Governance Scorecard, when it was named as one of ASEAN's top 50 public-listed companies for demonstrating excellence in corporate governance.

#### Maintaining Confidence

StarHub is a well-run company - overseen by a Board that upholds corporate governance excellence, managed by an experienced senior leadership team that is well regarded by the industry, and supported by a team of committed StarHubbers.

We are ahead of the curve in our sustainability practices, broadening our efforts to reduce our impact on the environment and caring for our wider community through our various philanthropy and outreach programmes.

Our strategic transformative programme reflects a proactive Board and Management team and manifests the challenger spirit to take on calculated risks in new ventures, whilst balancing pragmatism and fiscal responsibility.

#### IR Calendar 2018

1Q	2Q	3Q	4Q
<ul style="list-style-type: none"> <li>- FY2017 results announcement</li> <li>- Singapore Investor Roadshows</li> <li>- HSBS ASEAN Conference (Singapore)</li> <li>- CLSA ASEAN Forum (Bangkok)</li> <li>- Credit Suisse Asian Investment Conference (Hong Kong)</li> <li>- Maybank Kim Eng Invest ASEAN (Singapore)</li> </ul>	<ul style="list-style-type: none"> <li>- 1Q2018 results announcement</li> <li>- Singapore Investor Roadshows</li> <li>- BNP Paribas APAC TMT Conference (Hong Kong)</li> <li>- dbAccess Asia Conference (Singapore)</li> <li>- Citi ASEAN C-Suite Conference (Singapore)</li> <li>- SFRS(I) briefing session</li> </ul>	<ul style="list-style-type: none"> <li>- 2Q2018 results announcement</li> <li>- Singapore Investor Roadshows</li> <li>- "Meet new CEO" Analysts Luncheon (Singapore)</li> <li>- SGX-Maybank Kim Eng Conference (Kuala Lumpur)</li> <li>- Formation of Ensign InfoSecurity Analysts Briefing (Singapore)</li> <li>- CLSA Investors' Forum (Hong Kong)</li> </ul>	<ul style="list-style-type: none"> <li>- 3Q2018 results announcement</li> <li>- Singapore Investor Roadshows</li> <li>- Morgan Stanley APAC Summit (Singapore)</li> </ul>

# RISK MANAGEMENT

## Our Approach to Enterprise Risk Management

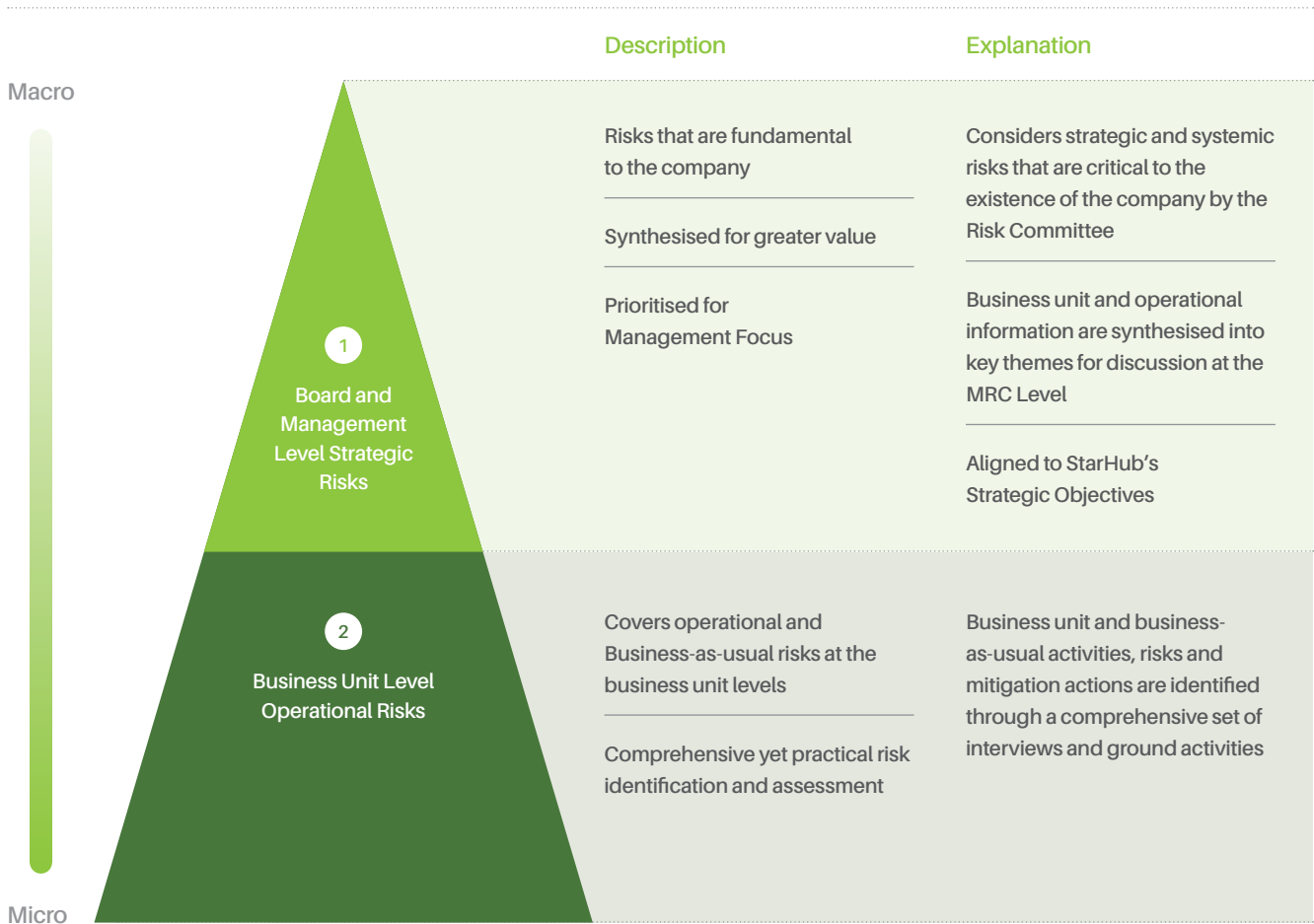
The StarHub Group’s Enterprise Risk Management (ERM) program is centred on being inclusive, multi-disciplinary and focuses on risks and opportunities that are pertinent to our business activities that are aligned to our company’s strategic objectives. The Group seeks to embed risk management in its decision-making processes and key business activities at all levels and adopts a comprehensive and practical approach to mitigating our risks.

## StarHub’s Enterprise Risk Management Framework

Through our Enterprise Risk Management framework, we seek to:

- Achieve an accurate, comprehensive understanding of StarHub’s key risks and opportunities through a top-down and bottom-up approach to identifying and mitigating our risks;
- Identify and prioritise key risks and opportunities which are aligned to our business activities and strategic objectives;
- Promote a culture of risk management which entails awareness, accountability and ownership of risk and risk mitigation;
- Maintain consistent oversight of StarHub’s Top Risks at the Board and Management Levels.

These are illustrated in the diagram below:



## StarHub's Top Risks

To improve risk management and mitigation, StarHub has identified Top Risks for tracking and monitoring. These risks are aligned with the company's strategic priorities, and were identified and prioritised in consultation with the Board Risk Committee and Management Risk Committee (MRC). They are also supported by bottom-up risk assessments conducted by the respective business unit managers who are responsible for execution and oversight.

Key risks are also subject to in-depth discussions at quarterly Management Risk Committee Meetings and bi-annual Board Risk Committee Meetings.

StarHub's Risk Management universe can be categorised in the table below:

Key Risk	Risk Description	Mitigation
<b>Customer Experience</b>	StarHub continues to face challenges in retaining and attracting customers in the telecommunications, media and technology space as consumers have rising expectations of network capacity, coverage speeds, superior customer service and overall value for money.	<p>StarHub's focus is to be a leader in providing a superior customer experience across all service lines.</p> <ul style="list-style-type: none"> <li>To help gauge StarHub's performance across customer touch points, StarHub adopts the Net Promoter Score (NPS) metric to measure satisfaction across a customer's journey.</li> <li>StarHub clocked Singapore's fastest 4G and 3G speeds according to OpenSignal Speed Awards 2018, ensuring our commitment to customers' needs and exceeding their expectations.</li> <li>StarHub utilises data analytics to gain insights and to better understand customer profiles, needs and behaviours. Through these insights, StarHub conducts targeted marketing and promotional activities to reward loyal customers and ensures that its offerings exceed customer needs and expectations.</li> </ul>
<b>Trusted Provider</b>	<p>StarHub needs to ensure availability and resilience of its network infrastructure and systems.</p> <p>Additionally, as custodians of customer data, StarHub needs to ensure adequate and effective data privacy and security measures are in place.</p>	<ul style="list-style-type: none"> <li>StarHub has policies, guidelines and procedures in place to ensure that network infrastructure and information systems are up-to-date, reliable and secure.</li> <li>StarHub ensures strict compliance with Infocomm Media Development Authority (IMDA) Resiliency Codes of Practices and is subjected to rigorous independent external audits on its network infrastructure. StarHub is also compliant to ISO 22301 - Business Continuity Management System.</li> <li>StarHub has a centralised Personal Data Protection Office with defined Personal Data and Protection procedures and guidelines to ensure strict compliance with legislations from the Singapore Personal Data Protection Act and to mitigate breach of data and privacy risks.</li> </ul>

## RISK MANAGEMENT

(Cont'd)

Key Risk	Risk Description	Mitigation
<b>Growth in new and adjacent businesses</b>	<p>The increasingly saturated telecommunications market has seen a need for StarHub to venture out into new business areas to remain relevant and competitive. Such initiatives are challenged by crowded markets, competition from other potential investors, legal and regulatory restrictions, other socio-political factors.</p> <p>With the acquisition of new businesses, StarHub faces the challenge of identifying suitable targets, integrating newly acquired businesses into our operations, and generating synergies from these acquisitions.</p>	<ul style="list-style-type: none"> <li>StarHub has ventured into new areas such as cyber security, data analytics, Over-The-Top (OTT) and ICT managed services to generate alternative sources of revenue. For example, StarHub's SmartHub Analytics-as-a-Service offering enables businesses to leverage big data analytics to gain valuable customer insights for better decision-making.</li> <li>StarHub is constantly on the lookout for new investment opportunities to augment its existing business and to find new sources of revenue. Recently, we have formed a new JVCo named Ensign InfoSecurity, by the merger of StarHub's Cyber Security Centre of Excellence, with our subsidiary, Accel Systems &amp; Technologies together with Certis' Cyber Security arm, Quann.</li> <li>To mitigate risks associated with the acquisition of businesses, StarHub has implemented systematic processes in the evaluation and decision-making of investment leads. These are augmented with clear post-integration plans, with business and corporate involvement.</li> </ul>
<b>Increasing Competition and technological disruption</b>	<p>StarHub operates in a highly competitive environment with the entrance of a 4th Operator, and multiple Mobile Virtual Network Operators in the Mobile Network Operator space and OTT providers in the media distribution space.</p>	<p>StarHub differentiates itself through superior network performance, providing innovative products, solutions and enterprise offerings that protect and enable organisations with cyber security solutions and digital telco-centric technologies.</p> <ul style="list-style-type: none"> <li>StarHub has recently completed the first outdoor pilot of 5G New Radio on the 3.5GHz frequency band in Singapore in partnership with Nokia. The over-the-air pilot with third party devices showcased the capabilities of a 5G non-standalone network architecture (Nokia 5G radio technology interworking with StarHub's 4G core network) to deliver the speeds, capacity and latency required to support enhanced mobile broadband services.</li> <li>StarHub continues to enhance and refine its enterprise propositions by offering digital solutions such as Analytics-as-a-Service, cloud platforms, cyber security solutions and next-generation connectivity solutions such as connected buildings, connected cars and connected living.</li> </ul>

Key Risk	Risk Description	Mitigation
<b>People and Talent Management</b>	<p>With increasing competition for talent from new entrants in the Telecommunications sector, StarHub continues to face the key risk of attracting and retaining talent.</p> <p>The increased pace of technological disruption, digitisation of business processes and the ventures into new business environments have resulted in the need to attract and retain human talent with the skill sets and capabilities required to drive the business forward.</p>	<ul style="list-style-type: none"> <li>StarHub benchmarks its Human Resource practices by taking part in multi-industry studies such as the Aon Hewitt Best Employee Survey to identify key areas for improvement. Additionally, StarHub has its own internal employee experience surveys with follow-up focus group discussions to better understand and address employee concerns.</li> <li>StarHub continues to place strong emphasis on attracting, hiring and retaining talent with competitive remuneration packages, recognition and award and talent development programs.</li> <li>StarHub has a defined learning and development roadmap for its employees. Employees are encouraged to take charge of their own development by enrolling in personal development courses conducted by internal and external training providers, aligned with their own development roadmap.</li> <li>StarHub has a robust succession plan in place to ensure leadership continuity and the transfer of necessary knowledge and information.</li> </ul>
<b>Cyber security threats to StarHub's Critical Information Infrastructure</b>	<p>As owners of Critical Information Infrastructure (CII), StarHub is exposed to the spectrum of cyber security-related threats prevalent in the digital era.</p> <p>A cyber incident on StarHub's Critical Information Infrastructure could potentially cause:</p> <ul style="list-style-type: none"> <li>▶ Disruptions to StarHub's network;</li> <li>▶ Interruptions to services provided to customers;</li> <li>▶ Leakage of sensitive and/or confidential information;</li> <li>▶ Significant regulatory fines and penalties.</li> </ul>	<ul style="list-style-type: none"> <li>StarHub has implemented security policies, procedures and systems based on international standards such as the ISO 27001, and has measures in place to comply with regulations such as the CyberSecurity Act 2018. We will continue to benchmark ourselves against relevant frameworks to minimise the risk of security incidents.</li> <li>StarHub regularly conducts rigorous penetration testing and vulnerability assessments on its networks and systems to ensure that vulnerabilities detected and resolved in a timely and effective manner.</li> <li>StarHub has defined business continuity management procedures and disaster recovery plans and conducts regular crisis exercises to ensure operational readiness in the event of a disruption.</li> </ul>
<b>Evolving regulatory and legal landscapes</b>	<p>StarHub's business is subjected to the fast-moving regulatory landscape that reflects the dynamic nature of the telecommunications industry. Apart from complying with prevailing legislations and regulatory requirements, radical regulatory and legislative changes may result in a significant impact to StarHub's business.</p>	<ul style="list-style-type: none"> <li>StarHub's regulatory team reviews regulatory requirements on a consistent basis and proactively engages IMDA where necessary.</li> <li>StarHub's regulatory team has regular engagements with internal business units to provide advice on IMDA requirements and to monitor compliance with existing obligations.</li> </ul>

## GROUP FINANCIAL REVIEW

### 1.1 Revenue

	Year ended 31 December					
	2018 \$m	2018 %	2017 \$m	2017 %	Incr/(Decr) \$m	%
Mobile revenue	<b>824.5</b>	34.9	897.7	37.2	(73.1)	(8.1)
Pay TV revenue	<b>311.3</b>	13.2	353.5	14.7	(42.2)	(11.9)
Broadband revenue	<b>185.8</b>	7.9	186.8	7.7	(1.0)	(0.5)
Enterprise Fixed revenue	<b>510.8</b>	21.6	440.5	18.3	70.3	16.0
Total service revenue	<b>1,832.4</b>	77.6	1,878.5	77.9	(46.1)	(2.5)
Sales of equipment	<b>529.6</b>	22.4	532.2	22.1	(2.7)	(0.5)
Total	<b>2,362.0</b>	100.0	2,410.7	100.0	(48.7)	(2.0)

Numbers may not add up due to rounding.

The Group's total revenue of S\$2,362.0 million was S\$48.7 million or 2.0% lower year-on-year (YoY), mainly due to lower revenue from Mobile, Pay TV, Broadband and Sales of equipment, partially offset by higher revenue from Enterprise Fixed services.

Mobile service revenue was lower by S\$73.1 million or 8.1% YoY due to lower IDD, voice and data usage revenue, lower subscription revenue due to higher phone subsidies given to customers, and a higher mix of SIM-Only plans. This was partially mitigated by higher revenue from roaming and mobile value-added services (VAS). 4Q2018 also included higher provisions for customer loyalty programmes as the redemption rates are expected to increase and a catch-up adjustment for contract asset provision as a result of the higher subsidies given. Excluding the one-time provisions and catch-up adjustment, Mobile service revenue would have decreased by S\$55.1 million or 6.2% in 2018.

Pay TV service revenue decreased YoY by S\$42.2 million or 11.9%, mainly due to lower subscriber base.

Broadband service revenue of S\$185.8 million in 2018 remained stable compared to last year.

Enterprise Fixed service revenue grew S\$70.3 million or 16.0% in 2018, mainly due to the consolidation of Ensign and D'Crypt.

Revenue from sales of equipment decreased YoY by 0.5% in 2018, primarily due to lower handset revenue, partially offset by the increase in sales of smart home equipment.

## 1.2 Operating Expenses

	Year ended 31 December			
	2018 \$m	2017 \$m	Incr/(Decr) \$m	%
Cost of sales	<b>1,075.0</b>	1,040.9	34.1	3.3
Other operating expenses	<b>1,014.7</b>	1,011.8	3.0	0.3
Total	<b>2,089.7</b>	2,052.7	37.0	1.8

Numbers may not add up due to rounding.

The Group's operating expenses in 2018 was higher by S\$37.0 million or 1.8% YoY. The increase was due to higher cost of sales and other operating expenses.

As a percentage of revenue, total operating expenses for 2018 were at 88.5%, compared to 85.1% last year

A breakdown of total operating expenses is as follows:

### (i) Cost of sales

	Year ended 31 December			
	2018 \$m	2017 \$m	Incr/(Decr) \$m	%
Cost of equipment sold	<b>483.2</b>	475.6	7.6	1.6
Cost of services	<b>482.3</b>	464.4	17.8	3.8
Traffic expenses	<b>109.5</b>	100.9	8.6	8.5
Total	<b>1,075.0</b>	1,040.9	34.1	3.3

Numbers may not add up due to rounding.

Cost of sales increased by S\$34.1 million or 3.3% YoY in 2018, mainly due to higher cost of equipment sold, cost of services and traffic expenses.

The increase of S\$7.6 million or 1.6% in 2018 for cost of equipment sold was primarily due to higher sales of smart home equipment when compared to last year.

Cost of services was higher by S\$17.8 million or 3.8% in 2018 due to higher Managed services cost, post-paid cost, Ensign and D'Crypt cost, partially offset by lower TV content cost.

The increase of 8.5% for traffic expenses in 2018 was mainly due to higher roaming cost in line with higher roaming revenue, partially offset by lower domestic and international traffic volume.



## GROUP FINANCIAL REVIEW

(Cont'd)

## (ii) Other operating expenses

	Year ended 31 December			
	2018 \$m	2017 \$m	Incr/(Decr) \$m	%
Staff costs	275.9	282.5	(6.6)	(2.3)
Operating leases	117.0	129.2	(12.2)	(9.4)
Marketing and promotions	102.2	95.8	6.3	6.6
Loss allowances of Trade receivables	13.9	17.4	(3.4)	(19.7)
Repairs and maintenance	101.2	99.1	2.1	2.1
Other expenses	110.7	107.4	3.4	3.1
Subtotal	721.0	731.4	(10.4)	(1.4)
Depreciation and amortisation	291.2	280.4	10.8	3.8
Impairment loss on property, plant and equipment	2.6	-	(2.6)	nm
Total	1,014.7	1,011.8	3.0	0.3

nm - not meaningful

Numbers may not add up due to rounding.

The Group's other operating expenses was higher by S\$3.0 million YoY in 2018. As a percentage of total revenue, other operating expenses were 43.0% in 2018, compared to 42.0% last year.

Analysis of major variances in other operating expenses is provided below:

**Staff costs**

Staff costs expense was 2.3% lower YoY in 2018. Staff costs expense for 2017 was higher due to provisions for certain staff benefits in order to rationalise and retain talent in recognition of the business challenges and operating conditions. Excluding this one-time provision and reversal of prior year accruals no longer required in 2017, staff costs expense would have been higher by 4.7% YoY in 2018, mainly due to consolidation of Ensign and D'Crypt staff costs, partially offset by lower staff costs from existing telco operations.

**Operating leases**

Operating leases in 2018 were lower by 9.4% YoY due to lower duct lease rental.

**Marketing and promotions**

Marketing and promotions expenses was higher by S\$6.3 million YoY in 2018, mainly attributable to higher promotional activities in line with new product launches.

**Loss allowances of Trade receivables**

Loss allowances of Trade receivables was lower by S\$3.4 million YoY in 2018, mainly driven by improved collections.

**Repairs and maintenance**

Repairs and maintenance expense was 2.1% higher YoY in 2018, mainly due to provision for cable faults and higher IT maintenance cost.

**Other expenses**

Other expenses were higher by S\$3.4 million YoY in 2018 primarily due to foreign exchange loss of S\$7.6 million compared to a foreign exchange gain of S\$0.1 million last year coupled with higher accrual for licence fees, partially offset by lower professional fees and inventories written down.

**Depreciation and amortisation**

Depreciation and amortisation expense was higher by S\$10.8 million YoY in 2018 mainly due to the addition of 4G spectrum rights in 2Q2017 and the higher additions of intangible assets in 2018.

### 1.3 Profitability

	Year ended 31 December			
	2018 \$m	2017 \$m	Incr/(Decr) \$m	%
Total revenue	<b>2,362.0</b>	2,410.7	(48.7)	(2.0)
Operating expenses	<b>(2,089.7)</b>	(2,052.7)	37.0	1.8
Other income	<b>1.2</b>	4.4	(3.3)	(73.7)
Profit from operations	<b>273.5</b>	362.4	(89.0)	(24.6)
Finance income	<b>3.2</b>	3.7	(0.6)	(14.8)
Finance expenses	<b>(30.2)</b>	(29.9)	0.3	1.2
	<b>246.4</b>	336.3	(89.9)	(26.7)
Non-operating loss	-	(0.7)	0.7	100.0
Share of loss of associate, net of tax	<b>(1.0)</b>	(2.2)	(1.2)	(55.2)
Profit before taxation	<b>245.5</b>	333.3	(87.9)	(26.4)
Taxation	<b>(44.9)</b>	(59.8)	(14.9)	(25.0)
Profit for the year	<b>200.6</b>	273.5	(72.9)	(26.7)
Service EBITDA	<b>520.8</b>	586.1	(65.3)	(11.1)
Service revenue	<b>1,832.4</b>	1,878.5	(46.1)	(2.5)
Service EBITDA as a % of service revenue	<b>28.4%</b>	31.2%	-2.8% pts	

Numbers may not add up due to rounding.

Profit from operations of S\$273.5 million was S\$89.0 million lower YoY in 2018, mainly due to lower revenue from Mobile, Pay TV, Broadband and Sales of equipment coupled with increase in operating expenses (mainly due to higher cost of sales and depreciation).

In 2018, service EBITDA of S\$520.8 million was 11.1% lower YoY. Correspondingly, service EBITDA margin of 28.4% was 2.8% points lower YoY.

Finance income and finance expenses were relatively stable compared to last year.

Share of loss from associate decreased in 2018 when compared to last year.

As a result of lower profit from operations, profit before taxation of S\$245.5 million in 2018 was lower by S\$87.9 million YoY. Correspondingly, taxation expenses were lower at S\$44.9 million.

## GROUP FINANCIAL REVIEW

(Cont'd)

### 1.4 Liquidity and Resources

	Year ended 31 December	
	2018 \$m	2017 \$m
Profit before taxation	245.5	333.3
Non-cash items & net finance expenses adjustments	322.8	310.4
Changes in operating assets and liabilities	(81.4)	(61.2)
Income tax paid	(68.6)	(65.3)
Net cash from operating activities	418.3	517.2
Net cash used in investing activities	(334.7)	(327.1)
Net cash used in financing activities	(263.4)	(130.1)
Net change in cash and cash equivalents	(179.8)	60.0
Cash and cash equivalents at beginning of the year	345.2	285.2
Cash and cash equivalents at end of the year	165.4	345.2
<b>Free Cash Flow <sup>(1)</sup></b>	<b>145.5</b>	221.3

(1) Free Cash Flow refers to net cash from operating activities less purchase of property, plant and equipment and intangible assets in the cash flow statement.

The Group's net cash from operating activities of S\$418.3 million was S\$98.9 million lower YoY. The decrease was primarily due to lower cash flow from operations, higher working capital needs and higher income tax paid.

In 2018, the negative working capital changes of S\$81.4 million was primarily attributed to higher trade receivables and lower trade and other payables, partially offset by lower contract assets and net balances due from related parties.

Net cash flow used in investing activities of S\$334.7 million was S\$7.6 million higher YoY mainly due to investments made in January 2018 for D'Crypt as well as Ensign in October 2018, partially offset by lower CAPEX payments and investment made in July 2017 for mm2.

The Group's CAPEX payments amounted to S\$272.8 million in 2018, representing 11.5% of total revenue. CAPEX payments were lower YoY by S\$23.1 million in 2018. 1Q2018 CAPEX payments included S\$31.6 million of payment for a building in Tai Seng for Nucleus Connect. Excluding the purchase of this building, CAPEX payments would have amounted to S\$241.2 million or 10.2% of total revenue in 2018.

Free cash flow was lower by S\$75.8 million YoY as a result of lower cash from operating activities, partially offset by lower CAPEX payments.

Net cash used in financing activities was higher YoY at S\$263.4 million as a short-term loan of S\$50.0 million was drawn down in 4Q2018 compared to higher long-term funds raised in the same period last year.

The resulting net cash generated was a deficit of S\$179.8 million in 2018, leading to a lower cash and cash equivalents balance (excluding restricted cash) of S\$165.4 million.

## 1.5 Financial position

	As at 31 December	
	2018 \$m	2017 \$m
Non-current assets	<b>1,704.7</b>	1,601.8
Current assets	<b>930.8</b>	1,034.2
Less: Current liabilities	<b>871.8</b>	1,013.9
Less: Non-current liabilities	<b>1,175.7</b>	1,016.2
Net assets	<b>588.0</b>	605.9
Shareholders' equity	<b>588.0</b>	605.9
Attributable to owners of the Company	<b>528.1</b>	601.5
Non-controlling interests	<b>59.9</b>	4.4

As of 31 December 2018, the Group's total non-current assets of S\$1,704.7 million was S\$102.9 million higher when compared to S\$1,601.8 million as of 31 December 2017. The increase was primarily due to higher property, plant and equipment and intangible assets. This was partially offset by the decrease in contract assets and the Group's investment in mm2.

As a result of the new SFRS(I) 9 Financial Instruments which is applicable from 1 January 2018, the Group's investment in mm2 has been reclassified from available-for-sale financial assets in 2017 to investment in fair value through other comprehensive income in 2018.

Total current assets as of 31 December 2018 decreased by S\$103.4 million to S\$930.8 million mainly from a decrease in cash and cash equivalents and contract assets. This was partially offset by the increase in trade receivables.

Total current liabilities decreased by S\$142.1 million to S\$871.8 million as of 31 December 2018. This is due to a decrease in trade and other payables. In addition, some bank borrowings were refinanced resulting in the reclassification of the current portion of the bank borrowings from current liabilities to non-current liabilities.

The increase in total non-current liabilities by S\$159.5 million to S\$1,175.7 million as of 31 December 2018 was primarily due to the reclassification of the bank borrowings as mentioned above, higher other payables and contract liabilities, partially offset by lower deferred tax liabilities.

The Group's shareholders' equity decreased by S\$73.4 million to S\$528.1 million as of 31 December 2018 (excluding non-controlling interests of S\$59.9 million). The decrease was mainly due to lower retained profits.

The non-controlling interests represent the balance of 35.0% equity in D'Crypt, in addition to 40% effective economic interest in Ensign. In 2018, the Group paid out S\$7.9 million for perpetual capital securities distribution.

### Gearing

The Group's unsecured borrowings was higher by S\$51.0 million at S\$1,028.5 million as of 31 December 2018.

On account of a lower cash and cash equivalent balance, net debt was S\$230.2 million higher at S\$862.5 million as of 31 December 2018 compared to S\$632.3 million as of 31 December 2017. As a ratio of the past 12 months' EBITDA, the Group's net debt was higher at 1.52 times as of 31 December 2018, up from 0.98 times as of 31 December 2017.