

# CORPORATE GOVERNANCE





# SES SHAREHOLDERS<sup>1</sup>

SES Shareholders <sup>1</sup>	Number of shares	% Voting shareholding	% Economic participation
<b>A Shares</b>			
Sofina Group	10,000,000	1.74%	2.17%
Nouvelle Santander Telecommunications S.A.	8,000,000	1.39%	1.74%
Luxempart Invest S.à.r.l.	5,000,000	0.87%	1.09%
Other shareholders	5,059,982	0.88%	1.10%
FDRs (free float)	355,397,618	61.79%	77.24%
<b>Total A Shares</b>	<b>383,457,600</b>	<b>66.67%<sup>3</sup></b>	<b>83.33%<sup>3</sup></b>
<b>B Shares</b>			
BCEE	62,572,893	10.88%	5.44%
SNCI	62,565,085	10.88%	5.44%
Etat du Grand-Duché de Luxembourg	66,590,822	11.58%	5.79%
<b>Total B Shares<sup>2</sup></b>	<b>191,728,800</b>	<b>33.33%<sup>3</sup></b>	<b>16.67%</b>
<b>Total Shares (Actual)</b>	<b>575,186,400</b>		
Total Shares (Economic)	460,149,120		

<sup>1</sup> Significant shareholdings as of 31 December 2017.

<sup>2</sup> A B-share carries 40% of the economic rights of A-share.

<sup>3</sup> All figures have been rounded up to the second decimal, which may result in a rounding difference of the total percentage for A and B-shares.

# CHAIRMAN'S REPORT ON CORPORATE GOVERNANCE AND INTERNAL CONTROL PROCEDURES

## INTRODUCTION

SES has been listed on the Luxembourg Stock Exchange since 1998 and on Euronext Paris since 2004. The company follows the 'Ten Principles of Corporate Governance' adopted by the Luxembourg Stock Exchange (its home market), as revised in 2013, a copy of which can be found at [www.bourse.lu/corporate-governance](http://www.bourse.lu/corporate-governance). SES also complies with the governance rules for companies listed in Paris, where the majority of the trading in SES FDRs takes place. In the instance of conflicting compliance requirements, for example concerning the publication of the individual remuneration of the members of its Executive Committee and its Board members, SES follows the rules of the home market by reporting the aggregate amount of the remuneration of the members of the Executive Committee, with the fixed and the variable components of the benefits being separately identified.

SES meets all the recommendations made by the 'Ten Principles' except with regard to Recommendation 3.9, which states that the committees created by the Board should only have advisory powers. The SES Board has delegated some decision-making powers to the Remuneration Committee. For the full details of these powers, see the charter of the Remuneration Committee on the SES website ([www.ses.com](http://www.ses.com)). After each meeting of the Remuneration Committee, its Chairman reports to the Board about the latest Remuneration Committee discussions and decisions.

The company is continuously increasing the flow of information to its shareholders via the corporate governance section of its website, and communicates with its shareholders through the dedicated e-mail address: [shareholders@ses.com](mailto:shareholders@ses.com). In line with Luxembourg law, the company allows shareholders to receive all corporate documentation, including the documents for shareholder meetings, in electronic format.

In this context, the SES website contains a regularly updated stream of information, such as the latest version of the company's

main governance documents, including the articles of incorporation, the corporate governance charter (including the charters of the various committees set up by the Board) and the separate sections on the composition and the mission of the Board, the Board's committees and the Executive Committee. This section also contains the SES Code of Conduct and Ethics, the SES Dealing Code, the financial calendar and any other information that may be of interest to the company's shareholders.

## ORGANISATION PRINCIPLES

Created on 16 March 2001 under the name of SES GLOBAL, SES is incorporated in Luxembourg. On 9 November 2001, SES became the parent company of SES ASTRA, originally created in 1985. A copy of SES's articles of incorporation, in its latest version, is available in the corporate governance section of the company's website.

## THE ANNUAL GENERAL MEETING OF SHAREHOLDERS

Under Luxembourg company law, the company's Annual and/or Extraordinary General Meetings represent the entire body of shareholders of the company. They have the widest powers, and resolutions passed at such meetings are binding upon all shareholders, whether absent, abstaining from voting or voting against the resolutions.

The meetings are presided over by the Chairman of the Board or, in his absence, by one of the Vice Chairmen of the Board or, in their absence, by any other person appointed by the meeting. Any shareholder who is recorded in the company's shareholder register 14 business days before the meeting is authorised to attend and to vote at the meeting. A shareholder may act at any meeting by appointing a proxy (who does not need to be a shareholder).

The company has issued two classes of shares: A-shares and B-shares.

The State of Luxembourg holds a direct 11.58% voting interest in the company and

two indirect interests, both of 10.88%, through two State owned banks, Banque et Caisse d'Épargne de l'État and Société Nationale de Crédit et d'Investissement. These shares constitute the company's B-shares.

Although they constitute separate classes of shares, A- and B-shares have the same rights except that the B-shares entitle their holders to only 40% of the dividend, or, in case the company is dissolved, to 40% of the net liquidation proceeds paid to A-shareholders. B-shares are not freely traded. Each share, whether A- or B-share, is entitled to one vote. In accordance with the company's articles of incorporation, no A-shareholder may hold, directly or indirectly, more than 20%, 33% or 50% of the company's shares unless it has obtained prior approval from a meeting of the shareholders. Such limit is calculated by taking into account the shares of all classes held by an A-shareholder.

A shareholder or a potential shareholder who plans to acquire by whatever means, directly or indirectly, more than 20%, 33% or 50% of the shares of the company must inform the Chairman of the Board of such intention. The Chairman will then inform the government of Luxembourg of the planned acquisition, which may only be opposed by the government within three months of receiving such information, should it determine that such an acquisition is against the general public interest.

In case of no opposition from the government of Luxembourg, the Board shall convene an extraordinary meeting of shareholders, which may decide at a majority as provided for in article 67-1 of the law of 10 August 1915, as amended, regarding commercial companies, to authorise the shareholder or potential shareholder to acquire more than 20%, 33% or 50% of the shares.

In accordance with article 8 of the Luxembourg law of January 11, 2008, as subsequently amended, any shareholder or FDR holder acquiring or disposing of shares or FDRs, respectively, is required to inform the company and the Commission de Surveillance du Secteur

Financier within four business days of the proportion of voting rights held as a result of such acquisition or disposal where that proportion reaches, exceeds or falls below the thresholds of 5%, 10%, 15%, 20%, 25%, 33.33%, 50% or 66.66%.

The annual general meeting is held on the first Thursday in April. Each registered shareholder will receive written notice of the annual general meeting, including the time of the meeting and the agenda, at least 30 days prior to the meeting. Holders of the company's FDRs will be represented at the meeting by Banque et Caisse d'Epargne de l'Etat acting as fiduciary. Each FDR will represent one A-share. If a holder of FDRs wishes to attend the annual general meeting of shareholders in person, that shareholder will need to convert at least one FDR into an A share. In order to facilitate the attendance of the meeting by FDR holders, the company will pay the applicable charge for a conversion of up to 10,000 FDRs for a short period prior to the annual general meeting.

Notice of the meeting and of the proposed agenda will also be published in the international press. The fiduciary will circulate the draft resolutions to both international clearing systems, Clearstream and Euroclear, allowing FDR holders to give their voting instructions to the fiduciary in time for the meeting. At the same time, the draft resolutions will be made available on the company's website. Unless the fiduciary has received specific instructions from the FDR holder, the fiduciary will vote in favour of the proposals submitted by the Board. One or more shareholders owning together at least 5% of the shares of SES have the right to add items on the agenda of the AGM and may deposit draft resolutions regarding items listed in the agenda or proposed to be added to the agenda. This request will need to be made in writing (via mail or e-mail) and received no later than the twenty-second day preceding the AGM and will need to include a justification or draft resolution to be adopted at the AGM. The written request must include a contact address to which the company can confirm receipt within 48 hours from the receipt of the request.

No later than fifteen days preceding the AGM, the company will then publish a revised agenda.

The meeting may deliberate validly only if at least half of the A-shares and at least half of the B-shares are represented. In the event that the required quorum is not

reached, the meeting will be reconvened in accordance with the form prescribed by the articles of incorporation. It may then validly deliberate without consideration of the number of represented shares.

The proceedings are mostly held in French, but an English translation is provided by the company. Interventions in English will be translated into French. A French version of the AGM minutes and the results of the shareholders' votes will be published on the SES website within 15 days after the annual general meeting.

With the exception of the procedure described above regarding whenever a shareholder intends to hold more than 20%, 33% or 50%, all the resolutions of the meeting are adopted by a simple majority vote except if otherwise provided for by Luxembourg company law. The annual general meeting held on 6 April 2017 was attended by 98.86% of the company's shareholders, not including the 6,189,148 FDRs held by the company.

During the 2017 annual general meeting, the shareholders used for the first time an electronic voting system. They approved the 2016 financial results and the allocation of the 2016 profits, granted discharge to the external auditor and to the directors, re-elected PwC as the company's external auditor for another year, granted an authorisation to SES to buy back its own shares and approved the new equity based compensation plan principles. The shareholders also approved the directors' fees, which remained unchanged in comparison to 2016. Finally, shareholders elected six Directors for a term of three years with a majority of at least 96.964%

All of the Board's other proposals were carried by a majority of at least 84.791% of the votes cast. In accordance with article 67-1 of the Luxembourg company law, abstentions are not considered when determining whether a resolution has been passed or not. The detailed results of the shareholders' votes are available in the corporate governance section of the company's website.

## **THE BOARD OF DIRECTORS AND ITS COMMITTEES**

### **MISSION**

The Board of Directors is responsible for defining the company's strategic objectives as well as its overall corporate plan. The Board approves, upon proposal from the Executive Committee, the annual consolidated accounts

of the company and the appropriation of results, the group's medium-term business plan, the consolidated annual budget of the company and the management report to be submitted to the meeting of shareholders. It also approves major investments and is responsible vis-à-vis shareholders and third parties for the management of the company, which it delegates to the Executive Committee in accordance with the company's internal regulations.

### **COMPOSITION**

At the end of December 2017, the Board of SES was composed of 17 non-executive directors, four of them female. In accordance with the company's articles of association, two-thirds of the Board members represent holders of A-shares and one-third of the Board members represent holders of B-shares. The mandates of the current directors will expire at the annual general meeting of shareholders in April 2018, 2019 and 2020, respectively. Mr Romain Bausch, President and CEO until 3 April 2014, is the Chairman of the Board of Directors. He is assisted by two Vice Chairmen, Messrs François Tesch and Jean-Paul Zens, each one elected on the basis of proposals submitted by directors representing A-shareholders and B-shareholders, respectively. Their mandates as Chairman and Vice Chairman are annual mandates.

In the event of a vacancy on the Board, the remaining directors may, upon a proposal from the Nomination Committee and on a temporary basis, fill such a vacancy by a majority vote. In this case, the next annual general meeting of shareholders will definitively elect the new director, who will complete the term of the director whose seat became vacant.

In accordance with internal regulations adopted by the Board, at least one-third of the Board members must be independent directors. A Board member is considered independent if he or she has no relationship of any kind with the company or management that may impact his or her judgment.

Independence for these purposes is defined as:

- (i) not having been a director for more than 12 years;
- (ii) not having been an employee or officer of the company over the previous five years;
- (iii) not having had a material business relationship with the company over the last three years and

(iv) not representing a significant shareholder holding directly or indirectly more than 5% of the voting shares.

Seven of the current Board members are considered independent: Ms Tsega Gebreyes and Katrin Wehr-Seiter, Messrs Marc Beuls, Victor Casier, Conny Kullman, Ramu Potarazu and Kaj-Erik Relander.

Of the ten directors who are not considered independent, five represent a significant shareholder owning more than 5% of the company's shares, four have been a director for more than 12 years and one has had a recent employment relationship with the company.

Mr Pierre Margue, Vice President Legal and Corporate Affairs, acts as secretary of the Board of Directors.

## **RULES OF GOVERNANCE**

The Board of Directors meets when required by the company's business, and at least once per quarter. It can only validly deliberate if a majority of the directors are present or represented. The resolutions of the Board are passed by a simple majority of the votes of the voting directors present or represented, not considering abstentions. The Chairman does not have a casting vote. Any material contract that is proposed to be signed by the company or any of its wholly controlled operating subsidiaries with a shareholder owning, directly or indirectly, at least 5% of the shares of the company is subject to a prior authorisation by the Board. In 2017, there were no transactions between the company and a shareholder owning directly or indirectly at least 5% of the company's shares.

## **ACTIVITIES OF THE BOARD OF DIRECTORS IN 2017**

The Board of Directors held seven meetings in 2017, with an average attendance rate of more than 97%. After endorsement by the Audit and Risk Committee, the Board approved the 2016 audited accounts, including the proposed dividend, as well as the results for the first half of 2017.

During the year, the Board approved the updated strategic plan. In this context, the Board reviewed the evolution of the market dynamics and their impact on the two newly created NBUs (Video and Networks) and discussed how differentiated products and solutions can be developed and go-to-market channels will be enhanced through the two NBUs. The Board also approved the business

plan for the period 2017- 2022, which served as the basis for the 2018 budget as approved by the Board in December.

The Board also used its informal pre-Board sessions to develop its knowledge about the industry and its perception by outside investors through several presentations. The Board visited SpaceX and Boeing at the occasion of its June Board meeting that was held in Los Angeles.

During 2017, the Board also decided to launch a new share buyback programme, which was implemented on Euronext Paris through the filing of a 'notice d'information' on 7 April 2017. The 2017 programme was limited to the following two objectives:

- (i) to operate under the framework of a liquidity contract signed with Rothschild, and
- (ii) to meet the company's obligations under its executive share ownership and stock option plans.

Under this programme, the company is authorised to buy back up to 18.5 million A-shares and 9.25 million B-shares at prices between EUR 15 and 35 per A-share and EUR 6 and 14 per B-share.

Finally, the Board approved the investment in O3b mPOWER as well as the launch vehicle for O3b satellites 17-20. In the context of the new operating model, the Board extended the composition of the Executive Committee. It approved updated corporate governance documents as well as changes to the satellite insurance policy. The Board noted updates on the IRRs of recent organic and inorganic investments as well as to the company's risk management report. The Executive Committee regularly informed the Board about the group's activities and financial situation, as well as about the new operating model, including an assessment of the Executive Committee's performance. It noted updates on: (i) 2017 Business Objectives; (ii) financial framework; (iii) corporate social responsibility; (iv) regulatory management strategy; (v) tax framework; (vi) IT operating model; (vii) cyber security; and (viii) investor relations matters.

At each meeting, directors receive a report on on-going matters and the Chairmen of the three committees set up by the Board present a report on the latest developments discussed in these respective committees. In addition, a business report is distributed to the members of the Board on a monthly basis, as well as a monthly Investor Relations report.

As at 31 December 2017, the 17 members of the Board of Directors were:

### **MR ROMAIN BAUSCH**

#### **Chairman of the Board**

Born on 3 July 1953, Mr Bausch became a director on 4 April 2013. Following a career in the Luxembourg civil service (Ministry of Finance) where he occupied key positions in the banking, media and telecommunications sectors including a five-year term as a Director and Vice Chairman of SES. Mr Bausch has been President and CEO of the Company from May 1995 to April 2014. Mr Bausch is the Chairman of the Board of Directors of SES and a Director of SES ASTRA. He is also a member of the Boards of Directors of Aperam, Banque Raiffeisen Société Coopérative, Compagnie Financière La Luxembourgeoise and the Luxembourg Future Fund, as well as a member of the CNFP (Conseil National des Finances Publiques) of Luxembourg. He graduated with a degree in economics (specialisation in business administration) from the University of Nancy. He holds an honorary doctorate from the Sacred Heart University in Luxembourg. He is a member of the Company's Remuneration Committee and of its Nomination Committee.

Mr Bausch is a Luxembourg national. He is not an independent director because of his past employment relationship with SES.

### **MR FRANÇOIS TESCH**

#### **Vice Chairman of the Board**

Born on 16 January 1951, Mr Tesch became a director on 15 April 1999. He is Executive Chairman of Luxempart S.A. He graduated with a degree in economics from the Faculté d'Aix en Provence and holds an M.B.A. from INSEAD (Institut Européen d'Administration des Affaires). He is also Chairman of the Board of Foyer S.A., of Wealins S.A. and of Financière de Tubize S.A., and Vice-Chairman of CapitalatWork Foyer Group. Mr. Tesch is a Vice Chairman of the Board of Directors and a member of the Nomination Committee of SES.

Mr Tesch is a Luxembourg national. He is not an independent director because he has been a director for more than 12 years.

### **MR JEAN-PAUL ZENS**

#### **Vice Chairman of the Board and Chairman of the Nomination Committee**

Born on 8 January 1953, Mr Zens became a director on 7 May 2002. He was elected as a Vice Chairman on the same date. Mr Zens is also a member of the Board of Directors of SES ASTRA and POST Luxembourg.

He is currently Director of the Media and Communications department of the Ministry of State in Luxembourg. He holds a law degree and a degree in psychology and communications sciences from the University of Strasbourg. Mr Zens is the Chairman of the Company's Nomination Committee and a member of its Remuneration Committee.

Mr Zens is a Luxembourg national. He is not an independent director because he represents an important shareholder.

#### **MR SERGE ALLEGREZZA**

Born on 25 October 1959, Mr Allegrezza became a director on 11 February 2010. He is currently the Director General of Statec, the Luxembourg Institute for Statistics and Economic Studies, a post he has held since April 2003. He was Conseiller de Gouvernement 1ère classe at the Ministry of Economics, responsible for internal market policy, and is the Chairman of the Observatory for Competitiveness. He is also the Chairman of the Board of Directors of POST Luxembourg and of the Board of LuxTrust i.n.c and a member of the Conseil Economique et Social. Mr Allegrezza, was a part-time lecturer at the IAE/University of Nancy 2, has a Master in economics and a PhD. in applied economics. Mr Allegrezza is a member of the Audit and Risk Committee of SES.

Mr Allegrezza is a Luxembourg national. He is not an independent director because he represents an important shareholder.

#### **MR MARC BEULS**

##### **Chairman of the Audit and Risk Committee**

Born on 15 September 1956, Mr Beuls became a director on 7 April 2011. He serves as a Member of the Board of Directors at Maris Ltd, a Mauritian holding company investing in frontier markets in Africa, Qaelum NV, Belgium, providing software solutions for quality control of medical imaging and WindGen Power USA Inc., building and operating smart micro grids in Africa. He is the Chairman of American Prepaid Value VAS LLC, USA, developing value added services for the wireless prepaid market. He is the former President and CEO of Millicom International Cellular S.A., a position he held from 1998 to 2009. Prior to joining Millicom in 1992 as Senior Vice President in charge of finance and treasury, Mr Beuls worked for Generale Bank in Belgium, specialising in project and trade financing in emerging markets. Mr Beuls graduated from the Limburg Business School, holding a degree in economics with a major in finance. Mr Beuls is Chairman of the Audit and Risk Committee of SES.

Mr Beuls is a Belgian national. He is an independent director.

#### **MR MARCUS BICKNELL**

Born on 28 February 1948, Mr Bicknell became a director on 6 May 2005. Mr Bicknell is a director of New Media Foundry Ltd. and of Langstaff-Ellis Ltd., both non-listed companies in the United Kingdom. He is a Patron of the Royal Academy of Dramatic Art and winner of the 2017 Parmurelu d'Oru for services to cultural heritage in Bordighera, Italy. From 1986 to 1990, he was Commercial Director of Société Européenne des Satellites (now called SES ASTRA). Mr Bicknell holds an M.A. Honours Degree in physical anthropology from Cambridge University.

Mr Bicknell is a British national. He is not an independent director because he has been a director for more than 12 years.

#### **MR VICTOR CASIER**

Born on 7 May 1974, Mr Casier became a director on 7 April 2016. Mr Victor Casier is a member of the Executive Committee of Sofina S.A. and a board member of various companies within Sofina's portfolio, including Vente-Privée.com, Global Lifting Partners and Spanish investment fund, QMC II. Prior to joining Sofina, Mr Casier worked for Roland Berger Strategy Consultants, Transwide Limited and Banco Urquijo. Mr Casier holds an MBA from the University in Chicago, a Master in Business Engineering (Ingénieur de Gestion) from the Université Catholique de Louvain and a certificate from the INSEAD International Directors Programme (IDP). Mr Casier is a member of the Audit and Risk Committee of SES.

Mr Casier is a Belgian national. He is an independent director.

#### **MR HADELIN DE LIEDEKERKE BEAUFORT**

Born on 29 April 1955, Mr de Liedekerke Beaufort became a director on 17 April 2000. He is currently a director of Santander Telecommunications, a privately held company, as well as a director of other private companies with interests in various fields such as finance, communication and real estate developments. Mr de Liedekerke Beaufort graduated from the Ecole Hôtelière de Lausanne. Mr de Liedekerke Beaufort is a member of the Remuneration Committee of SES.

Mr de Liedekerke Beaufort is a French national. He is not an independent director because he has been a director for more than 12 years.

#### **MRS TSEGA GEBREYES**

Born on 14 December 1969, Mrs Tsega Gebreyes became a director on 4 April 2013. She is the Founding Director of Satya Capital Limited. She served as Chief Business Development and Strategy Officer of Celtel International BV and Senior Advisor to Zain. She was also Founding Partner of the New Africa Opportunity Fund, LLP and has worked with McKinsey and Citicorp. Mrs Gebreyes is a director of Ison Growth, Satya Capital Limited and Sonae. She is a Senior Advisor to TPG Growth. She has a double major in Economics and International Studies from Rhodes College and holds an M.B.A. from Harvard Business School.

Mrs Gebreyes is an Ethiopian national. She is an independent director and a member of the Remuneration Committee and of the Nomination Committee of SES.

#### **MR CONNY KULLMAN**

##### **Chairman of the Remuneration Committee**

Born on 5 July 1950, Mr Kullman became a director on 5 April 2012. He was a former Director General, CEO and Chairman of Intelsat. After working as a Systems Engineer for Saab-Ericsson Space AB in Sweden until 1983, he joined Intelsat in Washington DC, where he held several positions before becoming the company's Director General and CEO in 1998. Mr Kullman became the CEO of Intelsat, Ltd. in 2001, and in 2005, Chairman of Intelsat, Ltd, and CEO and President of Intelsat (Bermuda), Ltd., positions from which he retired in 2006. Mr Kullman graduated with a Master of Science in Electronic Engineering from the Chalmers University of Technology in Gothenburg in 1974. Mr Kullman is the Chairman of the Remuneration Committee and a member of the Nomination Committee of SES.

Mr Kullman is a Swedish national. He is an independent director.

#### **MR RAMU POTARAZU**

Born on 10 August 1961, Mr Potarazu became a director on 20 February 2014. He is the CEO of Binary Fountain. He is the Founder and former CEO of Vubiquity. Prior to founding Vubiquity, Mr Potarazu spent 15 years in various positions at Intelsat (1991-2006). He became Intelsat's Vice President of Operations and CIO in 1996 and its Vice President, Commercial Restructuring in 2000. In 2001, Mr Potarazu became President of Intelsat Global Service Corporation and from 2002 to 2006 he was President and Chief Operating Officer of Intelsat Ltd.

Prior to joining Intelsat, Mr Potarazu held several engineering positions. Mr Potarazu graduated with a BS in Computer Science and in Mathematics from the Oklahoma Christian University. He also holds an MSc in Electrical Engineering from the John Hopkins University and was a member of the Stanford Executive Program.

Mr Potarazu is a US national. He is an independent director.

#### **MR KAJ-ERIK RELANDER**

Born on 21 June 1962, Mr Relander became a director on 6 April 2017. He is Senior Independent Advisor of Mubadala Development Company. Mr Relander worked for the Finnish National Fund for Research and Development prior to joining Sonera Corporation where he held several management positions, including the position of CEO. He left Sonera in 2001 to join Accel Partners, a private equity and venture capital group before joining the Emirates Investment Authority in 2009 where he was a member of its Investment and Management Committees. Mr Relander graduated from the Helsinki School of Economics with an MSc in Economics. He also holds an MBA from the Helsinki School of Economics having completed part of it at the Wharton School, University of Pennsylvania (USA), and studied also for a PhD at the Wharton School and the Aalto University, Helsinki. He is Chairman of the Investment Committee at the private equity fund, Apis.pe, and a board director of Starzplay Arabia in Dubai.

Mr Relander is a Finnish national. He is an independent director.

#### **MRS ANNE-CATHERINE RIES**

Born on 1 April 1973, Mrs Ries became a director on 1 January 2015. Mrs Ries is Senior Policy Advisor to the Prime Minister and Minister for Media and Communications in Luxembourg with a focus on telecom and digital strategy. Her responsibilities include coordinating the government's 'Digital Luxembourg' priority. Anne-Catherine Ries graduated with a law degree from the Université de Paris II and the University of Oxford. She holds a postgraduate LL.M degree with honours from the London School of Economics, where she specialised in Telecommunications, Information Technology and European Competition Law. After starting her professional career in a law firm in Paris, she joined the Permanent Representation of Luxembourg

to the EU in Brussels in 2000. Upon her return to Luxembourg and over the last decade, her focus has been on attracting tech companies to establish and develop in Luxembourg. She sits on the Board of Directors of POST Luxembourg. Mrs Anne-Catherine Ries is member of the Nomination Committee of the Company.

Mrs Ries is a Luxembourg and French national. She is not an independent director because she represents an important shareholder.

#### **MR JEAN-PAUL SENNINGER**

Born on 3 December 1959, Mr Senninger became a director on 7 April 2016. Mr Senninger has been the general secretary of the Council of Ministers of the Luxembourg Government from December 2013. Mr Senninger joined the Ministry of Foreign Affairs in 1999 as Premier Conseiller de Gouvernement. He was Luxembourg Ambassador to Spain (2004-2008) and to the United States of America, Canada and Mexico (2008-2012). From 2012-December 2013, he was the Secretary General of the Ministry of Foreign Affairs. Mr Senninger also worked as attaché in the Office of the Mayor of Luxembourg City and as Senior Officer and Head of Unit at the European Investment Bank. Mr Senninger holds a BA in Political Science and a BA in Literature from the Friedrich Wilhelms Universität in Freiburg and a Master in European Studies from the College of Europe in Bruges.

Mr Senninger is a Luxembourg national. He is not an independent director because he represents an important shareholder.

#### **MR MARC SPEECKAERT**

Born on 23 May 1951, Mr Speeckaert became a director on 6 May 2005. He was the Managing director of Sofina S.A. until June 2016 and is a director of several non-listed corporations, as well as of Rapala (which is listed on the Helsinki Stock Exchange). Mr Speeckaert graduated with a degree in applied economics and holds a Master in Business and Administration from the Université Catholique de Louvain (UCL) in Belgium. He also participated in an Advanced Management Program from Wharton, University of Pennsylvania (USA). Mr Speeckaert was the Chairman of the Audit and Risk Committee of SES until April 2017.

Mr Speeckaert is a Belgian national. He is not an independent director because he has been a director for more than 12 years.

#### **MS FRANÇOISE THOMA**

Born on 25 August 1969, Ms Thoma became a director on 16 June 2016. Ms Thoma is President and Chief Executive Officer of Banque et Caisse d'Epargne de l'Etat, and a member of the Boards of Directors of Cargolux International Airlines S.A., Luxair S.A., the Luxembourg Stock Exchange and Enovos Luxembourg S.A. She was a member of the Luxembourg Council of State from 2000-2015 and holds a PhD in Law from the Université de Paris II Panthéon-Assas and an LL.M. from Harvard Law School. Ms Thoma is a member of the Remuneration Committee and of the Audit and Risk Committee of SES.

Ms Thoma is a Luxembourg national. She is not an independent director because she represents an important shareholder.

#### **MRS KATRIN WEHR-SEITER**

Born on 27 January 1970, Mrs Wehr-Seiter became a director on 1 January 2015. She is a Managing Director of BIP Investment Partners S.A. and a Managing Director/ Partner of BIP Capital Partners S.A. Prior to joining BIP, she served as a Principal at global investment firm, Permira, and worked also as an independent strategy consultant as well as a Senior Advisor to international private equity group, Bridgepoint. She started her professional career at Siemens AG where she held various positions in strategy consulting and engineering. She serves as a director of Sky plc and of several non-listed corporations. Mrs Wehr-Seiter holds an MBA from INSEAD and an MSc in Mechanical Engineering from the Technical University of Chemnitz.

Mrs Wehr-Seiter is a member of the Audit and Risk Committee of the Company. Mrs Wehr-Seiter is a German national. She is an independent director.





## **THE BOARD OF DIRECTORS AS OF 22 FEBRUARY 2018**

From left to right:

Hadelin de Liedekerke Beaufort, Ramu Potarazu, Tsega Gebreyes, Marc Speeckaert, Victor Casier, Marcus Bicknell, Anne-Catherine Ries, Romain Bausch, Kaj-Erik Relander, Françoise Thoma, Serge Allegrezza, Katrin Wehr-Seiter, Marc Beuls, Conny Kullman, Jean-Paul Zens, François Tesch, Jean-Paul Senninger



# OUR GOVERNANCE STRUCTURE

## THE CHAIRMAN'S OFFICE

The Chairman's Office prepares the agenda for the Board meetings.

## THE REMUNERATION COMMITTEE

The Remuneration Committee determines the remuneration of the members of the Executive Committee and advises on the overall remuneration policies applied throughout the company. It acts as administrator of the company's Long Term Equity Plans.

## THE AUDIT AND RISK COMMITTEE

The Audit and Risk Committee assists the Board in carrying out its oversight responsibilities in relation to corporate policies, risk management, internal control, internal and external audit and financial and regulatory reporting practices.

## THE NOMINATION COMMITTEE

The Nomination Committee identifies and nominates suitable candidates for the Board of Directors, for election by the annual general meeting of shareholders. It also identifies and nominates suitable candidates for the Executive Committee.

## COMMITTEES OF THE BOARD OF DIRECTORS

### THE CHAIRMAN'S OFFICE

The Chairman and the two Vice Chairmen are members of the Chairman's Office. The Chairman's Office prepares the agenda for the Board meetings, allowing the Vice Chairmen to coordinate the preparation of the Board meetings with the directors of their respective share classes.

At 31 December 2017, the members were:

- Mr Romain Bausch
- Mr François Tesch
- Mr Jean-Paul Zens

The Chairman's Office met eight times during 2017, with an attendance rate of 100%.

### THE REMUNERATION COMMITTEE

In accordance with general corporate governance standards, the company's Board established a Remuneration Committee, which determines the remuneration of the members of the Executive Committee and which advises on the overall remuneration policies applied throughout the company. It reports to the Board at each meeting through its Chairman. The Remuneration Committee is comprised of six members, at least a third

of which are independent Board members in line with the SES internal regulations. As at 31 December 2017, the Remuneration Committee was composed of the following six non-executive directors:

- Mr Conny Kullman (Chairman of the Remuneration Committee, independent)
- Mr Romain Bausch
- Mr Hadelin de Liedekerke Beaufort
- Mrs Tsega Gebreyes (independent)
- Ms Françoise Thoma
- Mr Jean-Paul Zens

The Remuneration Committee held six meetings, with an attendance rate of close to 97%. Matters addressed related to the 2016 bonuses and the determination of the 2017 stock option grant for members of the Executive Committee. The Remuneration Committee further determined the number of performance shares allocated to the members of the Executive Committee for their performance in 2016, and it adopted the 2017 business objectives which are used as one element in the determination of their bonuses for 2017. The Remuneration Committee finalised the renewal of the long-term equity plans of the Company, prior to their approval by the Board and the shareholders. The Remuneration Committee supported

the Board regarding the benchmarked based remuneration of the new Executive Committee members to facilitate the implementation of the new operating model. After each meeting, the Board is briefed in writing about the work of the Remuneration Committee.

The Remuneration Committee also oversees the implementation of the decision under which the members of the Executive Committee must within five years hold at least the equivalent of an annual salary's worth of registered shares in the company (with the President and CEO of SES having to hold shares of at least two years' worth of his annual salary).

### THE AUDIT AND RISK COMMITTEE

As part of its overall corporate governance, the Board established an Audit and Risk Committee, which assists the Board in carrying out its oversight responsibilities in relation to corporate policies, risk management, internal control, internal and external audit and financial and regulatory reporting practices. The Committee has an oversight function and provides a link between the internal and external auditors and the Board. The Audit and Risk Committee is comprised of six members, four of whom are independent Board members, in line with the SES internal regulations.

As at 31 December 2017, the Audit and Risk Committee was composed of the following six non-executive directors:

- Mr Marc Beuls, Chairman of the Audit and Risk Committee (independent)
- Mr Serge Allegrezza
- Mr Victor Casier (independent)
- Mr Kaj-Erik Relander (independent)
- Ms Françoise Thoma
- Mrs Katrin Wehr-Seiter (independent)

The Audit and Risk Committee held four meetings, with an attendance rate of more than 95%.

The meetings were dedicated in particular to the review of the 2016 financial results before their submission to the Board and their subsequent approval by the shareholders at the statutory annual general meeting and to the review of the H1 2017 financial results of the Company. Members of the Board also had the opportunity to communicate any comments they had on the company's quarterly results through the Chairman of the Audit and Risk Committee prior to the publication of these results.

The Audit and Risk Committee reviewed the company's statement on internal control systems prior to its inclusion in the annual report, approved the Internal Audit plan, and received bi-annual updates on the Internal Audit activities and on the follow-up of the major recommendations. It also reviewed the 2016 PwC Management letter. The Audit and Risk Committee proposed to the Board and to the shareholders to appoint PwC as external auditor for 2017 and approved its compensation.

The Audit and Risk Committee further continued to encourage management in its efforts to eliminate as many non-operating legal entities as possible. An update on that topic was presented to the Audit and Risk Committee. The Audit and Risk Committee received bi-annual updates on risk management from the SES risk management committee and held a discussion on SES's IT security and cybersecurity issues. The Committee further was briefed on SES's Tax Framework. After each meeting, the Board is briefed in writing about the work of the Audit and Risk Committee.

#### **THE NOMINATION COMMITTEE**

In line with best practice in corporate governance, the Board established a Nomination Committee, whose role is to identify and nominate suitable candidates for the Board of Directors, for election by the

annual general meeting of shareholders. Such proposals are based on submissions from shareholders for a number of candidates at least equal to the number of posts to be filled for each class of shareholders. The Nomination Committee also proposes candidates for Executive Committee membership for election by the Board. The Nomination Committee is composed of six non-executive members, at least a third of which are independent Board members in line with the SES internal regulations. On 31 December 2017, they were:

- Mr Jean-Paul Zens (Chairman of the Nomination Committee)
- Mr Romain Bausch
- Mrs Tsega Gebreyes (independent)
- Mr Conny Kullman (independent)
- Mrs Anne-Catherine Ries
- Mr François Tesch

The Nomination Committee met five times with all its members being present. It discussed the Management Succession Plan 2017 and prepared the election of five directors as per the company's Board election process. In the context of the new operating model, the Nomination Committee proposed the appointment of three additional members to the Executive Committee and reviewed the performance of the new leadership team.

After each meeting, the Board is briefed in writing about the work of the Nomination Committee.

#### **THE EXECUTIVE COMMITTEE**

##### **MISSION**

The Executive Committee is in charge of the daily management of the group. It functions as a collegial body. The Executive Committee is mandated to prepare and plan the overall policies and strategies of the company for approval by the Board. It may approve intra-group transactions, irrespective of the amount, provided that they are consistent with the consolidated annual budget of the company, as well as specific transactions with third parties provided that the cost to SES does not exceed EUR 10 million per transaction. It informs the Board at its next meeting on each such transaction, it being understood that the aggregate amount for all such transactions can at no time be higher than EUR 30 million.

The Executive Committee may approve any external credit facilities or external guarantees, pledges, mortgages and any

other encumbrances of the company, or any wholly-owned affiliate, for as long as the company will not lose its investment grade rating as a result of such facility or guarantee. It may approve increases of up to 5% in the capital expenditure budget for a satellite procurement already approved by the Board, it being understood that the Internal Rate of Return will need to comply with certain specific thresholds defined by the Board. The Executive Committee informs the Board at its next meeting of each such increase.

The Executive Committee submits to the Board those measures that it deems necessary to be taken in order to meet the purposes of the company. Prior to the beginning of each fiscal year, the Executive Committee submits to the Board a consolidated budget for approval.

The Executive Committee is in charge of implementing all decisions taken by the Board and by the committees specially mandated by the Board. The Executive Committee may, in the interests of the company, sub-delegate part of its powers and duties to its members acting individually or jointly.

The Chairman of the Executive Committee organises the work of the Executive Committee and coordinates the activities of its members, who report directly to him. In order to facilitate the implementation by the Board of its overall duty to supervise the affairs of the company, the Chairman of the Executive Committee informs the Chairman of the Board on a regular basis of the company's activities. The latter receives the agenda and the minutes of all meetings of the Executive Committee in due time.

During 2017, the Executive Committee met 31 times, with an attendance rate of 95.59%. Mr Pierre Margue, Vice President Legal and Corporate Affairs, the secretary of the Board of Directors, also acted as secretary to the Executive Committee.

##### **COMPOSITION**

The following eight persons are members of the Executive Committee:

- the President and CEO (who assumes the chairmanship of the Executive Committee)
- the CEO SES Networks
- the CEO SES Video
- the Chief Financial Officer
- the Chief Human Resources Officer
- the Chief Legal Officer
- the Chief Strategy and Development Officer
- the Chief Technology Officer

## THE EXECUTIVE COMMITTEE

From left to right:

Ferdinand Kayser, Padraig McCarthy, Christophe De Hauwer, Karim Michel Sabbagh, Evie Roos, Martin Halliwell, Steve Collar, John Purvis



Members of the Executive Committee are appointed by the Board of Directors upon a proposal from the Nomination Committee.

The current members of the Executive Committee are:



### MR KARIM MICHEL SABBAGH

#### President and CEO

Born on 26 September 1963, Mr Karim Michel Sabbagh joined the SES Executive Committee in September 2013 and was appointed as President and Chief Executive Officer effective 3 April 2014. He is Chairman of the Executive Committee and Chairman of the Board of SES ASTRA. He also serves on the Board of YahLive. He is Vice Chairman of FEDIL (Business Federation of Luxembourg). Mr Sabbagh served on the Board of SES from 2011 until 2013 and was a member of the Audit and Risk Committee of SES for the same period. Prior to joining SES, he was a Senior Partner and global practice leader for communications, media & technology at Booz & Company. Mr Sabbagh is a visiting professor in technology and innovation management and member of the Academic Council for École des Ponts Business School in France. He holds an MS in Technology Management from Columbia University, and a DBA (Doctorate) in international business management from the International School of Management (Paris). He also holds an MBA and BBA with Distinction from the American University in Beirut.

Mr Sabbagh is a Canadian and Lebanese national.



### MR PADRAIG MCCARTHY

#### Chief Financial Officer

Born on 27 September 1960, Mr Padraig McCarthy was appointed as Chief Financial Officer on 4 April 2013. He is a member of the Board of SES ASTRA. Mr McCarthy joined SES in 1995 from Norton S.A. where he was Financial Director Europe. Previously he held positions with KPMG Chartered Accountants, Ireland. After having served as SES's Controller, Mr McCarthy took the position of Chief Financial Officer of SES ASTRA, then the European subsidiary of SES, from 2002-2011. Prior to his appointment as Chief Financial Officer, he worked as Senior Vice President Financial Operations & Business Support at SES since 2011. Mr McCarthy holds a Bachelor of Commerce degree from the University College Cork, is a fellow of the Irish Institute of Chartered Accountants and followed advanced management executive programmes at Babson Business School and INSEAD.

Mr McCarthy is an Irish national.



**MR FERDINAND KAYSER**

**Chief Executive Officer, SES Video**

Born on 4 July 1958, Mr Ferdinand Kayser was appointed Chief Executive Officer, SES Video in April 2017. Previously, he had been Chief Commercial Officer of SES since 2011. He is a member of the Boards of SES ASTRA and YahLive. Mr Kayser joined SES in 2002 as President and Chief Executive Officer of SES ASTRA. He has worked in senior roles in media companies such as Premiere Medien GmbH and Co. KG and CLT Multimedia. Prior to his appointment as Chief Commercial Officer of SES, he was President and Chief Executive Officer of SES ASTRA. Mr Kayser holds a Master of Economics from the University of Paris 1, Panthéon-Sorbonne, and has concluded specialized university studies in Media Law and Management of Electronic Media.

Mr Kayser is a Luxembourg national.



**MR STEVE COLLAR**

**Chief Executive Officer, SES Networks**

Born on 21 April 1970, Mr Steve Collar was appointed Chief Executive Officer, SES Networks in April 2017. Prior to SES Networks, Mr Collar was CEO of O3b Networks from 2011 until it was fully acquired by SES in 2016. Mr Collar is a satellite industry veteran, having previously worked in a variety of commercial, business development and technical roles at SES WORLD SKIES, New Skies Satellites, Astrium and Matra Marconi Space (now Airbus). Mr Collar holds a degree in Mechanical Engineering from Brunel University in London.

Mr. Collar is a British national.



**MR CHRISTOPHE DE HAUWER**

**Chief Strategy and Development Officer**

Born on 15 April 1971, Mr Christophe De Hauwer was appointed Chief Development Officer of SES as of 1 August 2015. He is a member of the Board of SES ASTRA. Mr De Hauwer joined SES in 2003, holding several positions of responsibility in the areas of Strategic Marketing, Strategic and Business Planning and Corporate Development, as well as Fleet Development and Yield Management. Prior to joining SES, Mr De Hauwer worked in the Strategy Consulting practice of the European Telecommunication and Media Industry with Arthur Andersen. He holds an Engineering and a PhD Degree from the Université Libre de Bruxelles.

Mr De Hauwer is a Belgian national.



**MR MARTIN HALLIWELL**

**Chief Technology Officer**

Born on 20 April 1959, Mr Martin Halliwell was appointed Chief Technical Officer on 1 May 2011. He is a member of the Board of SES ASTRA. Mr Halliwell joined SES in 1987 after working for Cable & Wireless and for Mercury Communications. He was previously President of SES ENGINEERING and Technical Director of SES Multimedia. Previously, he worked as SES Operation Manager and as General Manager of SES's Global Multimedia Networks. Mr Halliwell holds a Higher National Diploma in Communications and Electronics and a BA specialising in Mechanical Engineering and Mathematics from The Open University, and an MBA in External Environment and Strategic Management from the same university.

Mr Halliwell is a British national.



**MR JOHN PURVIS**

**Chief Legal Officer**

Born on 15 June 1962, Mr John Purvis was appointed Chief Legal Officer in February 2017. He has served as EVP & General Counsel of SES since 2007. John joined SES in 2001 as part of SES's acquisition of GE Americom. Previously, he had been a lawyer in GE Lighting and Rowe & Maw, a City law firm in London. John qualified as a solicitor of England & Wales in 1986. He holds a law degree from Jesus College, Cambridge.

Mr Purvis is a British national.



**MRS EVIE ROOS**

**Chief Human Resources Officer**

Born on 9 July 1967, Mrs Evie Roos was appointed Chief Human Resources Officer in February 2017. Prior to that, Evie held the position of Executive Vice-President Human Resources of SES. Evie is also an elected member of the Luxembourg Chamber of Commerce. Before joining SES, Evie held various management positions at ArcelorMittal. She holds two degrees in Law and European Studies from the University of Leuven in Belgium and the Europa Institut in Saarbrücken in Germany.

Mrs Roos is a Belgian, Luxembourg and US national.

On 12 February 2018, the Board of Directors announced that they had accepted the decision of Karim Michel Sabbagh to step down from his role of President & CEO, with effect from 5 April 2018. Furthermore, Padraig McCarthy, CFO of SES, also informed the Board of his intention to retire during 2018 and it has been agreed that he will also step down from his current role as of 5 April 2018.

On the same date, the Board announced the appointment of Steve Collar as the next President and CEO as well as Andrew Browne as next CFO with effect from 5 April 2018. Both becoming, respectively CEO Designate and CFO Designate with immediate effect.

## REMUNERATION

### REMUNERATION OF THE MEMBERS OF THE BOARD OF DIRECTORS

The annual general meeting of shareholders determines the remuneration of the members of the Board of Directors for attending Board and committee meetings. In 2017, the shareholders decided to maintain the fees paid to the directors at the previous year's level with a majority of 99.833%. Directors each receive a fixed fee of EUR 40,000 per year, whereas the Vice Chairmen each receive an annual fixed fee of EUR 48,000 and the Chairman receives a fee of EUR 100,000 per year. A Director, chairing one of the committees set up by the Board, if not the Chairman of the Board of Directors, receives an additional remuneration of EUR 8,000 per year. A Director, chairing the Audit and Risk Committee, if not the Chairman of the Board of Directors, receives an additional remuneration of EUR 9,600 per year.

The shareholders also maintained the fees at EUR 1,600 for each meeting of the Board or a Committee of the Board attended, except for the meetings of the Audit and Risk Committee for which directors receive EUR 1,920 per meeting. A director participating in more than one Committee meeting on the same day will receive the attendance fee for one meeting only. Half of the attendance fee is paid if the director participates in the meeting via telephone or videoconference.

The fees paid to the Board have not been increased since 2008, except for an increase paid to the members of the Audit and Risk Committee approved by the shareholders in 2015.

In 2017, the remuneration paid to the SES Board of Directors was benchmarked against companies of similar size and complexity. It was found to be in line with market practices and at market levels.

All these fees are net of any Luxembourgish withholding taxes. The total net remuneration fees paid for the year 2017 to the members of the Board of Directors (net of the Luxembourgish withholding tax) amounted to EUR1,078,960, of which EUR 309,760 was paid as variable fees, with the remaining EUR 769,200 representing the fixed part of the Board fees. The gross overall figure for the year 2017 was EUR 1,348,700.

### COMPANY STOCK OWNED BY MEMBERS OF THE BOARD OF DIRECTORS

On 31 December 2017, the members of the Board of Directors and their closely associated family members owned a combined total of 768,388 shares and FDRs (representing 0.13% of the company's share capital). Transactions made by members of the Board of Directors are published on the company's website under Management Disclosures. In accordance with the company's dealing code, directors require prior permission before dealing in SES shares or FDRs.

### REMUNERATION OF THE MEMBERS OF THE EXECUTIVE COMMITTEE

The remuneration of the members of the Executive Committee is determined by the Remuneration Committee. The total gross remuneration paid to the eight members of the Executive Committee for the year 2017 amounted to EUR 8,385,889.83. It is composed of a fixed part and a variable part. The fixed part (EUR 4,645,632.04) is composed of the base salaries (EUR 3,245,978.13) as well as the company's social security contributions, company's pension contributions, life and disability insurance, company car and other benefits (EUR 1,399,653.90). The variable part (EUR 3,740,257.79) is composed of the 2016 bonuses (EUR 2,068,934.14) and the 2017 exercised Performance and Restricted shares granted in 2014 (EUR 1,671,323.65). In the year 2017, no stock options were exercised by the Executive Committee.

The annual bonus is composed of three elements: (i) the financial performance of the Company; (ii) the individual business objectives of the Executive Committee members; and (iii) a discretionary element determined by the Remuneration Committee after reviewing the Company's achievements.

These three elements are weighted in the following proportions: 50%; 25%; and 25%, respectively.

The Financial performance measures both the actual (current year) vs. actual (previous year) performance and the actual (current year) vs. budget (current year) performance. These two achievement percentages are multiplied such that, if the actual performance of the company is below a defined threshold, the financial part of the annual bonus will be zero. The metric used for the actual vs. actual performance is the reported Group EBITDA. This metric measures the profitable growth of the business and is also reported to investors. A reduction of more than 5% in the year will lead to the total financial component of the bonus being forfeited. The actual vs. budget performance does take into account four financial metrics of the SES Group. The following metrics with their respective weights are measured: revenues (40%), operating expenses (30%), Group profit (10%) and net operating cash-flow (20%). The targets for those measures are set during the annual budget process and approved by the Board of Directors.

The individual business objectives are set at the beginning of the year by the Remuneration Committee. At year-end, the Remuneration Committee assesses in detail the performance of the Executive Committee to determine the target achievement.

During 2017, the members of the Executive Committee were awarded a combined total of 929,336 options to acquire company FDRs at an exercise price of EUR 21.15, the price being based on the average of the closing price on Euronext Paris of the first 15 trading days following the Remuneration Committee meeting at which the options were authorised. A quarter of those options vested on 1 January 2018, the remaining quarters vesting on 1 January 2019, 2020 and 2021, respectively. In 2017, members of the Executive Committee were granted 26,804 restricted shares as part of the company's long-term incentive plan, as well as 80,412 performance shares. These shares will vest on 1 June 2020.

The Executive long-term equity plans permit the grant of three equity types: (i) stock options; (ii) restricted shares; and (iii) performance shares. The total grant value is divided in one third of stock options, one sixth of restricted shares, and one half of performance shares.

The stock option is a standard call option with a maturity of 10 years. The final strike price is determined as the fair market value with an average of 15 days closing prices at the Paris stock exchange after the numbers of options have been determined by the Remuneration Committee. The vesting period is over four years with a yearly vesting of 25% on January 1<sup>st</sup> of each year following the grant.

The Restricted Shares are FDRs granted to the executives with the sole condition that, at vesting, the executive has to be employed by SES. The Restricted Shares vest on 1 June of the third year following the year of their grant. Performance Shares are FDRs granted to the executives with two additional vesting conditions. Those conditions reflect two performance criteria. The following criteria have both to be fulfilled:

1. The compounded three years adjusted Economic Value Add (adjusted EVA) has to be positive; and
2. Over the three years vesting period, the personal objectives have to be met and can only be one year slightly below expectations.

The adjusted EVA used for remuneration purposes has the Invested Capital reduced for the assets under construction to ensure focus of Management on long-term investments.

The executives must, when exercising their vested stock options and their vested shares, do this in accordance with the SES Dealing Code (including requiring the prior authorisation from the Corporate Secretary and/or Chief Financial Officer, and provide selling orders outside of a closed period). As for the members of the Board, exercises by members of the Executive Committee are reported on the SES website <https://www.ses.com/investors/shareholder-information/shares/management-disclosures>

During 2017, Messrs Martin Halliwell, Ferdinand Kayser, Padraig McCarthy, Karim Michel Sabbagh and Christophe De Hauwer and Mrs Evie Roos sold some or all of the restricted and performance shares which vested on 1 June. Each member of the Executive Committee is entitled to two years of base salary in case his contract is terminated without cause. A member of the Executive Committee who resigns is not entitled to any compensation.

#### **COMPANY STOCK OWNED BY MEMBERS OF THE EXECUTIVE COMMITTEE**

On 31 December 2017, the eight members of the Executive Committee owned a combined total of 271,107 shares and FDRs (representing 0.05% of the company's share capital), 267,608 unvested restricted and performance shares and 2,665,065 options. Transactions made by members of the Executive Committee are published on the company's website under Management Disclosures. Members of the Executive Committee are required to comply with the company's dealing code.

#### **EXTERNAL AUDITOR**

In accordance with the Luxembourg law on commercial companies, the company's annual and consolidated accounts are certified by an external auditor appointed by the annual general meeting of shareholders. On 6 April 2017, and based upon a proposal from the Board, the shareholders re-elected PwC as the company's external auditor for one year and approved its remuneration, with a majority of more than 99.774%. The mandate of PwC will expire at the annual general meeting on 5 April 2018.

#### **BUSINESS RISKS AND THEIR MITIGATION**

This section contains a summary of the main risks that SES may face during the normal course of its business.

However:

- this section does not purport to contain an exhaustive list of the risks faced by SES and SES may be significantly affected by risks that it has not identified or considered not to be material;
- some risks faced by SES, whether they are mentioned in this section or not, may arise from external factors beyond SES's control; and
- where mitigations are mentioned in this section, there is no guarantee that such mitigations will be effective (in whole or in part) to remove or reduce the effect of the risk.



# KEY RISK AREAS

## 1. RISKS RELATING TO PROCUREMENT

### *Risk of launch delays and/or launch failures*

SES is planning to launch one further geostationary satellite and eight O3b satellites (on two launch vehicles, each with four O3b satellites) during the rest of 2018 and 2019. The launch of any of these satellites carries a risk of delay for a variety of reasons, including the late availability of the satellite or co-passenger satellite (if there is a co-passenger for a geostationary satellite launch) for shipment to the launch site, the late availability of the launch service or last-minute technical problems arising on the satellite, the co-passenger satellite or the launcher.

A launch delay or failure could have a material negative effect on revenue and also potentially cause the loss of frequency rights at certain orbital positions. Satellite launch and in-orbit insurance policies do not compensate for lost revenues due to the loss of customers or for consequential losses resulting from any launch delay or failure.

SES attempts to mitigate the risk of a launch delay interrupting existing services by leaving adequate time margins in procurement schedules for replacement satellites.

There is always an inherent risk of launch failure resulting in a reduced satellite lifetime (in case of incorrect orbit injection), reduced functionality of the satellite or the total loss of a mission.

SES attempts to mitigate the risk of launch failure in several ways, including by detailed technical risk management of each satellite and launch vehicle programme, asset insurance for each launch and a staggered fleet deployment scheme (allowing assets to be repurposed in the case of single satellite failure so as to ensure a minimum impact on customers and revenues).

### *Risk of dependency on launch service providers*

SES is largely dependent on Arianespace and SpaceX to launch its satellites into space. SES may incur significant delays in launching new satellites in the event of a prolonged unavailability of one of those two systems.

### *Risk of dependency on satellite manufacturers and secondary suppliers*

SES is dependent on six major satellite manufacturers for the construction of its satellites.

Dependency on a small number of satellite manufacturers may reduce SES's negotiating power and access to advanced technologies (which may only be available to certain suppliers). It may also result in a higher concentration of risk – SES may incur significant delays in procuring new satellites in the event of prolonged problems at one of these satellite manufacturers. Further, the difficulties caused by any technical problems with the design of a particular model of satellite may be multiplied if several satellites of that design are purchased.

In addition, there are a limited number of second tier suppliers of certain key components for communication satellites. SES may incur significant delays in procuring new satellites in the event of prolonged problems at one of these secondary suppliers.

SES attempts to mitigate these risks relating to procurement by a constant monitoring of its supplier base, maintaining multiple procurement sources and developing relationships with new suppliers, where possible.

## 2. RISKS RELATING TO SATELLITES

### *Risk of in-orbit failure*

One or more of SES's satellites may suffer in-orbit failures, ranging from a partial impairment of its commercial capabilities to a total loss of the asset. In the event of such a failure, SES may not be able to continue to provide service to its customers from the same orbital slot or at all.

SES attempts to mitigate the risk of in-orbit failure by careful vendor selection and high quality in-orbit operations. SES's fleet is diversified by manufacturer and satellite type, which reduces the likelihood of widespread technical problems. The impacts of such failures on customer service and related revenues may be mitigated by an in-orbit backup strategy, pursuant to which customers on an impaired satellite may possibly be transferred to another satellite in the fleet. In addition, SES has in place a restoration agreement with another satellite operator pursuant to which customers on an impaired geostationary satellite may possibly be transferred to another satellite in that operator's fleet in order to protect continuity of service. However, there is no guarantee that these mitigations will be entirely effective, especially in the event of the failure of several satellites.

Several of SES's satellites have experienced various technical anomalies either before or during 2017.

Some of the SES satellites experiencing technical anomalies are operating beyond the end of their design lives. These satellites have already completed the primary missions for which they were designed and have been redeployed for secondary missions. Satellites in secondary missions are used for various reasons, such as developing new orbital locations, safeguarding spectrum rights and providing redundant capacity for satellites in their primary missions. These satellites' technical capabilities do not generally need to be fully utilised when operating their secondary missions, which potentially mitigates the effects of further technical failures.

In addition, eleven of SES's Lockheed Martin A2100 satellites have experienced technical problems with their solar array circuits. The extent of the problem varies depending on the satellite, but it may reduce both the operational life of the satellite and the number of usable transponders, leading to a reduction in the revenue generated by the satellite. AMC-11, AMC-10, and AMC-6 experienced further solar array degradation in 2017, which further impaired power generation. AMC-10 and AMC-16 are potentially close to requiring re-orbiting in the event that they experience further failed solar circuits. All of the satellites with solar array issues are still being used for their primary missions, with the exception of AMC-4, AMC-6 and NSS-7, which are being used for secondary missions.

NSS 12, a satellite built by Space Systems Loral, has also experienced solar array power losses. However, these appear to be less severe than the Lockheed Martin A2100 solar array issue and SES does not believe a specific mitigation plan is needed at this point.

Several of SES's satellites (AMC-4, AMC-10, ASTRA 1G, ASTRA 1H, ASTRA 1KR, ASTRA 1M, ASTRA 2B, NSS-7, SES-3, QuetzSat-1 and NSS-10) have experienced various other anomalies.

Technical failures have resulted in a reduction of available capacity on ASTRA 1G and a reduction in the operational life of ASTRA 1H. There is no risk of a recurrence of these issues on these satellites.

AMC-4, AMC-6 and NSS-7 have completed their primary missions and as a result no mitigation is in place.

One gyro on AMC-10 is currently not useable.

ASTRA 1M, which is a key asset at the 19.2°E prime orbital position, has currently lost redundancy on its propulsion subsystem. Further technical problems on the propulsion system could result in the loss of the satellite. However, SES believes that such an event is unlikely and the risk is mitigated by the additional capacity at this orbital position.

QuetzSat-1 has experienced the loss of redundancy in its data handling equipment and further technical problems with this sub-system could result in the loss of the satellite. However, SES believes that the possibility of such an event happening is unlikely and risks have been mitigated by the uploading of a software patch which allows the partial restoration of the on-board redundancy.

NSS-10 (AMC-12) has a failed star tracker, part of the satellite's flight dynamics systems. The satellite manufacturer is exploring potential mitigations in the event of a failure of the second star tracker on the satellite fails before the scheduled end of life of the satellite in November 2019.

NSS-806 suffered a power anomaly in 2017 that resulted in 14 C-Band transponders being permanently turned off.

AMC-18 has experienced anomalies on its South solar array drive, and further anomalies could result in a reduction in its payload capacity.

AMC-9 suffered an undetermined anomaly in 2017 resulting in the total loss of the satellite. An insurance claim for USD 44.5 million was settled with our wholly-owned insurance subsidiary, with no pay-out from external insurance companies. The satellite was successfully placed in grave-yard orbit at the end of 2017.

The O3b satellites operate as a constellation in a non-geostationary orbit with each satellite covering a service region as it orbits the equator. Because the satellites are not geosynchronous, each satellite provides service to all O3b customers over each complete orbit around the Earth. Accordingly, a beam failure could affect all customers using that beam in each region served by O3b, and could affect all customers and require O3b to remove the satellite or beam from commercial operation.

This would reduce the number of beams or regions served by the constellation unless a spare satellite could be utilised to replace the failed satellite or beam. Three of the current 12 satellites are used as spares to provide back-up for other satellites in the constellation.

The first set of four O3b satellites were affected by an anomaly with their frequency generator units. As a consequence, three of those satellites were removed from full-time commercial operations. In addition, two O3b satellites in operation have been affected by a reaction wheel issue, which has led to those wheels being removed from operations and spare units being used.

One O3b satellite has experienced telemetry transmitter malfunctions. Procedures for maintaining operations in the absence of continuous telemetry have been implemented.

In-orbit insurance constitutes an additional financial mitigation against the risk of impairments, subject to the limitations of such insurance.

#### ***Risk of short operational life***

The design life of SES's geostationary satellites is typically 15 years and the design life of O3b's current satellites is 10 years. In the event of changes in the expected fuel life of the satellite, in-orbit anomalies or other technical factors, its actual life may be shorter than this. This could lead to the satellite being depreciated faster than anticipated and the lifetime revenue generated by the satellite being reduced, diminishing the overall return on investment for the asset. SES attempts to mitigate the risk of a reduced operational life by careful vendor selection and high quality in-orbit operations.

### **3. RISKS RELATING TO INSURANCE**

#### ***Insurance coverage risk***

SES's satellites may be subject to damage or loss from events that might not be covered by insurance policies. SES maintains (i) pre-launch insurance, (ii) launch and initial in-orbit insurance, (iii) in-orbit insurance and (iv) third-party liability insurance for its satellites. The insurance policies generally contain exclusions for losses resulting from:

- military or similar action;
- any anti-satellite device;
- electromagnetic and radio interference (except for physical damage to a satellite directly resulting from this interference);

- confiscation by any governmental body;
- insurrection and similar acts or governmental action to prevent such acts;
- nuclear reaction or radiation contamination;
- wilful or intentional acts causing the loss or failure of satellites; and
- terrorism.

The insurance policies do not provide compensation for business interruption, loss of market share, reputational damage, loss of revenue, incidental and consequential damages and similar losses that might arise from the loss of a satellite during transportation to the launch site or launch site operations, the failure of a satellite launch, incorrect orbital placement or the failure of a satellite to perform according to specifications. In addition, SES's in-orbit insurance only covers losses in excess of the risk retention level selected by SES.

The in-orbit insurance policies may exclude from coverage failures arising from pre-existing defects, such as defects in solar array and battery anomalies on some existing satellites. In addition, SES will not be fully reimbursed if the cost of a replacement satellite exceeds the sum insured. As a consequence, the loss, damage or destruction of any satellites as a result of any of these events could result in material increases in costs or reductions in expected revenues or both.

SES has reviewed its approach to in-orbit insurance of its satellites and, in recognition of the excellent procurement and operating record, has adopted a policy of limited self-insurance in addition to external insurance. Premiums relating to its satellite fleet are paid to wholly-owned subsidiaries, which only assume part of the risks, thus reducing the amount of insurance premiums paid to external insurance companies.

If any event occurs that is covered by the in-orbit insurance, the payment of the sum insured could result in material increases in costs.

SES has third party liability insurance that covers damage suffered by third parties resulting from accidents such as launch failures and satellite collisions. It is subject to an annual combined single limit of EUR 500 million.

#### **Insurance availability risk**

Satellite insurance is a cyclical market subject to the laws of supply and demand. The amount of capacity currently available in the market is adequate to cover SES's satellite programmes. However, events outside of SES's control – including large losses and shifts of insurance capacity from space to other lines of business – could change this situation. This could result in an increase in the amount of insurance premiums paid by SES to cover its risks and affect its ability to obtain the desired level of coverage. SES's self-insurance programme improves its flexibility to accommodate variations in insurance market conditions.

#### **4. RISKS RELATING TO CUSTOMERS**

##### **Risk of key customer loss**

SES depends on a number of key customers whose loss (or non-renewal) would reduce SES's revenues. SES's five largest commercial customers represented 24.4% of SES's total revenues in 2017. The total revenue generated from contracts with the US Government (and customers serving the US Government) represented approximately 7.6% of SES's total revenues in 2017.

If key customers reduce their reliance on SES by developing or increasing relationships with other satellite operators (or moving to other telecommunications solutions) and such key customers cannot be replaced, SES's revenues may be impacted negatively.

SES's main existing satellite capacity agreements for the direct-to-home business in Europe typically have contract durations of ten years, with some contracts for longer periods. If SES is unsuccessful in obtaining the renewal of its satellite capacity agreements when they come up for renewal on commercial terms similar to those currently reflected in its agreements, revenues could be adversely affected for some time.

SES's customer base is subject to constant change. Bankruptcy of key customers or customer consolidation resulting from mergers and acquisitions can reduce demand for SES's satellites capacity, thereby affecting SES's revenues.

##### **Risks relating to customer credit**

SES may suffer a financial loss if any of its customers fails to fulfil its contractual payment obligations.

The level of customer credit risk may increase as SES, and/or its customers, grow revenues in emerging markets because credit risk tends to be higher in these markets (compared to the markets of Europe and North America).

This risk is mitigated principally through a customer credit policy that includes credit checks, credit profiles, deposits or other forms of security, monitoring of payment performance and the application of a provisioning policy. In some cases, customer credit risks are mitigated by credit insurance.

Further details are provided in Note 18 to the Financial risk management objectives and policies.

##### **Risks inherent in international business**

SES conducts business around the world. It is exposed to issues such as financial, regulatory, geopolitical, tax and trade risks in many jurisdictions. Political and financial stability in some jurisdictions may impact SES's business in that country. In practice, it may be difficult for SES to enforce its legal rights in some jurisdictions.

The inherent uncertainties in doing business in certain jurisdictions may have a negative impact on SES's results.

##### **Risks inherent in doing business with the US Government**

As a result of U.S. national security laws and regulations, SES Government Solutions, Inc. is subject to a proxy agreement with the U.S. Government ("the Proxy Agreement"). The proxy structure imposed upon SES Government Solutions is common for businesses contracting with the U.S. Government and is similarly imposed on SES's competitors.

The U.S. Government required SES Government Solutions to enter into the Proxy Agreement because SES Government Solutions is indirectly owned by SES, a foreign company, and SES Government Solutions has classified contracts with the U.S. Government. As a result of the Proxy Agreement, strict limitations are placed on the information that may be shared between SES Government Solutions and SES and its other subsidiaries. The Proxy Agreement also imposes restrictions on the control of SES Government Solutions by SES. However, it is important to note that inter-company activities including the

provision of satellite capacity to SES Government Solutions for provision to the U.S. Government are permitted under the Proxy Agreement.

#### **5. RISKS RELATING TO THE SATELLITE COMMUNICATIONS MARKET**

##### **Competition risk**

The telecommunications market is fiercely competitive and SES faces competition from satellite, terrestrial and wireless networks.

SES faces competition from international, national and regional satellite operators. Some national operators receive tax and regulatory advantages in their countries that are not available to SES. The development of national satellite programmes in some countries may limit or prevent SES's ability to compete in those countries.

In addition, SES competes with operators of terrestrial and wireless networks. Any increase in the technical effectiveness or geographic spread of these terrestrial and wireless networks could result in a reduction in demand for SES's satellites capacity. Some terrestrial and wireless operators may receive state aid and subsidies not available to SES.

Competition in the communications market could result in a reduction in demand for SES's satellite capacity and/or pricing changes resulting in a significant negative impact on SES's revenues.

##### **Technology risk**

The satellite telecommunications industry is vulnerable to technological change. SES's satellites could become obsolete due to unforeseen advances in telecommunications technology, leading to a reduction in demand for its services and a negative impact on revenues.

The use of new technology to improve signal compression rate could lead to a reduction in demand for SES's satellites, which could lead to a negative impact on SES's results.

#### **6. RISKS RELATING TO SES'S STRATEGIC DEVELOPMENT**

##### **Emerging market risk**

SES's development strategy includes targeting new geographical areas and emerging markets and developing joint ventures or partnerships with local telecommunications, media and financial businesses in order to improve market access for its services.

SES may be exposed to the inherent instability of doing business in those regions. Such inherent instability could have an adverse impact on SES's revenue.

Please also see 'Risks inherent in international business' above.

In some emerging markets, customers may be less financially secure and run a higher risk of insolvency than in more developed markets. The failure of a customer could have an adverse impact on SES's revenue.

#### **BREXIT risk**

On 23 June 2016, the United Kingdom voted to leave the EU ('BREXIT'). There is widespread uncertainty and speculation regarding what will occur as a result of BREXIT and it is difficult to predict what impact BREXIT will have on SES. As a result, it is difficult to know whether BREXIT will have a significant negative impact on SES's revenues, although SES considers this to be unlikely at this time.

#### **Investment risk**

SES regularly evaluates opportunities to make strategic investments. These opportunities may not yield the expected benefits due to a number of factors, such as antitrust reviews, financing costs and regulatory approvals. If an investment is made, it may adversely affect SES's results due to financing costs or the performance of the investment following acquisition. The success of any such investment is not guaranteed.

SES has a number of strategic investments in businesses that it does not fully control. As a result, SES is dependent in part on the co-operation of other investors and partners in protecting and realising the full potential of certain investments. SES may not be able to prevent strategic partners from taking actions that are contrary to SES's business interests.

SES also invests in new and innovative projects, which often feature new technology or uncertain market demand. If the technology is not successful or demand does not materialise as planned, the value of SES's investment may be reduced.

SES has also earmarked certain funds for investment, which includes the replacement of existing satellites (often with increased capacity) and the launching of new satellites. The successful marketing and sale of new capacity is dependent on the underlying demand for satellite capacity in the targeted regional markets. If that

demand does not materialise as anticipated, SES's financial forecasts may not be met.

## **7. RISKS RELATED TO LEGAL, REGULATORY, SPECTRUM, AND CORPORATE**

### **Legal risk**

SES cannot always predict the impact of laws, regulations and politics on its operations. The operation of the business is and will continue to be subject to the laws, regulations and political will of the various governmental authorities of the countries in which SES operates, uses radio spectrum or offers satellite capacity, as well as to the frequency coordination process of the International Telecommunication Union (the "ITU"). Legal, regulatory and political changes are outside SES's direct control. New or modified rules, regulations, legislation, or decisions by a relevant governmental entity or the ITU could materially and adversely affect operations.

The international nature of SES's business means that it is subject to applicable sanctions, export control, competition and anti-bribery laws and regulations including associated civil and criminal penalties. Risks concerning and violations of applicable compliance laws and regulations may negatively affect future operations or subject SES to criminal or civil enforcement actions.

Disputes in relation to SES's business arise from time to time and can result in legal or arbitration proceedings. The outcome of these proceedings cannot be predicted. A negative outcome in a substantial litigation or arbitration case could have a material impact on SES's business and financial position.

### **Spectrum access risk**

Access to orbital slots and frequencies is required for SES to develop and maintain its satellite fleet.

The ITU is responsible for the allocation of spectrum for particular uses, and the allocation of orbital locations and associated frequencies. Use of the spectrum and orbital positions is in accordance with the ITU Radio Regulations. SES can only access spectrum through ITU filings made by a national administration.

Orbital slots, satellite systems and associated frequencies are a limited resource. The ITU may reallocate spectrum from satellite to terrestrial or other uses. In addition, national administrations are increasingly charging for access to spectrum by the use of fees and auctions.

Any reallocation of spectrum from satellite to terrestrial or other uses or fees and charges assessed by national administrations may have a significant adverse effect on SES's current results and future prospects.

### **Spectrum coordination risk**

SES is required to coordinate the operation of its satellites with other satellite operators through the relevant national administrations and in accordance with the ITU process so as to prevent or reduce interference between satellites. SES may also be required to coordinate any replacement satellite that has performance characteristics that differ from the satellite it replaces.

As a result of such coordination, SES may be required to modify the proposed coverage areas of its satellites, satellite design or transmission plans in order to eliminate or minimise interference with other satellites or ground-based facilities. Those modifications may mean that use of a particular orbital position is significantly restricted, possibly to the extent that it may not be economical to place a new satellite in that location. In addition, interference concerns of a country may affect the ability of SES's satellite network to generate revenues, due to the operational restrictions that the country may impose.

Similarly, the performance of SES's satellites in the affected areas could be adversely affected if ITU regulations or other legal constraints fail to prevent competing satellite operators from causing harmful interference by the operation of their satellites.

### **Spectrum use risk**

If SES does not occupy unused orbital locations by specified deadlines, does not maintain satellites in the orbital locations it currently uses or does not operate in all the frequency bands for which a licence has been received then, in accordance with applicable national and ITU regulations, those orbital locations or frequency bands may become available for use by other satellite operators.

SES has access to a large portfolio of orbital locations that have been filed at the ITU through various administrations. For each filing, the ITU and the national regulators impose various conditions that must be met in order to secure the spectrum. Operational issues such as satellite launch failure, launch delay or in-orbit failure might compromise the access to the spectrum or orbital

locations. SES is committed to the highest quality satellite and launch procurement processes, which helps to reduce this risk. In addition, SES's large fleet of satellites may in some circumstances permit the relocation of in-orbit satellites in order to meet regulatory requirements.

#### **Regulatory risk**

SES may need to obtain and maintain approvals from authorities or other entities to operate its satellites and to offer satellite capacity. For example, SES must obtain licences, authorisations or market access approvals in certain countries to enable provision of satellite capacity to those countries. The failure to obtain the licences, authorisations or market access approvals necessary to operate satellites or to offer satellite capacity could lead to loss of revenues and compliance actions against SES.

Each customer is responsible for obtaining regulatory approval for its operations. As a result, there may be governmental regulations inapplicable to SES which may adversely affect customers' operations. SES could lose revenues if customers are unable to obtain any necessary approvals, if customers' regulatory approvals are insufficient in the view of the relevant regulatory authorities, if the necessary approvals are not granted on a timely basis or if any applicable licencing restrictions become unduly burdensome.

#### **Export control**

SES must comply with U.S. export control laws in connection with any U.S. information, products or materials that it provides to non-U.S. companies relating to communications satellites, equipment, software and data. SES's U.S. operations may not be able to maintain normal business activities and SES's non-U.S. operations may not be able to source U.S. satellites, hardware, technology and services if:

- export licences are not timely obtained;
- export licences do not permit transfer of all items requested;
- satellite launches are not permitted in the locations that SES prefers; or
- the requisite licence, when approved, contains conditions or restrictions that pose significant commercial or technical problems.

Such occurrences could impede construction and delay the launch of any future satellites, adversely impacting current and/or future revenues. SES must also comply with other applicable national export laws and regulations.

#### **External threat risk**

In common with other satellite operators, SES is vulnerable to the risk of terrorist acts, sabotage, piracy, attack by anti-satellite devices, jamming, unintentional interference and natural disaster. Such external threats may lead to a temporary or permanent interruption in service and/or the loss of customers. Any such act could have a potentially significant adverse effect on SES's results.

#### **Cyber risk**

SES's operations may be subject to hacking, malware and other forms of cyber-attack. Due to the fast-moving pace of new hacking techniques, the high sophistication of certain attackers and an increasingly hostile cyber-attack environment, it may be difficult to detect, determine the scope of, contain and remediate every such event.

Any inability to prevent or to detect the occurrence of cyber-attacks in a timely manner could result in a disruption of services or malfunctions, loss of customers, inadvertent violations of data protection, export control and other relevant laws, damage to SES's reputation, or damage to SES's properties, equipment and data. Furthermore, such event could result in large expenditures necessary to repair or replace such networks or information systems or to protect them from similar events in the future.

SES has protections in place to help protect its networks, and continues to work to implement additional protective measures intended to limit the risks associated with such attacks.

#### **Risk of the loss of key employees**

SES has a number of key employees with highly specialised skills and extensive experience in their fields. If several of these employees were to leave, SES may have difficulty replacing all of them immediately. The risk of the loss of key employees may increase as SES continues with organisational changes.

SES attempts to mitigate the risk of losing key employees through retention

programmes, in-house back-up solutions, knowledge transfer, succession planning and development plans. In recent years, SES has also invested in improving its recruitment process to engage with new talent.

If SES is unable to retain key employees or attract new highly qualified employees, it could have a negative impact on SES's business, financial situation and results.

#### **Unforeseen high impact risk**

SES's operations may be subject to unforeseen events that are both improbable and have a high impact. Due to the unforeseen nature of the event, it is difficult to manage the impact of such events or predict the nature or extent of the damage. Such unforeseen events may have a significant negative impact on SES's business, financial situation and results.

## **8. RISKS RELATING TO FINANCE**

#### **Economic downturn risk**

An economic slowdown in the countries where SES operates may have a negative effect on its performance if potential customers face difficulties funding their business plans. This could, in turn, result in decreased profitability, with significant negative consequences for SES's business, financial condition and results of operations.

#### **Cash flow risk**

SES operates in accordance with a strong business model. If, for any reason, SES is not successful in implementing its business model then cash flow and capital resources may not be sufficient to repay indebtedness. If SES were unable to meet its debt service obligations or comply with covenants, then a default under debt agreements would occur. To avoid a possible default or upon a default, SES could be forced to reduce or delay the completion or expansion of the satellite fleet, sell assets, obtain additional equity capital or refinance or restructure its debt.

#### **Debt rating risk**

A change in SES's debt rating could affect the cost and terms of its debt, as well as its ability to raise financing. SES's policy is to attain, and retain, a stable BBB rating with Standard & Poor's, and a Baa2 rating with Moody's. If SES's credit rating were downgraded, it may affect SES's ability to obtain financing and the terms associated with that financing. SES cannot guarantee that it will be able to maintain its credit ratings.

### **Tax risk**

SES's financial results may be materially adversely affected by unforeseen additional tax assessments or other tax liabilities.

SES does business in many different countries and is therefore subject to taxation in multiple jurisdictions. SES makes provisions in its accounts for current and deferred tax assets and liabilities based on a continuous assessment of prevailing tax laws in those jurisdictions.

However, SES cannot always be certain of a tax authority's application and interpretation of the tax law. SES may become subject to unforeseen material tax claims, including late payment interest and/or penalties. Such claims may arise for a number of reasons, including: the identification of a taxable presence of a non-indigenous group company in a taxing jurisdiction; transfer pricing adjustments; application of indirect taxes on certain business transactions after the event; and the disallowance of the benefits of a tax treaty. In addition, SES may be subject to retroactive tax assessments based on changes in laws in a particular tax jurisdiction. SES has implemented a tax risks mitigation charter based on (among other things) a framework of tax opinions for the financially material positions taken, transfer pricing policies and documentation covering the group's important inter-company transactions, and procedures for accurate tax compliance in all jurisdictions.

### **Asset impairment risk**

SES's non-current intangible and tangible assets are valued at historic cost less amortisation, depreciation (where relevant) and accumulated impairment charges. The resulting net book values are subject to validation each year through impairment testing procedures, where they are compared to the value-in-use of the asset, representing the present value of the future cash flows expected to be derived from the asset. Where future assumptions for a specific asset, as set out in the approved Business Plan, become less favourable, or the discount rates applied to the future cash flows increase, then this may result in the need for material asset impairment charges.

In the SES S.A. annual accounts, impairment testing – using value-in-use procedures similar to those outlined above – is performed on the carrying value of the shares in affiliate undertakings, or on the carrying value of groups of shareholdings where the Board of Directors believes that it is more

appropriate under the circumstances, and better reflects the substance of the activities, the interdependency of the associated cash flows and their level of integration. If the carrying value of the relevant investment, or group of investments, is not substantiated by value-in-use, and any shortfall is assessed as being of an other than temporary nature, then this could result in an impairment charge being recorded to the income statement of the SES S.A. annual accounts in the period concerned.

### **Liquidity risk**

SES requires liquidity to maintain its operations and meet its obligations. Any liquidity problems may have a significant impact on SES's operations and lead to the breach of contractual obligations. In case of liquidity needs, SES can call on a number of committed and uncommitted credit facilities with banks. In addition, if deemed appropriate based on prevailing market conditions, SES can raise funds through its European Medium-Term Note programme or through the issuance of commercial paper. SES's debt maturity profile is tailored to allow the company to cover repayment obligations as they fall due. SES operates a centralised treasury function, which manages the liquidity of SES and seeks to optimise the funding costs. This is supported by a daily cash pooling mechanism.

Further details are provided in Note 18 to the Financial risk management objectives and policies.

### **Foreign currency risk**

SES's reported financial performance can be impacted by movements in the US dollar/euro exchange rate, as SES has significant operations whose functional currency is the US dollar and liabilities denominated in the US dollar.

To mitigate this exposure, SES can enter into forward foreign exchange or similar derivatives contracts to hedge the exposure on the financial debt or on the net assets. Further details are provided in Note 18 to the Financial risk management objectives and policies.

### **Interest rate risk**

SES's exposure to the risk of changes in market interest rates relates primarily to SES's floating rate borrowings as well as the renewal of its fixed rate borrowings. SES carefully monitors and adjusts the mix between fixed and floating rate debt from time to time, responding to market

conditions. Interest rate derivatives can be used to manage the interest rate risk. The terms of the derivatives are negotiated to match the terms of the hedged item to maximise the effectiveness of the hedge.

Further details are provided in Note 18 to the Financial risk management objectives and policies.

### **Counterparty credit risk**

SES's exposure relates to the potential default of a counterparty holding financial assets (cash and cash equivalents held for trading financial assets, loans, receivables and derivative instruments).

The counterparty credit risk from a cash management perspective is reduced by the implementation of several cash pools, accounts and related paying platforms with different counterparties. To mitigate the counterparty risk, SES only deals with recognised financial institutions with an appropriate credit rating. All counterparties are financial institutions that are regulated and controlled by the national financial supervisory authorities of the applicable countries. The counterparty credit risk portfolio is analysed on a quarterly basis. Moreover, to reduce this counterparty risk, the portfolio is diversified as regards the main counterparties, ensuring a well-balanced relationship for all categories of products (derivatives as well as deposits).

Further details are provided in Note 18 to the Financial risk management objectives and policies.

## **INTERNAL CONTROL PROCEDURES**

### **OBJECTIVE**

The Board has overall responsibility for ensuring that SES maintains a sound system of internal controls, including financial, operational and compliance controls. Such a system is an integral part of the corporate governance strategy of the company.

Internal control procedures help to ensure the proper management of risks and provide reasonable assurance that the business objectives of the company can be achieved.

The internal control procedures are defined and implemented by the company to ensure:

- the compliance of actions and decisions with applicable laws, regulations, standards, internal rules and contracts;
- the efficiency and effectiveness of operations and the optimal use of the company's resources;
- the correct implementation of the company's internal processes, notably those to ensure the safeguarding of assets;
- the integrity and reliability of financial and operational information, both for internal and external use;
- that management's instructions and directions are properly applied, and
- that material risks are properly identified, assessed, mitigated and reported.

Like all control systems, internal controls cannot provide an absolute guarantee that risks of misstatement, losses or human error have been totally mitigated or eliminated.

#### **CONTROL ENVIRONMENT**

SES has adopted a robust internal control framework based on a set of guidelines prepared by COSO (Committee of Sponsoring Organisations of the Treadway Commission). This framework provides reasonable assurance that the internal control objectives are being achieved; it is also consistent with the reference framework proposed by the French securities regulator, the 'Autorité des Marchés Financiers' (AMF).

The control environment is an essential element of the company's internal control framework, as it sets the tone for the organisation. This is the foundation of the other components of internal control, providing discipline and structure. The Board has delegated the design, implementation and maintenance of a rigorous and effective system of internal controls to the Executive Committee of SES, which in turn works closely with the other levels of management in establishing control policies and procedures.

The descriptions of the main SES functions and processes are electronically documented using Business Process Management software, with the support of the Enterprise Effectiveness Team. Policies and procedures are regularly updated, as appropriate. The aim is to design and implement a common set of policies and procedures that best support the organisation and can be used company-wide.

The policies and procedures apply to all employees and officers of the SES group, and where appropriate to its directors, as the general framework for their own business process design.

The policies and procedures take into account specificities of each legal entity and business unit and are adapted where necessary to their activity, size, organisation and legal and regulatory environment.

A group-wide 'Code of Conduct and Ethics' has been in place since 2009. The Code is designed to enable all employees, officers and directors to take a consistent approach to integrity issues and to make sure that SES conducts its business in compliance with all applicable laws and regulations and observes the highest standards of business ethics. In 2016, the Code has been reviewed and refreshed, and also mandatory refresher courses for all SES employees worldwide were continued to reinforce awareness and compliance by staff.

An SES Compliance Committee, composed of designated Compliance Officers in each main corporate location, is tasked with raising the staff's awareness of the Code and ensures a consistent roll-out and training programme for the Code. The Committee meets regularly to discuss important topics or issues. Reflecting the company's expansion into developing markets, the composition of the Compliance Committee includes representatives from SES's offices in Africa, Asia, the Middle East and Latin America.

To ensure better compliance with data protection laws and regulations SES appointed a Group Data Protection Officer in 2014.

Another key component of the control environment is the co-ordination of risk management with internal control. Risk management and internal control systems complement each other in controlling the company's activities.

#### **RISK MANAGEMENT**

SES has adopted a risk management framework based on principles proposed by COSO and ISO31000. The co-ordination of the implementation of this policy and the development of a risk register is the responsibility of a Risk Management Committee which reports to the Executive Committee of SES.

The Executive Committee in turn reports to the Board which has the ultimate responsibility for oversight of the company's risks and for ensuring that an effective risk management system is in place.

Common definitions and measures of risk management have been established and provided to the various risk owners to ensure that the risk management policy is properly implemented.

A risk management co-ordinator has been appointed in order to ensure the adequate review of the risks facing SES. Each reported risk is categorised, assessed by the risk owners and reviewed by the Risk Management Committee. Key risk developments are periodically reported to the Executive Committee, the Audit and Risk Committee and the Board.

#### **INTERNAL CONTROL ACTIVITIES**

Regarding the internal controls in the area of accounting and financial reporting, the following should be noted:

- Staff involved in the company's accounting and financial reporting are appropriately qualified and are kept up-to-date with relevant changes in International Financial Reporting Standards ('IFRS'). Additionally, specific training and written guidance on particular matters is provided where needed. Written guidance, regularly updated for business developments and regulatory changes, is available to all relevant staff members and provides a summary of the company's accounting and financial reporting policies and procedures.
- Controls have been established in the processing of accounting transactions to ensure appropriate authorisations for transactions, effective segregation of duties and the complete and accurate recording of financial information.
- Completeness and timely recording of financial information is ensured through regular reviews, monitoring of specific key performance indicators, validation procedures by functional leaders and as an additional check, the process of internal and external audit.
- In accordance with the requirements of IFRS, SES discloses detailed information on the market, credit and foreign exchange risks to which it is exposed, as well as its strategy for managing those risks.
- The company relies on a comprehensive system of financial information and

oversight. Strategic plans, business plans, budgets and the interim and full-year consolidated accounts of the company are drawn up and brought to the Board for approval. The Board also approves all significant investments. The Board receives monthly financial reports setting out the company's financial performance in comparison to the approved budget and prior year figures.

- Any weaknesses in the system of internal controls identified by either internal or external auditors are promptly and fully addressed.
- The external auditors perform a limited review of the company's half-year consolidated financial statements and a full audit of the annual consolidated financial statements.

Regarding the internal controls in the area of treasury management, the following should be noted:

- The treasury function uses specific software that helps to ensure the efficiency and control of the implementation of SES's hedging strategy for interest rate and foreign currency fluctuations. This software also aims to centralise the cash management of SES's affiliates.
- In order to ensure enhanced security and efficiency of the bank payments process, the company is using a banking payments system that allows for secured authorisation and transfer of payments from the SAP accounting system directly to the bank.
- A clear segregation of duties and assignment of bank mandates between members of SES management, treasury and accounting departments has been implemented.
- In order to streamline the cash management process, SES has centralised the in-house bank into one hub. This in-house banking system is fully integrated and managed in SAP.
- SES predominately uses forward currency contracts to eliminate or reduce the currency exposure on single deals, such as satellite procurements, tailoring the maturities to each milestone payment. Such foreign currency risk is predominantly in EUR or USD. The forward contracts are in the same currency as the hedged item and can cover up to 100% of the total value of the contract. It is the company's policy not to enter into forward contracts until

a firm commitment is in place, and to match the terms of the hedge derivatives to those of the hedged item to maximise effectiveness.

- Those treasury activities with a significant potential risk, such as financial derivative transactions with external parties and in particular the hedging activities engaged during the year, are authorised within the framework approved by the Board.
- A short treasury report is issued every quarter to the Board as part of the financial reporting.
- To further strengthen these controls, a treasury policy is regularly updated. In addition, a Foreign Exchange Risk Management strategy, combined with a multiple year funding plan based on SES's strategic and business plans, is also prepared and presented to the Audit and Risk Committee.

Regarding the internal controls in the area of tax management, the following should be noted:

- The main principles of SES's tax risk management are laid down in the SES Tax Charter. Tax positions are analysed based on most appropriate authoritative interpretations and reported in internal tax technical memos or tax opinions from external tax consultancy firms. The tax department seeks, where possible, to achieve upfront tax clearances with relevant local tax authorities with regard to the tax ramifications of main business ventures, corporate reorganisations and financing structures of the company.
- Current and deferred tax liabilities are recorded in the SES group accounts on the basis of a 5 step key control framework that ensures full transparency and understanding of all underlying data and reconciliation between the important sources of information within tax and accounting departments.
- The transfer pricing team is responsible for continuously updating and improving transfer pricing documentation underpinning all significant cross-border inter-company transactions in the company through functional and economic analyses including benchmarking studies. SES's transfer pricing documentation includes a master file, local files and a country-by-country report.

Regarding the internal controls in the area of satellite operations, the following should be noted:

- SES's Technology Department is responsible for the procurement of satellites and launch vehicles, the procurement and maintenance of satellite-related ground infrastructure and the administration, control and operations of the satellite fleet.
- The reporting of the satellite procurement and operations risk management process that is in place to monitor and assess sources of technical risks and to develop qualitative, quantitative and statistical methods which allow the mitigation of risk at the satellite fleet level has been integrated into the company's Risk Management framework.
- The operational procedures for satellite control and payload management cover manoeuvres and configuration changes required in nominal situations as well as in the case of technical emergencies. The controllers are trained and certified in the execution of such procedures. These procedures are periodically reviewed to ensure that they are up-to-date. Satellite control software is being used and fully validated electronic procedures for station-keeping and other regular operations are being applied throughout the entire SES fleet.
- SES has designed crisis management systems and supporting infrastructure and tools in order to address satellite in-orbit anomaly situations at an appropriate management level. An effective 'trouble tickets' escalation process is used to provide effective and timely support to customers.
- The Satellite Contingency and Emergency Response Process reflects the current company's organisational structure.
- For LuxGovSat, a highly secured Network Operation Center ('NOC') was constructed on the Betzdorf campus in 2017.

SES has adequate satellite control primary and backup capabilities utilising the European and US-based Satellite Operations Centres ('SOCs'). A SOC is being built in Brazil to control the SES-14 satellite, along with Betzdorf also being able to control it. This Brazilian SOC is scheduled for operation by mid-2018 in time for the SES-14 operational date.



For SES Geostationary satellites:

- Primary satellite operations in Europe are operated from the technical facility in Betzdorf and the SOC in Gibraltar. Primary satellite operations in North America are operated from the SOC in Princeton.
- Satellite engineering and Flight Dynamics tools, applications and documentation required to support satellite operations are available in the Betzdorf and Princeton Data Centers.
- SES has adequate satellite control backup capability utilising the European and US SOCs:
- In case of a major disaster impacting the primary US SOC, the primary European SOCs will first take-over satellite operations, until the backup SOC located in Woodbine (US) is staffed to take-over the operations.
- In case of a major disaster impacting the primary European SOC in Betzdorf, the Gibraltar SOC and the primary US SOC will first take-over satellite operations. Once staffed, the backup European SOC (located in Redu, Belgium) will take-over operations of several satellites to reduce the workload of the Gibraltar SOC and primary (US) SOC.
- Fail-over procedure from Primary to Backup SOC is tested regularly. The backup SOCs in Woodbine and Redu are tested twice a year.

For SES Medium Earth Orbit ('MEO') located satellites (O3b):

- Primary satellite operations are performed from the O3b/MEO SOC in Betzdorf and backup satellite operations are performed from the O3b/MEO SOC in Manassas (US).

For SES payload services:

- Adequate backup capabilities are currently implemented in the following areas:
  - MX1 has been equipped to be able to uplink control channels for DTH set-top boxes for the 19.2° orbital slot when Betzdorf is unavailable (not associated with telemetry, tracking and control ('TT&C')).
  - At SES's facilities in the US, additional fuel and Uninterruptible Power Supply ('UPS') redundant facilities are maintained to enhance the emergency backup system.
  - Design work on the upgrade of the power system at Manassas in the US has been completed and the installation

commenced in 2017. Full operation is anticipated for the end of the first quarter in 2018. The work currently being undertaken at Manassas is summarised as follows: 1) An additional new generator with associated fuel tank; 2) Replacement of two (2) UPS systems with new UPS systems; 3) Addition of new switchgear to improve the overall reliability and flexibility of the power system at the site.

- In 2018, SES is evaluating the need to replace two (2) generators and their associated fuel tanks with two (2) newer models. Additionally, a new 7.3m gateway antenna is currently being installed in Hawaii in support of O3b. This will be the fourth (4<sup>th</sup>) gateway antenna at the site for O3b. At SES's facility in Gibraltar SES upgraded its Security System in conjunction with the new computer room. At SES's facility in Betzdorf, SES is operating with a state of the art power plant cold water production system, cooling systems and power distribution systems.
- The Betzdorf physical security has been upgraded with the addition of an additional external fence around the facility.
- The TT&C function is currently provided for each satellite via at least two independent antenna sites. The sites are connected via a ground dual-redundant state-of-the-art network to at least two site diverse SOCs.
- The global network that supports TT&C deploy a dual-redundant state-of-the-art Multi-Protocol Label Switching ('MPLS') network connecting all the SOCs and TT&C sites worldwide.
- Additionally, Aggregation Service Routers (ASRs) were upgraded in the network in response to the new High Throughput Satellites (HTS) network traffic.

Regarding the internal controls in the area of information and communication technology, the following should be noted:

- Management is committed to ensuring that its data, infrastructure and information technology systems are as secure as is reasonably practicable. Security controls, policies and procedures are in place to prevent unauthorised access to premises, computer systems, networks and data. Policies and procedures have been defined and implemented in order to address the more rigorous regulations governing handling of personally identifiable data.

- Management is committed to enhancing information security through the established Data Governance and Information Security Committee within SES, comprising representatives from various applicable functions, which reviews practices, policies and procedures.
- SES is rolling out its information and cyber-security framework to its newly acquired businesses in order to align security controls and practices within the SES group.
- Electronic information is regularly backed up and copies are stored off-site.
- SES has disaster recovery plans for its business applications. The regular testing of these activities which took place in 2016 has confirmed that SES is in a good position to recover all mission critical back-office applications within their set recovery time objectives. The next testing is planned to take place in 2018.

#### INFORMATION AND COMMUNICATION

Since January 2015, all SES's main trading operations are now included and operated on a common SAP platform, sharing common processes and controls.

Furthermore, the companies O3b and MX1, acquired in 2016, and SmartCast, have been migrated to SAP as of January 2018 to achieve substantial integration of the trading and financial operations, leveraging existing best practices and security controls established within SES.

An SAP Security and Authorisation function is committed to continually enhancing SAP access management, taking advantage of the implemented SAP Governance Risk and Compliance module which focuses on access and process controls.

To further support this process, the SAP Security and Authorisation function has defined and implemented a comprehensive SAP security policy.

The operation of the SAP hosting platform continues to mature in various areas including data privacy, data encryption and intrusion detection. A detailed operational handbook is maintained to safeguard smooth and secure operation of the company's ERP platform. In 2017, the hosting company has commissioned a new state of the art backup data centre to ensure enhanced continuity of SAP system operations.

Internal communication ensures the effective circulation of information and supports

the implementation of internal control and risk management by providing business and functional objectives, instructions and information to all levels of SES. The corporate intranet portal and collaboration tools are instrumental to sharing information throughout the company.

#### **MONITORING ACTIVITIES**

Monitoring is done in two ways: through ongoing evaluations or separate evaluations. Ongoing evaluations are performed by management as routine operations, built into business processes, and are performed on a real-time basis, reacting to changing conditions.

The SES Internal Audit function performs separate evaluations of the relevance of, and compliance with, company policies and internal control procedures.

The mission of the Internal Audit function is to provide independent and objective assurance regarding the effectiveness and efficiency of business operations, the reliability of financial and operational reporting, and the company's compliance with legal and regulatory requirements. In this context, Internal Audit is also tasked to support management with identifying, preventing and minimising risks, as well as safeguarding the company's assets.

To ensure an appropriate level of independence and communication, the Internal Audit function has a direct reporting line into the Audit and Risk Committee and reports functionally to the President and CEO.

The activities of the Internal Audit function are executed in accordance with an annual audit plan, which is reviewed and approved by the Audit and Risk Committee. This plan is derived from an annual risk assessment based on a risk mapping exercise relying on the SES risk register. The annual risk assessment responds to the need to dynamically link the audit plan to risks and exposures that may affect the organisation and its operations.

Internal Audit monitors the implementation of internal control recommendations and regularly reports on effective compliance to the Senior Management of SES and to the Audit and Risk Committee.

Internal Audit also regularly co-ordinates audit planning and exchanges relevant information

with the company's external auditors.

The proxy structure of the SES Government Solutions entity, in line with common practice for businesses serving certain segments of the US Government, imposes various restrictions on the Board and executive management in directly supervising the maintenance of an internal control system and imposing an internal audit structure. The SES Internal Audit function did not perform any direct internal control review of this entity during 2017, in line with the imposed restrictions. However, these restrictions are mitigated through having agreement on a required risk management and internal control framework for SES Government Solutions which is subject to evaluation and testing by a third-party internal audit function. An adequate reporting process of activities of the third-party audit function to the SES Internal Audit function and the Audit and Risk Committee has been put in place.

It should be further noted that PwC, as external auditor, reviews the financial statements of SES Government Solutions.

#### **INVESTOR RELATIONS**

SES's dedicated Investor Relations function reports to the Chief Financial Officer and works closely with the President and CEO. Its purpose is to develop and coordinate the group's external financial communications and interactions with equity and debt investors, investment analysts, credit rating agencies, financial journalists and other external audiences, to monitor stock market developments, and to provide feedback and recommendations to the SES Executive Committee. The SVP, Corporate Finance and Investor Relations, along with the VP, Head of Investor Relations, is responsible for the definition and execution of SES's active Investor Relations programme and participation in investor conferences and similar events. Investor Relations also works closely with the Chief Legal Officer to ensure that the group's external communications are compliant with all applicable legal and regulatory requirements.

# CORPORATE SOCIAL RESPONSIBILITY (CSR)

The concept of [Corporate Social Responsibility \(CSR\)](#) is used to identify how a company's values and conduct demonstrate responsibility towards the communities and societies in which it operates. To get an accurate overview of a company's social responsibility, a variety of factors need to be considered, including environmental and ecological profile, educational contributions, charitable activities, diversity as well as corporate strategy.

SES CSR goes beyond compliance with the compulsory legal elements and includes self-defined targets. SES has made a number of commitments in this domain and defined its best practices. This results in notable recognition by stakeholders, investors, customers and employees, and an excellent reputation as a corporate citizen.

In addition to complying with the existing framework, SES voluntarily discloses supplementary and non-financial information - via this current report – beyond that required by the EU directive 2014/95 which will become mandatory for reporting in 2018.

## ENVIRONMENT

SES applies best practices in minimising the environmental impact of its sites across the world. The company also ensures that the amount of radiation emitted from earth stations respects or remains below the maximum levels defined by the countries of operation. SES's compliance with this is checked through yearly audits that are conducted both by internal and by third-party accredited organisations that specialise in the field of industrial safety.

Since 2008, SES has officially reported the CO<sub>2</sub> emissions of its operations through participation in the Carbon Disclosure Project (CDP), which collects the data of all SES's business activities and locations.

The data collection for CDP covers three scopes:

- Scope 1: Direct Combustibles (gas and fuels consumption, refrigerant leakage, car fleet)

- Scope 2: Indirect Energy consumption (purchased electricity or heat)
- Scope 3: Other Emissions (business travel, commuting, waste, water consumption)

In 2016, the company's activities related to operating and commercialising the SES's satellite fleet, as well as general administration, finance and marketing, generated approximately 40,856 tons of CO<sub>2</sub> emissions worldwide, a decrease of 3 % compared to 2015. Scope 1 emissions were approximately 5.9 %, reduced by 3,037 tons. Scope 3, business travel including staff commuting, increased by 1,251 tons to 33.6 % overall. This increase was due to the growth of the company in number of employees and sites.

The methodology used follows as closely as possible the guidelines outlined in the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard and Defra (UK) Guidance on How to Measure and Report your Greenhouse Gas Emissions (September 2009) and the 2016 guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting and the International Energy Agency's 2016 edition of CO<sub>2</sub> emissions from fuel combustion and World energy balances database.

Emissions from Scope 2, electricity consumption, represented the largest component of SES's total emissions (approximately 60.5%). Scope 2 location-based emissions factors were chosen in line with the GHG Protocol recommendations. For low occupancy sites, assumptions were made based on average electricity, gas and travel data at the main offices sites. A data collection questionnaire was circulated to all 33 main SES global sites in order to collect activity data. 59 low occupancy and unmanned SES sites ('co-locations') were included in the data collection exercise. In order to calculate GHG emissions, when electrical power consumption was not precisely measured, it was estimated.

SES is particularly focused on carbon reduction initiatives in connection with new building constructions and infrastructure upgrades as the largest share of the emissions was generated from Scope 1 and Scope 2 sources. In fact, at SES, the billions of items of data exchanged by satellite

## SES CO<sub>2</sub> results

Year	2016	2015	2014	2013	2012	2011	2010	2009	2008
Scope 1 (t CO <sub>2</sub> e)	2,418	5,455	6,546	6,621	6,959	6,464	12,397	17,317	14,432
Scope 2 (t CO <sub>2</sub> e)	24,701	24,395	17,080	17,391	20,475	27,758	26,846	32,471	26,507
Scope 3 (t CO <sub>2</sub> e)	13,737	12,466	11,460	14,756	5,873	4,937	2,309		
<b>Total emissions (t CO<sub>2</sub>e)</b>	<b>40,856</b>	<b>42,336</b>	<b>35,087</b>	<b>38,768</b>	<b>33,307</b>	<b>39,159</b>	<b>41,553</b>	<b>49,788</b>	<b>40,939</b>

through teleports are analysed in computer servers located on the Betzdorf site in Luxembourg. These servers emit a lot of heat and need to be constantly cooled. Until recently, this need was covered by a Combined Heat and Power (CHP) unit, which reduces the emissions load of the general grid. These are special machines that can transform the waste heat of the cogeneration plants of the site into over 2 MW of refrigeration.

Since January 2010, SES's headquarters in Betzdorf, Luxembourg, have been using electricity sourced from hydropower, which can be considered CO<sub>2</sub>-free. The use of renewable energy has had a significant reduction of the company's carbon emissions (an estimated 6,000 tonnes). However, due to the carbon accounting rules, these emissions gains are not reflected in the official company's carbon disclosure figures. The same technology was applied to its operations in Sweden.

In the context of the legal framework in Europe with the goal to save energy, SES started to analyse the energy efficiency of the main facilities in accordance with EN 16247. This audit was first performed at the SES's state-of-the-art site in Munich, Germany, and in 2016 at the headquarter site in Betzdorf, Luxembourg with the goal to identify energy saving potential for further optimisation.

Through these and other initiatives, SES has thus implemented a substantial and ongoing carbon reduction plan in its sites across the world.

## EDUCATION

SES's education initiatives entail collaborations and partnerships across the world. SES partners with universities to foster technological innovation, contribute to the development of mission critical technical capabilities, advance satellite-based business solutions, develop engineering talent, and support PhD research.

SES also recognises that it must inspire the new generation towards Science, Technology, Engineering and Mathematics (STEM) and so it invests in considerable resources to get involved in local and global activities in this field.

SES academic partners include:

- Luxembourg Institute of Science and Technology (LIST)
- The Center for Security, Reliability and Trust (SnT) at the University of Luxembourg
- The Faculty of Law, Economics and Finance (FDEF) at the University of Luxembourg

- Jack Welch College of Business at Sacred Heart University, Luxembourg City, Luxembourg
- The Lycée Technique d'Esch, Esch-sur-Alzette, Luxembourg
- Massachusetts Institute of Technology, US
- The International Space University, Strasbourg, France
- Université Paris-Sud, France
- The University Politechnica, Bucharest, Romania
- The Stevens Institute of Technology, New Jersey, US
- Princeton University, New Jersey, US
- The African School of Economics (ASE), Abomey-Calavi, Benin

## DIVERSITY & INCLUSION

SES seeks to bring the best to its customers, wherever they are and whatever their needs and challenges. To do this, SES is committed to bringing together an SES team of diverse individuals with different life experiences, different backgrounds, and from different geographies and cultures. This approach is paramount to serving its customers today and helping it decipher the world's communication needs of tomorrow.

By actively nurturing an inclusive company culture, and appreciating why it's so important to create a fair and supportive work environment for its people, SES seeks to continue attracting and retaining the very best talent.

SES also acknowledges that there is much work still to be done, as indeed there is in the technology sector as a whole. As an industry leader, SES is fully committed to increasing the number of colleagues from underrepresented groups and to creating a more diverse SES for the future.

SES has begun by analysing and addressing drivers for female inclusion, which is an approach that is also used to maximise the commitment of all diverse groups in its workforce.

Currently SES's workforce consists of 23% women, a figure that has been stable over the last four years but that it expects to grow as part of its diversity strategy. Also, whilst currently 9% of its executives are female, about 26% of its employees below 30 years are female, representing more than one third of the executive succession plan and 24% of the participants in SES's High Potential Program.

SES's goal is to continue to increase number of women in areas where they are underrepresented and SES has committed to increase the number of female executives by 2020. In order to achieve this goal it will need to

introduce systematic and supportive practices in building a female talent pipeline that will sustain long-term gender inclusion.

As of 31 December 2017, the SES group employed 2,033 individuals worldwide. This breaks down to 536 in its Luxembourg headquarters, 554 in the rest of Europe, 555 in the US, and 388 in the rest of the world. SES is a truly international company represented by 68 different nationalities. The leadership team consists of 26 different nationalities at the executive level, with employees from 24 different nationalities in its high potential programme. The top five nationalities by number of employees are the US (546 employees), Germany (319), Israel (230), the UK (179) and France (113).

## GIVING BACK

SES's entire team focuses on charitable work, including charitable activities that benefit from its donation-matching programme, SES social clubs, and charity projects endorsed by its HR Learning and Development team.

SES makes annual contributions to charities, one-off contributions to disaster-stricken areas in the context of the 'SES Gives Back!' programme, and a site-based charity run. These activities engage and motivate the colleagues, who then inspire each other to give back to the community where they work.

In 2017, SES matched employee donations to charitable organisations including - the Red Cross, the Red Crescent, Oxfam, Unicef, Médecins Sans Frontières/Doctors Without Borders, and Télécoms Sans Frontières.

In addition, SES is proud to see its employees take on independent initiatives to give back to society. In 2017, SES employees' independent initiatives took a more formal shape with a '1 charity per month' programme. This provides a platform where employees can join forces in support of particular charities and disaster relief activities.

## RESPONSIBILITY STATEMENT

The Board of Directors and the Executive Committee of the company reaffirm their responsibility to ensure the maintenance of proper accounting records disclosing the financial position of the group with reasonable accuracy at any time and ensuring that an appropriate system of internal controls is in place to ensure the group's business operations are carried out efficiently and transparently.

In accordance with article 3 of the law of 11 January 2008, as subsequently amended, on transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market, we declare that, to the best of our knowledge, the annual statutory accounts as of and for the year ended 31 December 2017, prepared in accordance with Luxembourg legal and regulatory requirements, and the consolidated financial statements as of end for the year ended 31 December 2017, prepared in accordance with the International Financial Reporting Standards as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit of the year of SES taken individually, and of SES and its consolidated subsidiaries taken as a whole, respectively. In addition, the management report includes a fair review of the development and performance of the business and the position of SES taken individually, and of SES and its consolidated subsidiaries taken as a whole, together with a description of the principal risks and uncertainties that they face.

22 February 2018



Romain Bausch  
Chairman of the Board of  
Directors



Karim Michel Sabbagh  
President and CEO