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This past year has been an extremely important one for me personally. In 2017 I stepped down from HOK and ‘repurposed’ myself. I was delighted to be re-elected as Chairman of buildingSMART in June and am fully committed to helping this organisation achieve the scale and financial sustainability we need to do our job.

Growing and professionalising the leadership of buildingSMART continues to be a demanding but highly rewarding role. Our progress in 2017 was no less than in earlier years, and I’m delighted by the developments and progress detailed in this report.

Growing and professionalising the leadership of buildingSMART continues to be a demanding but highly rewarding role.

I’m particularly pleased to see the senior business and client user engagement in our work, both in leading and supporting major projects and participating as Strategic Members and in providing valuable advice during our Strategic Advisory Council meetings.

I’m also very proud of the long history and deep commitment at an individual level, which was recognised in the establishment of our Fellowship Scheme. This is now being formally constituted under the leadership of the Fellows to ensure it continues to be a high-honour and self-sustaining scheme that will grow along with our activity.

Patrick MacLeamy
Chairman, buildingSMART International
Chief Executive’s statement

2017 was another extremely strong year of growth and improvement for buildingSMART. We experienced growth in almost all dimensions. Highlights include the following:

- New Chapters in Austria and Russia
- Standards Program: Infrastructure and Rail activities
- bSDD: Beta launch and Product Manager
- Professional Certification foundational development work
- Software Certification new platform development
- Membership growth

That said, we continue to face significant challenges to build the necessary confidence with our client audiences, and to offer services and provide organisational leadership of a more comprehensive nature.

The two Standards Summits (Barcelona and London) were both very well attended and of a high standard. The professionalism was noted by external stakeholders and has contributed to our growth. Infrastructure owners and operators of all types are interested in extending our standards to cover their domains. We are especially pleased with the progress being made in the areas of bridge, rail and ports.

Our journey of improving governance and ‘company building’ continued with the approval of our new Articles of Association by the International Council in Zurich in June. The combined membership arrangement had its first full year of operation, and the tangible benefits of closer alignment and mutual gains are beginning to be demonstrated. Of special note was the establishment of the buildingSMART Fellowship Scheme and the recognition of some 18 professional contributors for their long-serving commitment over many years.

Looking ahead, the Board has established a strategic framework for buildingSMART that is designed to allow us to improve the clarity around the various aspects of business and product / technical strategy. This is important to support further growth and sustainability of our work, and to ensure the relevance of our outputs in the web-enabled world of the future.

Our finances remain tight and our expenditure continues to be carefully controlled. I would like to extend my thanks and sincere appreciation, once again, to all those members, sponsors and professional contributors whose contributions allow us to operate. A special mention is also due to Patrick MacLeamy, our Chairman. Through his ‘Chairman’s Challenge’ promise to provide substantial personal funding, Patrick has galvanised our fundraising efforts.

Open digital solutions including openBIM are of increasing demand in the built asset industries; our work in creating international consensus and supporting the implementation of those standards is of growing importance. The road ahead is complex, especially as the functionality and use of the web increases. I am convinced of the vital nature of our work and remain excited and inspired by the opportunity and challenge of rising to fulfil those needs.

Richard Petrie
Chief Executive
03 The buildingSMART programs:

Standards

The Standards Program continues to gain strength in governance and in the volume and quality of the output.

Two bSI Final Standards and three bSI Technical Reports were published in 2017.

The BIM Collaboration Format (BCF) version 2.1 was an update to an existing standard and was a good test of using the Standards Process for managing revisions. buildingSMART actively promotes the deployment of its standards in order to drive implementation and, moreover, to generate useful feedback from application. Continuous improvement and revisions are an important part of the value offering, and this BCF revision is a prime example.

IFC 4.1 Alignment positioning and sectioned geometry is the first official extension of the International Standard IFC4 (ISO 16739), and it is an enabler for the other projects in the Infra Room program plan (IFC Bridge, Road, Rail, etc.). Its publication now allows the exchange of alignment information, the ability to link alignments, positioning and linear referencing and, of course, the archiving of such information in an open, standardised way.

A technical report on Overall Architecture provides a common basis for the projects that will be extending the IFC into infrastructure. It was written in parallel to the IFC 4.1 alignment standard and complements it.

The Infrastructure Asset Management Technical Report is an important contribution to the industry as it establishes the benefit of open sharable information to enable decision making at each stage of an asset’s lifecycle. Decisions made at early design stages can have significant impact on whole life value.

The Open Standards for Regulation Report paves the way for digital standards regarding regulatory, requirements and recommendatory content.

During 2017 there were more than 30 activities passing through the Standards Process in 7 Rooms. At the time of writing, a new Railway Room has been formed and the IFC Rail project has been transferred to it from Infrastructure.

The IFC Rail project—with a €5 million budget and stakeholders from several international rail operators—is a significant scale up of buildingSMART’s activities. Projects of this scope are what the robust Standards Process was created for.

The Standards Committee continues to grow and has doubled in size in just over two years as a result of buildingSMART International’s increasing membership. Having a diverse committee is what ensures robust international consensus when standards are being endorsed. The Standards Committee was called on to vote 15 times in 2017.

Development of the operational tools has also improved the functionality of the process. On-line voting has been created and investment in the document sharing platform has been made. This links neatly to the members’ intranet and allows much better team working across the world.
The buildingSMART programs:

Standards

The Standards Program continues to gain strength in governance and in the volume and quality of the output.

buildingSMART

Data Dictionary (bSDD)

The bSDD is now run as a service operated directly by buildingSMART International. buildingSMART Norway is supporting the employment of a bSDD Product Manager and providing operational support from their Chapter resources. Without this support, recent progress would not have been possible.

bSDD is targeting a position as the primary smart integrating dictionary world-wide.

bSDD is targeting a position as the primary smart integrating dictionary world-wide. We believe we are uniquely placed to do this because of the smart integrating functionality established to date and our open, neutral international status. We also believe such a service is a fundamental requirement for efficient digital workflows in the built asset industry.

A new Operating Model and Quality Management framework has been introduced and a ‘beta’ service has been launched. This targets Software Agents and Content Creators at this time; end users will benefit from improved app functionality in due course.

Strategy

During the year we continued with the Strategy and Operating Vision agreed in Beijing in 2014. The critical central theme is one of increasing professional leadership in order to organise and sustain our activities. In many ways our circumstances may be compared to those of a high-growth start-up (i.e., many demands and limited resources).

We started work on a new strategic framework for buildingSMART. The key drivers for this framework are the need to

- respond to the Information and Communication Technologies (ICT) developments;
- ensure sufficient and sustainable financial resources in the future; and
- clearly define buildingSMART’s unique value proposition.

The Board is responsible for the Business Strategy. Technical Strategy is led by the Technical Room and takes care of the modernisation requirements of the IFC Schema implementations and associated apps and workflow enabling tools. Product Strategy is aimed at articulating a systems vision of buildingSMART offerings in the context of the new ICT environment.
04 The buildingSMART programs:

Compliance

Software Certification
Penetration of the IFC 2x3 exchanges has increased, showing that the adoption of IFC is growing (at present 23 vendors certified). The IFC4 Reference View certification was launched and has been taken up strongly. The initial launch was well received with 13 certifications registered for IFC4 Reference View for 11 applications.

Although the IFC4 certification platform is now up and running, the development of detailed specific Exchange Requirements (ER) for the Design Transfer View certification has proven problematic. More work is needed to develop and achieve a consensus on the appropriate ER to certify against.

The pre-investment in the certification tool has been supported by iabi, AEC3 and Aconex.

Professional Certification
The Professional Certification program officially launched its first phase (Individual Qualification) in September 2017. By year's end, nine Chapters—Germany, Switzerland, Canada, Korea, Norway, Italy, Spain, Japan and UK & Ireland—had signed up and committed to deliver the program locally. At the Standards Summit in London, the Professional Certification Committee showcased its prototype of the online qualification platform and ran two working sessions to answer questions and explain the program in more detail. In November and December, the content and question database for the Basic module was reviewed by 40 experts around the world to ensure quality and consistency. Parallel to this effort, process and guidance documents were developed to further support Chapter implementation.

In 2018 we expect to see these nine Chapters heavily involved in local implementation of the program. We also hope to see other Chapters coming on board later in the year. The bSI Professional Certification Committee will continue to provide guidance and support to the Chapters and ensure successful adoption around the world.
05 The buildingSMART programs:

User

Users and National Engagement

It is clearly recognised that industry transformation requires the front-line engagement of users for the cultural and commercial changes required.

Client and government mandates continue to increase around the world. There is great alignment between these and the work we have underway in our programs and by our Chapters. bSI hosts a monthly e-conference for Chapter Leaders and offers Chapters the opportunity to update each other on a rolling basis throughout the year and to present topics of interest or merit.

The International User Group (IUG) holds regular online meetings, open to any user of buildingSMART-compliant products. Participants are invited to make presentations and share their experiences.

buildingSMART International Awards

The Award program was created in 2014 to recognize exemplary projects using buildingSMART solutions. Entries must deploy one or more buildingSMART tools or standards, and are judged on how effectively, or how innovatively, they have used these to overcome interoperability challenges.

The 2017 winners were awarded at the Institute of Engineering and Technology in London, during the International Standards Summit.

2017 Winners:

- **Design Award:** The Tønsberg Project, Norway
- **Construction Award:** Neubau Klinikum Frankfurt Höchst, Germany
- **Operations & Maintenance Award:** The Governor Mario M. Cuomo Bridge, USA
- **Student Award:** IFC Enabled Site to BIM Automation, USA

Fellowship Scheme

In 2017 buildingSMART established a Fellowship Scheme to honour long-serving professional contributors who have been the organisation’s lifeblood over many years. buildingSMART wishes to ensure this scheme rewards those who contribute exceptionally, and is recognised as a very high honour. It must also grow in stature over the long term, sustaining the vital concessionary professional contributions on which buildingSMART depends.

buildingSMART Fellows

Kjell Ivar Bakkmoen
Chris Groome
Reijo Hänninen
Ian Howell
Rudolf Juli
Arto Kiviniemi
Alain Maury
Dr. Mikio Shoji
Patrick MacLeamy
Rasso Steinmann
Cheng Tai Fatt
Väino Tarandi
Jeff Wix
Yoshinobu Adachi
Francois Grobler
Jan Karlshøj
Thomas Liebich
John Mitchell
A new railway room has been formed. The IFC rail project—with a €5 million budget and stakeholders from several international rail operators—is a significant scale up of buildingSMART’s activities.
06 The buildingSMART rooms:

Airport

The Airport Room continues to have strong engagement at the International Summits from airport operators and their suppliers, but has yet to form a true Steering Committee. At this stage, therefore, it is still creating its workplan based around the management of airport-specific assets.

At the time of writing, a core team is taking the contributions from several airports and preparing a draft roadmap that will illustrate the value proposition and propose aspects that would benefit from digital workflows.

“The Airport Room continues to have strong engagement at the International Summits from airport operators and their suppliers.”
There is now a good portfolio of work within the Room and the activities are progressing well through the process.

The Model View Definitions for energy transfer through thermal boundaries and quantity take-off will reach completion in 2018. In addition, new projects for IFC Reinforcing Bar and IFC Precast concrete have commenced and are forming support for funding and delivery. It is encouraging that the requirements for these projects came from government organisations and serious industry organisations involved in the construction of nuclear power plants.

The new standard for IDM Model Setup, which defines a common model protocol based on existing practice for IFC4, will also complete and be published in 2018.

A technical report called LOX, which is investigating the different levels of development / definition / information, is progressing well.

There are several projects in the pipeline for the Building Room in 2018, including openBIM enabling design for manufacture & assembly and lean practice, and IFC for sites, landscape and urban planning.

Leadership of the Rooms is an important element of creating and delivering an industry relevant plan—to this end, Steering Committee elections will be held in 2018.
The Construction Room was launched September 2016 in response to industry demand for a room dedicated to the needs of construction projects.

It is always a very popular Room at the International Summits, which reflects the interest in accelerating the uptake of building information technology.

The Construction Room is currently a forum for industry players to share best practice regarding digital solutions in the site environment. It is always a very popular Room at the International Summits, which reflects the interest in accelerating the uptake of building information technology.

Education remains a high priority for the Construction Room, as many contractors are unaware of the benefits that BIM can bring, especially the clarity that visualisation can bring to the workforce on-site.

A proposal to use the Room to generate bSI Reports on a series of topics including CIM (Construction Information Management), Internet of Things (IoT), on-site robotics, augmented reality and wearables is expected in 2018.
The IFC 4.1 Alignment standard was endorsed by the Standards Committee early in 2017. The publication of this standard and its supporting report, Overall Architecture, are what has paved the way for further projects that deliver other infrastructure standards to start.

Standards for IFC Road, IFC Rail, IFC Bridge, IFC Tunnel and IFC Ports and Harbors are in development. Each of these projects is being driven by a truly international team. It is worth noting that the Belt and Road initiative from China (sometimes referred to as the new Silk Road) is generating a lot of momentum for these activities.

There is also a project underway to stimulate adoption of the IFC 4.1 Alignment standard, thereby driving implementation and useful feedback from application. As noted earlier, continuous improvement cycles are an important part of buildingSMART’s value offering.

IFC Road project recognises that IFC standards for roads are required for the introduction and activation of BIM in road projects in every country. Internationally, the BIM application for road projects has been increasing. However, there is not yet an international IFC extension for roads, so IFC-based parametric designs that are specialised in road facilities, delivery and process management of outcomes are not available. Especially in the case of delivering design and as-built outcomes after finishing design and construction stages, the as-built road models have difficulties in securing the interoperability and consistency between BIM S/W in creating the 3D models for roads because it generally applies IFC for architecture. To address these issues, this project will allow the development and standardisation of road facilities that can be used globally.

The IFC Rail project is intended to accelerate and exploit new digital opportunities for railway systems and create a complete, comprehensive and applicable digital representation of the entire railway ecosystem that will support all phases of the lifecycle. This provides the basis of interoperable support systems, reduced complexity, secure and safe solutions and reduced costs for all stakeholders.

IFC Ports & Harbors will draw on the expert knowledge from the buildingSMART International community and leading organisations in ports and harbour construction to provide a framework for open data standardisation. This framework will include domain specific IFC Schema extension, Model View Definition (MVD) development, software & model demonstration, documentation for the extensions and MVDs plus guidelines on use of the information. The project would align (and if requested, assist) its efforts with the outcomes from the overall architecture project and concurrent developments of the common definitions project.

The MoU between bSI and the Open Geospatial Consortium (OGC) has been made more tangible with the formation of the joint Integrated Digital Built Environment (IDBE) task group. This collaboration is a joint Planning Committee to find solutions to increase the interoperability between data for both the geospatial and built environment domains. A management structure is in place for this work and the framework model is being populated.
10 The buildingSMART rooms:

Product

The aim of the Product Room is to develop the tools and templates that will allow the efficient use of product data in building projects and subsequent asset management.

The buildingSMART Data Dictionary (bSDD) is an open library of terms, object types and their properties that is providing IFC terminology and unique identifiers.

The new licensing arrangements for the bSDD have been implemented and are now supported by a bSI Product Manager (a shared resource with buildingSMART Norway).

The Product Room continues to deliver projects that support this use of the bSDD. One example is the development of our free tool ifcDoc, which allows users to create their own IFC documentation. This tool is being integrated with the bSDD to allow the addition of Property Sets (PSets) and Quantity Sets (QSets).
The technical report Open Standards for Regulation is an important first publication for the Regulatory Room and is a solid basis for new projects that have been in discussion for sometime and are now beginning to progress.

The Auto code checking Report will review the available and proposed exchange formats for supporting interoperability between Regulatory, Requirements and Recommendatory (RRR) content. This report aims to present a case for investigating such issues; identify solutions; and propose recommendations that will be implemented by the buildingSMART community, the research community and regulatory bodies.

"The technical report Open Standards for Regulation is an important first publication for the Regulatory Room."

E-submission Common Guidelines project is addressing the juxtaposition that an increasing number of building permissions are being required against digital submissions but the parties concerned do not have information available to allow them to do this efficiently. The project is expected to provide a published Technical Report in late 2018.
The Technical Room has been rethinking its role during 2017 to understand how it can best serve the community.

The focus has been on developing the technical strategy, which essentially means the modernisation requirements of the IFC Schema implementations and associated apps and workflow enabling tools.

A project that remains a Candidate Standard, but is a very important aspect of the technical strategy development, is ifcOWL ontology. The intention is that the ifcOWL ontology be used in linked data and semantic web applications that consume IFC data.

The Implementation Support Group (ISG) met in person in Oslo and Glasgow during 2017 and continues to offer great support to vendors with the online tools.

The Model Support Group (MSG) also continued to provide the technical support for the bSI standards by maintaining the IFC model, supporting the ifcDoc software tool and representing bSI at ISO’s Technical Committee 59.
Chapters

A new buildingSMART Russia was endorsed as a new full Chapter of buildingSMART during the Zurich International Council meeting. At the time of writing, an Austrian Chapter is also established with development status.

**Full Status (as of 31 Dec 2017)**
- Australasia
- Benelux
- Canada
- China
- France
- Germany
- Japan
- Korea
- Nordic
- Norway
- Russia
- Switzerland
- UK
- USA

**Developing Status (as of 31 Dec 2017)**
- Italy
- Singapore
- Spain

The level of interest from candidate nations to establish Chapters remains high. Sustained interest has been expressed by:
- Egypt
- Estonia
- India
- Latvia
- Lithuania
- Poland
- Portugal
- Turkey
- UAE

There is also a group in Ireland developing a stronger local leadership cadre.

The business of starting and growing a new Chapter is a significant challenge, as is the work required to support and assess the candidate proposals. bSI is not well enough resourced to address this properly at present. We have identified an opportunity to leverage our network and Chapters to help in these tasks. For example, the Nordic chapter grouping has acted as an umbrella organisation to assist Baltic States candidate Chapters and Germany has acted as a coach and facilitator for the UAE candidate group.

bSI wishes to encourage greater involvement from established Chapters in supporting new ones.

We are aware that some of our older, legacy Chapters are facing challenges of either renewal in the face of growing country expectations or of sustaining growth, and therefore require attention.

The challenges and status of individual Chapters is provided by way of updates at the Chapter leaders’ forum. Considerable personal investment is needed from our leaders until they can gain sufficient support to employ staff.
Membership

International members are entitled to be members of five local Chapters in addition to membership of bSI, while standard members are also given membership of their home Chapter. As of December 2017, there were six strategic members: Arup, Autodesk, HOK, Kajima Corporation, LafargeHolcim and Nemetschek Group. There were five international members and seventeen standard members.

Members sit on the Standards Committee, which endorses the creation of standards, and can work in Room Committees and on projects. Members benefit from the collective local and international activities of other members. They play an active role, not only in identifying issues, but also in developing solutions.

New members during the year were the giant product manufacturer, LafargeHolcim (strategic); the rail operator, SBB (international); and Bexel, China Communications Construction Company, CRB, DB Netz, FM Global, Hochtief PPP Solutions, Royal HaskoningDHV, ÖBB Infra, SNCF Réseau (standard).

The SAC contributes to Board meetings and met face-to-face in Zurich and London.

The number of standard members more than doubled in 2017, and although the strategic members have also increased, it is the standard membership where we expect most of our future growth.

Strategic Members

ARUP  LHK  Kajima Corporation  LafargeHolcim  Nemetschek Group

International Members

BricsCAD  coBuilder  Dassault Systèmes  SBB CFF FFS  Trimble

Standard Members

Bexel Consulting  CRB  DB Netz  ferrovial  agrup

menschmaschine  Hochtief PPP Solutions  Hochtief  CCCC  Royal HaskoningDHV

Schiphol  Schiphol  TRAFFIKVERKET  SNCF Réseau
Communications

For an international alliance that has contributors from more than 200 companies in nearly 40 countries, good communication channels are essential. buildingSMART continues to invest in resources and facilities in line with increasing income to bolster communication.

There are several layers to the communication offering. The public website (www.buildingsmart.org) has been revamped with a new theme and the security of the servers strengthened.

Extra content has been added for the new service offerings of Professional Certification (Individual Qualification) and the buildingSMART Data Dictionary.

The technical website, which is where the detail of our standards is published, is also undergoing a transformation for release in 2018.

A full suite of logos and branding guidelines has been created and published on the members’ intranet. They are available for Chapters, Members, Award winners and certified parties. This is an important aspect of ensuring consistent branding to promote a professional image.

buildingSMART’s existing digital communication channels continue to be a good transmitter of news stories:

- The LinkedIn channel is two years old and has 3400 subscribers. Stories regularly attract almost 2000 readers.
- Twitter has almost 5000 users, nearly a tenfold increase in two years.
- Facebook is more popular in Asia and our page has 700 followers.
- The YouTube channel also has a library of videos and these are being added to and categorised more conveniently all the time.

Until now, our communication to the broader community has been limited to transmit only.

In addition to improving the ‘static’ portion of the sites, a new community forum will be created to facilitate open discussion. This initiative gives an official platform for the knowledgeable volunteers to provide responses to questions about buildingSMART standards and solutions. There will be a level of moderation provided. Until now, our communication to the broader community has been limited to transmit only. The dynamic nature of this platform will draw more people to buildingSMART.

Within the organisation, the management of the activities is paramount, and therefore has also received investment. The creation of a members’ intranet in 2016 was a first step. This has received many improvements since its inception, including the ability to perform on-line voting.

One aspect that was never very satisfactory was the ability to track project documents. This challenge has now been resolved with the investment of Citrix ShareFile licences. ShareFile has many advantages and is now the official company product for document sharing. It also links easily to the Project Teams on the members intranet.
Governance and finance

BuildingSMART International is incorporated in the UK as a company limited by guarantee while the Chapters, which are self-governing, are set up according to the legal framework in their home country. The International Council (IC) consists of representatives from the Chapters in their governance capacity and holds an annual general meeting. Each Chapter sends two representatives to the IC meetings. A Board is elected at the annual International Council meeting.

The Strategic Advisory Council (SAC) also advises bSI, and during the year SAC members met with the Board on two occasions. Three full-time officers are employed by bSI: a Chief Executive and an Operations Director, with a Business Administrator / Events Manager joining mid-2017. The Chief Executive was appointed as the company Secretary at the Board meeting in Zurich.

Other services are also procured on a fee basis, and include technical support for standards development and the bSDD, communications support and website management.

The principal source of income for bSI is membership dues, which in 2017 contributed €894,000. Income from chapter membership stood at €292,000 of which €98,000 was returned to the Chapters under the rebate scheme.

Income from services jumped to €293,000, which was almost entirely due to software certification. Most of this software certification income, however, washes through with payments to the service provider. The income stream from the new bSDD licences and the Professional Certification service is expected to begin in 2018.

The principal outgoings from the core overheads are bSI management (€549,000 in 2017); and the bSI website and marketing (€98,000). An appropriately sized professional office space was acquired in 2017 for the three staff members. Management costs increased due to the recruitment of the new staff member and the agency search fees for an International Project Coordinator and a Marketing Director.

Travel came in under budget but with the extra staff and increase in activities, this is expected to increase in 2018. Projects are funded separately, with total funding and expenditure balancing out on project completion. The currency exchange rate between the euro and GBP brought a negligible benefit in 2017. The year ended with a surplus of €128,000. Increasing revenue, chiefly through membership, remains a priority. The accounts are published at the end of this report.
buildingSMART's growth trajectory remains positive and the indicators all point to that continuing. In order to maintain the current momentum, it is important that we deepen the engagement with our members and ensure that we deliver value for the support we receive.

Our current priorities are

- Improved external communications
- Improved community and technical communications
- Successful completion of our major standards projects
- Development and clarification of our product and technology strategies
- Launch of the bSDD and Individual Qualification services
- Continued closer alignment with Chapters to offer seamless paths for members
- Strengthening our leadership team
## Annex: Financial statement

2017 Full Year

### Income

<table>
<thead>
<tr>
<th></th>
<th>2016 Actual</th>
<th>2017 Budget</th>
<th>2017 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapters</td>
<td>274</td>
<td>280</td>
<td>292</td>
</tr>
<tr>
<td>Membership</td>
<td>604</td>
<td>871</td>
<td>894</td>
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<tr>
<td>Chapter rebate</td>
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<td>(77)</td>
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<tr>
<td>Services</td>
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<tr>
<td>Projects</td>
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<td>187</td>
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<tr>
<td>Other Income</td>
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<td>75</td>
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<tr>
<td>Exchange gain on income</td>
<td>43</td>
<td></td>
<td></td>
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<td><strong>Income Total</strong></td>
<td><strong>1,222</strong></td>
<td><strong>1,394</strong></td>
<td><strong>1,531</strong></td>
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### Expense

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<th>2016 Actual</th>
<th>2017 Budget</th>
<th>2017 Actual</th>
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<tbody>
<tr>
<td>bSI Core Overheads</td>
<td>706</td>
<td>819</td>
<td>825</td>
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<tr>
<td>Room Overheads</td>
<td>161</td>
<td>225</td>
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<tr>
<td>Services</td>
<td>65</td>
<td>57</td>
<td>245</td>
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<tr>
<td>Projects</td>
<td>309</td>
<td>201</td>
<td>158</td>
</tr>
<tr>
<td>Bad Debt / Curr Exch</td>
<td>(59)</td>
<td>25</td>
<td>(3)</td>
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<tr>
<td><strong>Income Total</strong></td>
<td><strong>1,182</strong></td>
<td><strong>1,327</strong></td>
<td><strong>1,403</strong></td>
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</table>

### Surplus / Deficit

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<th></th>
<th>2016</th>
<th>2017</th>
<th>2017</th>
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<tbody>
<tr>
<td>Surplus / Deficit</td>
<td><strong>40</strong></td>
<td><strong>67</strong></td>
<td><strong>128</strong></td>
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</table>

**GBP to EURO rates**

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<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2017</th>
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</thead>
<tbody>
<tr>
<td>GBP to EURO</td>
<td>1.17</td>
<td>1.20</td>
<td>1.13</td>
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</tbody>
</table>

**€000s**
BUILDINGSMART INTERNATIONAL LIMITED
UNAUDITED FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 2017
PAGES FOR FILING WITH REGISTRAR
# BUILDINGSMART INTERNATIONAL LIMITED

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<td>Notes to the financial statements</td>
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BUILDINGSMART INTERNATIONAL LIMITED

STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2017

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<thead>
<tr>
<th></th>
<th>Notes</th>
<th>2017</th>
<th>2016</th>
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<td></td>
<td></td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Fixed assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>3</td>
<td>5,358</td>
<td>1,363</td>
</tr>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td></td>
<td>10,999</td>
<td>10,999</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>4</td>
<td>197,731</td>
<td>57,068</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td></td>
<td>864,181</td>
<td>508,679</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,072,911</td>
<td>576,746</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5</td>
<td>(928,143)</td>
<td>(541,390)</td>
</tr>
<tr>
<td>Net current assets</td>
<td></td>
<td>144,768</td>
<td>35,356</td>
</tr>
<tr>
<td>Total assets less current liabilities</td>
<td></td>
<td>150,126</td>
<td>36,719</td>
</tr>
</tbody>
</table>

Reserves

| Income and expenditure account | 150,126 | 36,719 |

The directors of the company have elected not to include a copy of the income and expenditure account within the financial statements.

For the financial year ended 31 December 2017 the company was entitled to exemption from audit under section 477 of the Companies Act 2006 relating to small companies.

The directors acknowledge their responsibilities for complying with the requirements of the Act with respect to accounting records and the preparation of financial statements.

The members have not required the company to obtain an audit of its financial statements for the year in question in accordance with section 476.

These financial statements have been prepared and delivered in accordance with the provisions applicable to companies subject to the small companies' regime.

The financial statements were approved by the board of directors and authorised for issue on 14 February 2018 and are signed on its behalf by:

Mr William Harold Moore
Director

Company Registration No. 05024694
1 Accounting policies

Company information
buildingSMART International Limited is a private company limited by guarantee incorporated in England and Wales. The registered office is 9 Quy Court, Colliers Lane, Stow-cum-Quy, Cambridge, CB25 9AU.

1.1 Accounting convention
These financial statements have been prepared in accordance with FRS 102 “The Financial Reporting Standard applicable in the UK and Republic of Ireland” (“FRS 102”) and the requirements of the Companies Act 2006 as applicable to companies subject to the small companies regime. The disclosure requirements of section 1A of FRS 102 have been applied other than where additional disclosure is required to show a true and fair view.

The financial statements are prepared in sterling, which is the functional currency of the company. Monetary amounts in these financial statements are rounded to the nearest £.

The financial statements have been prepared under the historical cost convention. The principal accounting policies adopted are set out below.

1.2 Income and expenditure
Turnover comprises the fair value of the consideration received or receivable for the provision of services in the ordinary course of the company’s activities and membership subscription income. Turnover is shown net of sales/value added tax, returns, rebates and discounts.

The company recognises revenue when:
The amount of revenue can be reliably measured;
it is probable that future economic benefits will flow to the entity;
and specific criteria have been met for each of the company’s activities.

Membership income is recognised over the period to which it relates and any amounts received during the year that relate to future periods are carried forward at the balance sheet date as deferred income.

1.3 Property, plant and equipment
Property, plant and equipment are initially measured at cost and subsequently measured at cost or valuation, net of depreciation and any impairment losses.

Depreciation is recognised so as to write off the cost or valuation of assets less their residual values over their useful lives on the following bases:

Office equipment 25% straight line basis

The gain or loss arising on the disposal of an asset is determined as the difference between the sale proceeds and the carrying value of the asset, and is credited or charged to surplus or deficit.

1.4 Impairment of non-current assets
At each reporting period end date, the company reviews the carrying amounts of its tangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the company estimates the recoverable amount of the cash-generating unit to which the asset belongs.
Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in surplus or deficit, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Recognised impairment losses are reversed if, and only if, the reasons for the impairment loss have ceased to apply. Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in surplus or deficit, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

1.5 Inventories
Inventories are stated at the lower of cost and estimated selling price less costs to complete and sell. Cost comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition.

Inventories held for distribution at no or nominal consideration are measured at the lower of replacement cost and cost, adjusted where applicable for any loss of service potential.

At each reporting date, an assessment is made for impairment. Any excess of the carrying amount of inventories over its estimated selling price less costs to complete and sell is recognised as an impairment loss in profit or loss. Reversals of impairment losses are also recognised in profit or loss.

1.6 Cash and cash equivalents
Cash and cash equivalents are basic financial assets and include cash in hand, deposits held at call with banks, other short-term liquid investments with original maturities of three months or less, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities.

1.7 Financial instruments
The company has elected to apply the provisions of Section 11 ‘Basic Financial Instruments’ to all of its financial instruments.

Financial instruments are recognised in the company's statement of financial position when the company becomes party to the contractual provisions of the instrument.

Financial assets and liabilities are offset, with the net amounts presented in the financial statements, when there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

**Basic financial assets**
Basic financial assets, which include trade and other receivables and cash and bank balances, are initially measured at transaction price including transaction costs and are subsequently carried at amortised cost using the effective interest method unless the arrangement constitutes a financing transaction, where the transaction is measured at the present value of the future receipts discounted at a market rate of interest. Financial assets classified as receivable within one year are not amortised.
1 Accounting policies (Continued)

Classification of financial liabilities
Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the company after deducting all of its liabilities.

Basic financial liabilities
Basic financial liabilities, including trade and other payables, bank loans, loans from fellow group companies and preference shares that are classified as debt, are initially recognised at transaction price unless the arrangement constitutes a financing transaction, where the debt instrument is measured at the present value of the future payments discounted at a market rate of interest. Financial liabilities classified as payable within one year are not amortised.

Debt instruments are subsequently carried at amortised cost, using the effective interest rate method.

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Amounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables are recognised initially at transaction price and subsequently measured at amortised cost using the effective interest method.

1.8 Taxation
The company is a mutual company and as such is exempt from corporation tax on surpluses generated from mutual activities.

1.9 Employee benefits
The costs of short-term employee benefits are recognised as a liability and an expense, unless those costs are required to be recognised as part of the cost of stock or non-current assets.

The cost of any unused holiday entitlement is recognised in the period in which the employee’s services are received.

Termination benefits are recognised immediately as an expense when the company is demonstrably committed to terminate the employment of an employee or to provide termination benefits.

1.10 Leases
Rentals payable under operating leases, including any lease incentives received, are charged to income on a straight line basis over the term of the relevant lease except where another more systematic basis is more representative of the time pattern in which economic benefits from the lease asset are consumed.

1.11 Foreign exchange
Transactions in currencies other than pounds sterling are recorded at the rates of exchange prevailing at the dates of the transactions. At each reporting end date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at the rates prevailing on the reporting end date. Gains and losses arising on translation are included in the income statement for the period.

2 Employees
The average monthly number of persons (including directors) employed by the company during the year was 2 (2016 - 1).
3 Property, plant and equipment

<table>
<thead>
<tr>
<th>Cost</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 1 January 2017</td>
<td>2,263</td>
</tr>
<tr>
<td>Additions</td>
<td>6,169</td>
</tr>
<tr>
<td>Disposals</td>
<td>(265)</td>
</tr>
<tr>
<td>At 31 December 2017</td>
<td>8,167</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depreciation and impairment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At 1 January 2017</td>
<td>900</td>
</tr>
<tr>
<td>Depreciation charged in the year</td>
<td>2,042</td>
</tr>
<tr>
<td>Eliminated in respect of disposals</td>
<td>(133)</td>
</tr>
<tr>
<td>At 31 December 2017</td>
<td>2,809</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carrying amount</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At 31 December 2017</td>
<td>5,358</td>
</tr>
<tr>
<td>At 31 December 2016</td>
<td>1,363</td>
</tr>
</tbody>
</table>

4 Trade and other receivables

<table>
<thead>
<tr>
<th>Amounts falling due within one year:</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Trade receivables</td>
<td>148,616</td>
<td>36,346</td>
</tr>
<tr>
<td>Other receivables</td>
<td>49,115</td>
<td>20,722</td>
</tr>
<tr>
<td></td>
<td>197,731</td>
<td>57,068</td>
</tr>
</tbody>
</table>

5 Current liabilities

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Trade payables</td>
<td>86,404</td>
<td>51,923</td>
</tr>
<tr>
<td>Other taxation and social security</td>
<td>-</td>
<td>3,974</td>
</tr>
<tr>
<td>Other payables</td>
<td>841,739</td>
<td>485,493</td>
</tr>
<tr>
<td></td>
<td>928,143</td>
<td>541,390</td>
</tr>
</tbody>
</table>

6 Members' liability

The company is limited by guarantee, not having a share capital and consequently the liability of members is limited, subject to an undertaking by each member to contribute to the net assets or liabilities of the company on winding up such amounts as may be required not exceeding £500.
7 Operating lease commitments

Lessee
At the reporting end date the company had outstanding commitments for future minimum lease payments under non-cancellable operating leases, as follows:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td></td>
<td>3,520</td>
<td>-</td>
</tr>
</tbody>
</table>

8 Related party transactions

P E MacLeamey
(director)
At the balance sheet date the director was owed £52,431 (2016: £52,431) from the company. No interest is charged in respect of this balance.

The Business Round Table Ltd
of which C J Groome is a director
During the year buildingSMART International Ltd recognised costs from the company totalling £17,818 for business manager, administration and secretarial services. The company also recharged travel expenses totalling £3,404. At the balance sheet date the amount due to The Business Round Table Ltd was £nil (2016: £nil)

Other member organisations
The directors Professor P I Kim, W H Moore, Professor R T Steinman, P E MacLeamy and D Schaper are connected with member organisations, which each pay annual membership subscriptions to buildingSMART International Limited in the normal course of their business.

In the course of normal business, some member organisations also receive payments for services provided to the company. Such services are provided on an arms length basis.
Officers, Board members & leaders

As of 31 December 2017

Chairman
Patrick MacLeamy

Chief Executive
Richard Petrie

Operations Director
Richard Kelly

Board Members
Karin Anderson
Inhan Kim
Patrick MacLeamy
Bill Moore (treasurer)
Christophe Moreau
Jan Myhre (deputy chair)
Dirk Schaper
Rasso Steinmann

Company Secretary
Richard Petrie

Airport Room
Alex Worp
Rob Roef

Building Room
Ricardo Bittini

Certification
Rasso Steinmann
(software certification)
Mark Baldwin
(professional certification)

Construction Room
Ken Endo
Kazumi Yajima

Infrastructure Room
Christophe Castaing
Tiina Perttula

Product Room
Roger Grant

Regulatory Room
Õivind Rooth

Technical Room
Greg Schlesusner

Implementation Support Group
Jeffrey Ouellette

Model Support Group
Tim Chipman
Thomas Liebich

User Group
Kjell Ivar Bakkmoen

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May 2018
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