

**INTERNATIONAL
PROPERTY
MEASUREMENT
STANDARDS:
OFFICES**

SSC Response to Exposure Draft Feedback

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Introduction

The International Property Measurement Standards for Offices Document was in consultation between 16 July and 15 September 2014. During this period there were over a 2,200 downloads of the Exposure Draft and the responses were received from the 52 organisations or individuals listed below. The IPMS Standards Setting Committee has considered all the comments received before completing the IPMS – Office Buildings.

In order to encourage an open and transparent consultation process the International Property Measurement Standards Coalition (IPMSC) has asked the Standards Setting Committee to publish the comments received during the consultation process and to explain how these comments were taken into consideration post-consultation.

<i>APREA</i>	<i>Personal Response Mark Griffin</i>
<i>BAM Construct</i>	<i>Personal Response Paul Collins</i>
<i>Camara and Smith</i>	<i>Personal Response Susan Pegg</i>
<i>CASLE</i>	<i>Plowman Craven Limited</i>
<i>Caxtons</i>	<i>RICS Asia</i>
<i>CBRE Brasil</i>	<i>RICS Austria</i>
<i>CLGE</i>	<i>RICS Belux</i>
<i>Dubai Land Department</i>	<i>RICS Germany</i>
<i>Expert Invest</i>	<i>RICS CH & PSP & IPB</i>
<i>Fisher I Associats</i>	<i>RICS Cyprus</i>
<i>Gensler</i>	<i>RICS Finland</i>
<i>GIF</i>	<i>RICS Hungary</i>
<i>Gladman Developments</i>	<i>RICS Italy</i>
<i>Grillo Europe Limited</i>	<i>RICS Portugal</i>
<i>IHG (Intercontinental Hotels Group)</i>	<i>SVIT Facility Management Switzerland</i>
<i>IPD</i>	<i>SVIT Switzerland</i>
<i>BOMA Japan</i>	<i>Universidad Politecnica De Valencia</i>
<i>JLL India Limited (Padman Arulampalam)</i>	<i>Valad Europe</i>
<i>JLL India Limited (Sachin Gulaty)</i>	<i>Vereniging De Vierkante Meter</i>
<i>JLL Vietnam</i>	<i>ZIA</i>
<i>Jones Lang Wootton</i>	
<i>Knight Frank LLP</i>	
<i>Lithuanian Association of Surveyors</i>	
<i>Misselwitz & Kaden</i>	
<i>Mostyn Estates Limited</i>	
<i>Netherlands Council for Real Estate Assessment</i>	
<i>PCA</i>	
<i>PCNZ</i>	
<i>Personal Response Alan Muse</i>	
<i>Personal Response David Park</i>	
<i>Personal Response Jenn McArthur</i>	
<i>Personal Response John Nijsten</i>	

A number of responses were received from various RICS country groups, such as RICS Germany. In these cases the responses were prepared by working groups of members, many of whom may have multiple affiliations with RICS and other professional bodies.

We are aware that a number of other responses such as those prepared by Appraisal Institute, APREA, CASLE, GIF, IPD, Lithuanian Association of Surveyors, Netherlands Council for Real Estate, PCA, Plowman Craven, Valad Europe, Vereniging De Vierkante Meter and ZIA were also prepared by boards or working groups.

The IPMS principles, methodology and measurement practices used in this standard will be applied when the future IPMS standards for other building classes, for example residential, industrial and retail, are drafted by the SSC. Obviously these will need to be consistent as another building class is mixed use, which will incorporate several IPMS standards. The objective is that there will be no conflicts between these standards.

Individual markets around the world have well-established local measurement codes. The SSC realised that a standard that attempted to change these well-established concepts would not be globally adopted. It was therefore necessary to create a Standard that allowed existing standards to interface with the IPMS Standard.

Finally the diversity of responses received has underlined the need for IPMS Standards.

Executive Summary

In respect to the Exposure Draft consultation process an Exposure Draft response form was issued and respondees were asked the following five questions in relation to the Consultation Document. Please find here below the response summary and the IPMS Standards Setting Committee's rationale in relation to the way these responses were treated:-

1. Is IPMS: Offices fit for purpose?

Response Summary: *There were 49 responses to this question and a range of different opinions. On the whole the respondees felt that IPMS Offices was fit for purpose. However a number of respondees stated that the standard required further clarification to be fit for purpose and others once again stated the benefits of their own existing standards and could not understand why those principles were not adopted.*

SSC Rationale: *The SSC considered the responses received and noted that respondees overwhelmingly accepted the need for an international measurement standard though felt some areas required further clarification in order for the standard to be fit for purpose. The SSC has spent the past two months discussing these matters and revising the document in order to clarify remaining issues and ensure that IPMS Office Buildings is now fit for purpose.*

(a) Please state whether or not you have any fundamental concerns, or,

Response Summary: *There were 41 responses to this question. A number of respondees stated fundamental concerns in relation to clarification of terms and definitions contained within the document and inconsistencies of approach. Further respondees felt that the inclusions and exclusions of area such as balconies within IPMS 1, IPMS 2 - Office and IPMS 3 –Office was inconsistent. Further concerns were stated in relation to Component Areas, Dominant Face and integrating with existing national standards.*

SSC Rationale: *The SSC has revised IPMS: Office Building to provide further clarity and consistency across IPMS 1, IPMS 2 – Office and IPMS 3*

– Office. The definition of Internal Dominant Face has also been slightly revised post-feedback and additional diagrams have been added to provide further clarification. Finally we have revised the Component Area spreadsheet to include Limited Use Areas and added an Interface Adjustment section to better allow better translation between IPMS and existing standards.

(b) consider there are matters that need clarification, or

Response Summary: There were 32 responses to this question and the majority of these responses reiterated the response to question 1a. The majority of respondents required further clarification of terms, definitions and diagrams within the document.

SSC Rationale: The SSC has revised terms, definitions within IPMS: Office Buildings to provide further clarity and consistency. The definition of Internal Dominant Face and Component Areas has also been further revised and the Component Area spreadsheet now includes Limited Use Areas. Further clarification has also been provided to IPMS 3 - office (the exclusive area) to allow better identification of shared/public areas and better translation between IPMS and existing standards.

(c) require more detail?

Response Summary: There were 27 responses to this question and the majority of respondents reiterated their response to the previous questions.

SSC Rationale: As previously stated the SSC has revised terms and definitions within IPMS: Office Building to provide further clarity and consistency.

2. Are there any further concepts that you would like introduced into IPMS: Offices?

Response Summary: There were 34 responses to this question. A number of responses required further clarification of Limited Use Areas (formerly Restricted Areas) and for their measurements to be separately stated within the Component Area Spreadsheet. Further response

required IPMS 3 – office to include a further diagram for an office floor in single occupation.

SSC Rationale: The SSC has revised the Examples contained within the Limited Use Areas and provided further detail. The revised draft now states that “Limited use areas as defined in Section 2.3 are included in the overall **IPMS 2 - Office** total floor area, but must also be identified, measured and stated separately within **IPMS** reported areas.” The Sample Component Area Spreadsheet contained within the standard now includes a separate line to quantify Limited Use Areas such as height in Component Areas B to H. Finally the SSC has also revised the definition of Standard Facilities contained with IPMS 3 to provide further definition of exclusive and shared/public areas and to include a diagram for an office in single occupation.

3. Are there any parts of IPMS: Offices that would be better left out?

Response Summary: There were 28 responses to this question and the vast majority felt that there was nothing that should be left out of the Standard. Some respondents felt Contamination should be removed from Restricted Areas and the term Accuracy should be removed.

SSC Rationale: The SSC have removed contamination from Limited Use Areas and replaced the term ‘Accuracy’ with ‘Tolerance.’

4. Does the Standard need to define more explicitly whether a floor is above or below ground level?

Response Summary: There were 32 responses to this question and the responses were divided between those who felt the information provided was consistent and those who had concerns over interlinking IPMS with existing national measurement standards.

SSC Rationale: The SSC was sensitive to the concerns raised and in order to address these concerns have created a new section called Interface Adjustments to deal with this issue. The section on Interface Adjustments states as follows:

“The **SSC** is aware that there are many different measurement conventions in use. In some markets **Floor Area** is measured to the wall-

*floor junction, in others it is taken to the midpoint of walls or the external face. Other markets have adopted varying interpretations of the dominant face of an inside finished surface. Against that background of different measurement practices the SSC has adopted **Internal Dominant Face** to define the extent of **IPMS 2- Office** and **IPMS 3-Office**.*

***Users** and **Service Providers** wishing to interface with other measurement conventions will need to identify and state the **Floor Area** variation from **IPMS**.”*

Moreover the SSC have revised the Component Areas and the Component Area spreadsheet to include separately stated Limited Use Area measurements to allow interface with standards where measurement to the Dominant Face is not the accepted approach.

Finally the Coalition has tasked the SCC with approving all future guidance in relation to IPMS: Offices to ensure that IPMS is consistently used and interpreted across markets.

Q4. Cont. If not, please state what, if any, supplementary guidance would assist your organisation or membership in adopting IPMS: Offices?

***Response Summary:** There were 2 further responses to this question both feeling that further clarification and flexibility was required to allow successful implementation and adoption across markets.*

***SSC Rationale:** The SSC felt that the creation of the additional section on ‘Interface Adjustments’ contained within IPMS: Office Buildings and outlined in the response to the first part of this question deal with the majority of these issues.*

Moreover the further level of clarification in respect of ‘Limited Used Areas’ and the revised sample spreadsheet contained within IPMS 2 – office, facilitates interface between IPMS and other standards.

5. Do you feel there is sufficient information within IPMS: Offices to Allow you to interlink with existing standards? If not, please state what, if any, supplementary guidance would assist your organisation or membership in adopting IPMS: Offices?

***Response Summary:** There were 30 responses to this question and the majority of these responses had no further comments. However a number of responses required greater clarity and flexibility to enable IPMS to successfully interface with other standards and for dual reporting to be adopted.*

***SSC Rationale:** SSC has responded to these concerns and the introduction to IPMS: Office Buildings states as follows: “**IPMS** is a high level standard. Markets that do not have an existing established measurement standard are encouraged to adopt **IPMS**. The **SSC** did not identify any existing measurement standard that was suitable for adoption internationally.....We expect **IPMS** to work initially in parallel with local standards and for a dual reporting basis and interface to be adopted where appropriate. In time we expect IPMS to become the primary basis of measurement across markets.”*

In addition the respondees were given the option to respond to the Exposure Draft on a section-by-section basis. The remainder of this document provides the responses received to each question and to each section and highlights the views and actions taken by the SSC in relation to each response. Although the respondees and responses have been listed in alphabetical order, the order gives no indication of the weight given to each submission.

Q1. Is IPMS: Offices fit for purpose?

Consultation Responses:

1. APREA - Noel Neo, Singapore: *No comment.*
2. BAM CONSTRUCT - John Burke, UK: *Yes.*
3. CAMARA AND SMITH - Paulo Câmara, Brazil: *Yes.*
4. CASLE - Tony Westcott, UK: *Yes, greatly improved document.*
6. CAXTONS - Charles Oliver, UK: *Nearly.*
- 7.
6. CBRE BRAZIL - Walter L M Cardoso, Brazil: *In relation to the standards: we propose a few changes to be made in order to suit the requirements of users (landlords, tenants, developers, property appraisers and others).*

IPMS1: we agree with IPMS 1 standards as mainly a method to determine the replacement cost of a commercial building.

IPMS 2: in order to provide users with a standard that would include only components that could be assigned commercial value to the space we propose that vertical penetrations, structural elements, columns and parking spaces are to be excluded from the measurement. We also believe that roof terraces, balconies, covered galleries and storage rooms should be included in the measurement for IPMS 2 but quantified and stated separately in order to allow users the option to assign value to those areas. Similarly, areas of shared use in a multiple occupancy building such as ground floor reception, meeting rooms and areas for private generators should be apportioned between the number of units. Areas of shared use should also include the ground and underground levels of the commercial building.

Example of alternative schedule for IPMS2:

- *Inclusions: Technical Services, Hygiene Areas, Circulation Areas, Amenities, workspace, other internal areas. Also areas of shared use (such as ground floor reception, meeting rooms and areas for private*

generators) in multiple occupancy are to be apportioned between the number of units.

- Areas to be quantified and stated separately: covered galleries, balconies, roof terrace, external car parking, equipment yards, waste areas, patios and decks, enclosed walkways and passages between separate buildings.
- Exclusions: Vertical Penetrations, Structural Elements and basement car parking.

IPMS 3: once changes are made into IPMS 2 we see no value to also have the option of IPMS 3 once the purpose here is to standardize the area measurement and with that reduce the existing inconsistency on a comparison standpoint. In any event, according to our suggestion, as IPMS 2 would already quantify separately the carpet area, we see no reason to have IPMS 3 as the carpet area is basically the purpose of IPMS.

8. CLGE - Group Response, Europe: *No. There are numerous anomalies and inconsistencies, which we have outlined in the position paper of CLGE, to which this form is attached.*
8. DUBAI LAND DEPARTMENT - Mohamad Al-Dah, Dubai: *Yes. The latest IPMS is a well-written document too.*
9. EXPERT INVEST - Petar Andonov, Bulgaria: *We consider that IPMS: Offices is fit for purpose.*
10. GENSLER - Area Analysis Team, USA: *If other standards organizations do not implement official changes to their measurement practices to comply with the IPMS standard, the IPMS standard as written may cause service providers to produce hybridized area measurement data that is not consistent from practitioner to practitioner, but uses common terminology which leads users or third parties to believe the data can be compared on a like with like basis. This is counter to the aim of the standard.*
11. GIF - Dr. Ira Hoerndler, Germany: *Yes, with the following restrictions.*

12. GLADMAN DEVELOPMENTS - Greg Limb, UK: *Not necessary to change existing code of measuring practise.*
13. GRILLO EUROPE LIMITED - Dick Grillo: *No. The Dominant Face definition is flawed and could result in unintended consequences.*
14. IHG - Chris Bennetts, UK: *I think this is a far clearer document than the last version and does seem to achieve what is intended so think it is very positive.*
15. IPD - Christopher Hedley, UK: *The Exposure Draft Standard is a further step towards the consistent definition of space. Subject to some important reservations contained in these comments and bearing in mind that that this will be the first edition of many, IPD welcomes this Exposure Draft.*
16. JAPAN BOMA - Shigeru Takagi, Japan: *Yes. I think it fits for purpose.*
17. JLL INDIA LIMITED - Padman Arulampalam, India: *Yes.*
18. JLL INDIA LIMITED - Sachin Gulaty, India: *Yes.*
19. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *This draft is substantially better than the first one. With some amendments it can be fit.*
20. JONES LANG WOOTTON - Padman Arulampalam, India: *Generally yes.*
21. KNIGHT FRANK LLP - Group Response, UK: *Thank you for your consultation document. As you know we have assembled experts in various fields such as Best Practice, Leasing, Lease Advisory, Corporate Asset Management, Development and Commercial Valuations to consider this information . This is a summary of their combined thinking. Knight Frank LLP recognise the benefit that a global standard could provide for global occupiers. A single standard for global analysis and comparison, something that is currently not available. To that extent IMPS achieves this and we appreciate the work the RICS is doing on behalf of its members, devoting resources to establish the various*

approaches to measurement across the globe and finding agreement with foreign bodies on a joint standard.

However the suggestion that in due course IPMS will replace the current RICS Code of Measurement definitions of GEA, GIA and NIA will impact on the letting/sale/valuation of UK offices in our opinion.

We therefore recommend that IPMS is inserted into the RICS Code of Measuring in addition to, rather than in replacement of, GEA, GIA and NIA.

Accurate office valuation is based upon accurate measured areas. As IPMS is by its own admission a compromise between various different national approaches to measure, we do not believe it is as fit for valuation purposes (for UK landlords and occupiers) as the RICS Code of Measuring Practice. The RICS Code has been finely-tuned over various editions to a high degree of accuracy and clarity for application.

In practice floor areas and valuation are inextricably linked, and to adopt a measuring standard that is not directly applicable for valuation purposes is less ideal than the current standard.

Accordingly our panel of experts have not shown support for the adoption of this standard in replacement of GEA, GIA, and NIA.

22. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *We think that IPMS: Offices doesn't fit for purpose yet. Exposure draft has to be amended and supplemented.*

23. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Yes, its limited purpose, but an opportunity to widen out could be missed.*

24. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *We believe the exposure draft is only to a certain extent fit for purpose. Some clarifications must be made in order to make the standard universally applicable and fit to replace existing national standards. We point this out in the form below.*

25. PCA - Ken Morrison, Australia: *The Property Council of Australia endorses the underlying approach of PMS: Offices which is to provide a high level standard that will work in conjunction with existing standards,*

or provide for dual reporting, where appropriate. IPMS: Offices creates a common platform for cross border comparison, without mandating a singular standard be applied around the world. Therefore we believe that it is largely fit for purpose, subject to some clarifications and corrections, which are further outlined below.

26. PCNZ - John Darroch, New Zealand: *Firstly, thank you to ALL involved for getting this over the line quickly and efficiently. I take my hat off to you for making it happen. I do have some concerns about the guide, so don't think it is quite fit for purpose. My comments sit below.*

27. PERSONAL RESPONSE - ALAN MUSE, UK: *Generally, yes.*

28. PERSONAL RESPONSE - DAVID PARK, UK: *Overall, I think it is an impressive piece of work - it is immediately evident just how much thought and effort has gone in to it.*

29. PERSONAL RESPONSE - JENN MCARTHUR, UK: *I believe that the way the standard is developed will be beneficial to allow this standard to be effectively used by a range of individuals.*

30. PERSONAL RESPONSE - John Nijsten, Netherlands: *As a consultant in real estate my general opinion is that there is not enough attention for the interests of the occupier/tenant/user.*

31. PERSONAL RESPONSE - Mark Griffin, UK: *Almost - IPMS succeeds in identifying the various areas that should be measured but does not succeed in identifying how those areas should be measured. The result is that we will continue to see identical spaces described with different area values and we will continue to find it difficult to understand why they are different.*

32. PERSONAL RESPONSE - Paul Collins, UK: *The document should make it clearer from the outset – including the front cover that it is essentially about enclosed internal floor space.*

33. PERSONAL RESPONSE - Susan Pegg, UK: *I find this draft confusing and unnecessary. Given that each country has differing legal/tax systems I can see no reason why the code requires to be standardised on an international basis.*

34. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *It is our feeling that the IPMS now presents a clearer and more concise explanation and narrative of IPMS and the different IPMS Standards. While looking through the document we have kept in mind the application of the standard in terms of Space Measurement and whether we would be able to provide consistent independent advice as to its contents and application.*

35. RICS AUSTRIA - Group Response, Austria: *Yes, it is appropriate for working in CEE countries; but there will no interest to implement it for the internal Austrian market.*

36. RICS BELUX - Group Response, Belux: *Yes. Good point in this exposure draft is that now it is better addressed how to deal with local practices. IPMS now allow the local definitions in experienced markets. That is an interesting concept for instance for the 'lettable area', which is not included in the IPMS and this, is a good thing: local practises are often good or clear or widely spread (this is the case for the BACS in the BeLux). This was an important remark from us during the first consultation round, so thank you for having taken this into consideration. Having allowed this kind of 'double reporting' (IPMS and local practice) will make the adoption in the market of the IPMS much more easy and fluent. Like previously said, one should seriously consider to add "FAQ's" (Frequently Asked Questions) at the end. This allows to give correct interpretations on some of the general rules towards specific situations or 'exceptions' in a natural way.*

37. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *Compared to the first draft, there is significant progress, but there are still a few points that conflict with current national standards. The rentable area seems the one where consensus can be achieved the easiest.*

38. RICS CYPRUS - Jennifer Petridou/Kleanthis Tofarides/Yiannis Roussos, Cyprus: *Additionally, it was currently shared by the group that the layout and structure of the document appeared rather complicated to comprehend and perhaps for third parties to apply, especially with the categories and sub-categories. Perhaps this could be simplified into just one approach, preferably along the lines of IPMS 2.*

Further, it appeared especially conflicting the separate definition of a Floor Area and an IPMS 1,2,3 definition – perhaps the Floor Area could be avoided.

Lastly, it would be interesting to see the outcome of IPMS, especially with regards a possible implementation from the District Lands Office, and, more specifically, with the areas included in each title deed issued.

39. RICS FINLAND - Group Response, Finland: *We know this is the last minute, but still in time, we hope.*

We discussed this topic briefly in the RICS Finland board last week, and, as we communicated already in the first consultation round, we do understand the benefits of an international standard, but do see some issues here, which might prevent or postpone its adoption in Finland.

The main thing is that the suggested standards are not in line with the local standards, which are included in the Finnish legislation and building code. Therefore the IPMS – if adopted here – should be used in parallel with the local standard. In this sense, it would cause extra cost – and potential confusion - for property owners, developers and users. This cost should be assessed in relation to the potential benefit the international standard would bring. Therefore, the adoption is dependent on the potential pressure from international investors and occupiers for internationally accepted standards. If demanded by international stakeholders, a simple and understandable “translation” tool should be developed to compare the local and international standards. At this stage, we are not able to assess the potential need / success of the international standard in Finland.

One big question in this would be the availability of services, as well as cost for measuring the space according to the international standard.

In Finland, the best contact for IPMS coalition would probably be Rakennustieto (Building Information Group), who provides and publishes all kinds of instructions and standards for construction and building management. They have also been involved in the CEN standard work, so they’d probably be in the best position to co-operate with the coalition. We believe Mikael is already trying to liaise with them.

40. RICS GERMANY - Group Response, Germany: *Yes, with the following restrictions.*

41. RICS HUNGARY- Group Response, Hungary: *For pure measurement yes however, for valuation (when determining the income), for letting or investment no.*

42. RICS ITALY - Group Response, Italy: *Yes. In particular the simplifications and changes to IPMS 2 and 3 make the standard more effective.*

43. RICS PORTUGAL- Group Response, Portugal: *We are of the opinion that the IPMPS Offices fit for its purpose.*

44. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Compared to the first Consultation Document, the latest version represents a big progress in the right direction but there are still remaining deficits to make it entirely usable in practice for the stated stakeholders.*

45. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Not yet.*

46. UNIVERSIDAD POLITECNICA DE VALENCIA - Natividad Guadalajara and María José Ruá, Spain: *Yes, we think is a good option since offices use to be more homogeneous than residential uses.*

47. VALAD EUROPE - Per Nordström: Europe: *Ref to enclosed DWG, as a principle, yes.*

48. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *Not yet, because it is incomplete, and on points interpretable.*

49. ZIA: *Yes, with the following restrictions.*

Response Summary: There were 49 responses to this question and a range of different opinions. On the whole the respondees felt that IPMS Offices was fit for purpose. However a number of respondees stated that the standard required further clarification to be fit for purpose and others once again stated the benefits of their own existing standards and could not understand why those principles were not adopted.

SSC Rationale: The SSC considered the responses received and noted that respondees overwhelmingly accepted the need for an international measurement standard though felt some areas required further clarification in order for the standard to be fit for purpose. The SSC has spent the past two months discussing these matters and revising the document in order to clarify remaining issues and ensure that IPMS Office Buildings is now fit for purpose.

Q1a. Please state whether or not you (a) have any fundamental concerns;

1. APREA - Noel Neo, Singapore: *While understanding the desire to avoid confusion with terms that have established definitions, the introduction of IPMS 1, IPMS 2 – Office and IPMS 3 – Office represents a new lexicon that is unfamiliar to the market. This may impede the rate and extent of adoption.*

2. BAM CONSTRUCT - John Burke, UK: *See Definitions.*

3. CASLE - Tony Westcott, UK: *Some clarification of terms, as described below.*

4. CAXTONS - Charles Oliver, UK: *No.*

5. CBRE BRAZIL - Walter L M Cardoso, Brazil: *The inclusion in IPMS 2 of areas that are not assigned commercial value such as vertical penetrations, structural elements, technical services and internal car parking. Also the exclusion of areas that could be assigned commercial value such as roof terraces, balconies, covered galleries, storage rooms and areas of shared use.*

6. CLGE - Group Response, Europe: *Yes. Our concerns involve, particularly, the concept of Dominant Face, which could lead to serious inconsistencies in the values derived for the floor areas of different buildings. These inconsistencies are fully explained in the above-mentioned position paper.*

Secondly, the designation as valid workspace, of Work Areas, Circulation Areas and Hygiene Areas, where ceiling height and other parameters do not meet the minimum legal requirement, in the jurisdiction in which the building is located, for human habitation and working conditions, is unacceptable. This would again lead to serious inconsistencies in comparing buildings and would negate the whole purpose of the standard.

7. DUBAI LAND DEPARTMENT - Mohamad Al-Dah, Dubai:

1. *Based on the market in Dubai, UAE we would like to see the “Common Areas” defined separately in IPMS.*
2. *We recommend “IPMS 1” to have a name, similar to what was given to “IPMS 2 – Offices”.*
3. *We find that IPMS1 and IPMS2 are too similar, and would recommend merging them together if possible. Thus resulting in two standards for IPMS Offices only.*

8. EXPERTS INVEST - Petar Andonov, Bulgaria: *We have no fundamental concerns.*

9. GENSLER - Area Analysis Team, USA: *I have some concerns about the practical application of the standard measurement methods as laid out in the document (will discuss below). I am concerned about the practice of relating to other standards.*

10. GIF - Dr. Ira Hoerndler, Germany:
 - a) *Inconsistency between IPMS 1, 2 and 3 when it comes to balconies and galleries and the basement with parking.*
 - b) *The calculation of commonly used areas is completely missing in IPMS 3.*
 - c) *The calculation of restricted areas is not separately presented in the sample spread sheet.*
 - d) *The definition of dominate face is not clear*

12. GLADMAN DEVELOPMENTS - Greg Limb, UK: *Yes – very fundamental. Absolutely no need to change.*

13. GRILLO EUROPE LIMITED - Dick Grillo: *Yes. The example of a floor area being extended to the surface of a window instead of the surface of the structural wall where the area of glass exceeds 50% of the area of the wall in question is plainly daft. Based on this definition a window that runs from 1 metre above the floor to the ceiling in a 2.5 metre room would qualify for the measurement to be taken to the surface of the glass not the wall, when clearly the surface of the wall defines the limit of the useable floor area.*

14. IPD - Christopher Hedley, UK: *We are very concerned that the same building might be measured significantly differently for IPMS 3 –*

Offices in different countries and in different circumstances. Such variability would negate the benefits of the standards. The key issue here is to define (Standard) Building Facilities consistently around the globe. Another important issue which might cause variability is the set of restrictions, especially Example 2 on height restrictions.

15.JAPAN BOMA - Shigeru Takagi, Japan: *Yes. I have fundamental concerns. In Japan, the office space is measured to the centre line of the wall. But in the IPMS2-Office and IPMS3-Office, the office space is measured only to dominant face. So if the current IPMS2-office and IPMS3-office are adopted, Japanese property must be re-calculated to fit the IPMS2-office and IPMS3-office. It is very hard task for Japanese property owners and managers. So if possible I would like you to admit the measurement to the centre line of the wall in IPMS2-office and IPMS3-office in addition to the measurement to dominant face and if it is difficult, it would be appreciated if you show the easy calculating formula to convert the space to the centre line of the wall into the space to the dominant face.*

16.JLL INDIA LIMITED - Padman Arulampalam, India: *IPMS Offices 3, the measurement is not Net Lettable Area. Hence for purposes of conducting estate agency related work, this measurement basis is deemed inadequate and highly unsatisfactory. I would prefer if the following are excluded from IPMS 3 Offices:-*

- *Columns*
- *Internal Walls*

Also IPMS 3 Offices should ensure that measurement to Common Walls shall be to is Dominant Face, NOT the centre line of the Common Wall.

Alternatively, an IPMS Offices 4 can be created using the above same basis.

17.JLL INDIA LIMITED - Sachin Gulaty, India: *One fundamental concern with respect to IPMS 3 – Office (stated subsequently). No other fundamental concerns.*

18.JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *Yes. The fundamental concern is the definition and use of glazing as the 'dominant face'. Please see comments below on page 14.*

The secondary concern is the use of 'gallery' to define an external feature. Please see comments below on page 9.

19.JONES LANG WOOTTON - Padman Arulampalam, India: *IPMS Offices does not have a basis of measurement that embraces the concept of Net Lettable Area, which is a very important basis of measurement to be adopted throughout the property industry.*

For the purposes of conducting estate agency related work, IPMS 3 Offices is deemed inadequate and highly unsatisfactory.

Hence it would be preferred if a basis of measurement adopting the concept of Net Lettable Area be incorporated into IPMS Offices or amendments be made to IPMS 3 Offices to exclude the following from its basis of measurement:

- 1) Columns & Vertical Protrusions (such as pipes, telephony ducting, etc)*
- 2) Internal Walls forming part of the structure of the building (but not necessarily load bearing)*

Furthermore the measurement to Common Walls shall be to its Dominant Face and NOT the centre line of the Common Wall.

Also in the context of Net Lettable Area, the definition of Dominant Face must be amended to state clearly that if any horizontal protrusions exist across the inside finished surface of the external construction feature, then the measurement shall be taken from the said inside finished surface of the said horizontal protrusions. Example: Often in glass cladding type walls, the glass surface is recessed and sometimes a metal piece or wire is installed across the said glass (for security / safety reasons, etc). Hence this horizontal protrusion prevents the use / enjoyment of the space between the inside of the glass and the horizontal protrusion.

Alternatively if IPMS 3 Offices serves the needs of Asset Managers, Facility Managers, Property Managers for calculation of service charge / operating expenses, then create IPMS 4 Offices incorporating the abovementioned concept of Net Lettable Area for use by professionals practising Estate Agency or Transactions type work.

20. KNIGHT FRANK LLP - Group Response, UK: *IPMS1 and IPMS2 are broadly equivalent to standards we measure to already in the UK, there are just a few nuances of difference. However IPMS 3 appears to be less representative of the area occupied by office occupiers and, as such, the UK's Net Internal Area ('NIA') in the RICS Code would remain preferable for use with valuation work in our view.*

As IPMS 3 is a blend of NIA and GIA, IPMS3 does not equate to what one colloquially would call an occupier's net lettable area. The RICS Code has set down a detailed NIA definition that better describes the usable area the tenant actually occupies and adapted it well to changing building designs in the UK. NIA is used so much in the UK office markets, for instance the comparable method of valuation for UK offices, and is a far more accurate area for occupation than IPMS3.

For these reasons we would encourage the insertion of IPMS in the RICS Code of Measuring Practice as a separate standard strictly for global office uses as being the best way forward. This would mean the current standard would continue to apply for UK offices.

Our concerns regarding IPMS3 include: -

1. Accuracy - IPMS3 does not capture as accurately as NIA what we believe occupiers would wish to place value upon. IPMS3 includes corridors, columns, radiators, and 50% of division walls that occupiers would not wish to pay rent or be concerned with (as a floor area) in the UK.

2. Confusion - IPMS appears to be suggesting that two different floor areas will be used. One for measurement and another for valuation. We currently only have one. When seeking comparable evidence, two versions of floor area creates uncertainty. Eg. Whether areas provided by, say, an agent include areas attracting zero value. For instance, marketing areas may state IPMS and the agreed rent is based on a smaller area akin to the current NIA.

3. *Valuation difficulties - IPMS3 includes floor areas that may not be included in the rental or capital valuation of offices. Eg. Columns. The IPMS3 area could be the same for a suite of offices with numerous columns and a suite with little or none. Two adjustments rather than one need be made if IPMS is used, one to reflect the impact of the columns on the occupation of the space and another to remove column areas so that no value is placed on them. Under NIA, only one adjustment need be made.*

4. *Measuring difficulties - these include:*

a) *The problem/inaccuracy of measuring to the middle of a wall?*

b) *Measuring to a surface that requires an assessment of whether 50% glazed or walling adds complexity .NIA does not include either of these, and has improved over the years to reflect a variety of office designs.*

5. *Cost – the sheer volume of work to identify IPMS areas across all offices will incur cost. We question whether UK-focused clients will be prepared to pay for the cost of this re-measurement where they do not receive any benefit. Also, will they understand why the RICS has forced this change on the market?*

We know of many landlords who have large portfolios and no overseas investments. Similarly large UK occupiers who are strictly UK-based. We believe it essential that you consider their opinions on the idea of IPMS replacing current standards in due course.

21. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *It is not clear why there is a need to prepare separate standards for office, industrial, retail, etc. buildings. We think that differences in calculation areas of buildings used for different purposes can be reflected in different sections of the same standard, but not in different standards. We strongly support efficiency and the idea of creating a single standard.*

22. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Not with the standards themselves.*

23. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *We have most concerns regarding to the definition of IPMS 3-office and the definition of the Component Areas*

within IPMS 2-office. We think the IPMS-3 does not lead to more consistency in measuring property, because the IPMS-3 area of a floor can vary depending on the number of tenants. It is not always clear when there are more tenants which area should be considered as shared facilities. Therefore it is possible that the sum of the IPMS-3 area with two tenants differs from the sum of the area with three tenants, while the floor is in fact identical.

This makes it possible that two identical floors in an office building vary in size (according to IPMS-3). And that, in our opinion, undermines the concept of a standard.

For IPMS-2 our concern is with the distinction between E: Circulation Areas, F: Amenities and G: Workspace. With very limited alterations a space can be converted from the one component to another and there are also a lot of spaces with a mixed use.

24.PCA - Ken Morrison, Australia: *Yes. IPMS 2 Component Area B requires structural elements (such as columns and structural walls) to be measured and accounted for separately. We consider this an unnecessary step as it is unlikely that this information would ever be requested or required when transacting in property. Individually measuring the width of structural walls and columns is detailed and time consuming. Undertaking these measurements would therefore add significant cost to the use of IPMS: Offices for minimal or no benefit. To simply resolve this issue, the Property Council recommends that the individual measurement of columns be removed from the standard and that structural walls be attributed to the space in which they enclose. This would allow /PMS 2 Component Area I to be removed from the standard.*

25.PCNZ - John Darroch, New Zealand: *Terminology of titles (IPMS 1, 2 and 3) bares no relevance to the actual basis. i.e there is no “ clue in the title” . It requires the reader to add another “look-up step”, to understand what it means, which is hardly streamlined.*

26.PERSONAL RESPONSE - ALAN MUSE, UK: *Principally, that the connection between IPMS and the floor area definitions that inform construction costs should be consistent (as it currently is). If IPMS 2 is the worldwide standard for gross internal floor, this should be*

consistently used in the construction sector when referring to cost/m² of buildings. To lose this consistency would be a retrograde step.

27. PERSONAL RESPONSE - JENN MCARTHUR, UK: *No – I think it was well-developed.*

28. PERSONAL RESPONSE - Paul Collins, UK: *P2 – seems strange that the RIBA or CIAT have not been party to the discussions.*

29. PERSONAL RESPONSE - Susan Pegg, UK: *Yes, terminology is confusing and not written in plain English. Concerned at having to re-measure and recalculate existing stock/service charges based on this standard which is piecemeal. Measurement is related to value therefore there will be consequences and the new code will lead to a lack of understanding and increased negotiation between parties. Cannot see the need to deviate from floor area definitions which are clear to abbreviations which are not.*

30. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *We have none – the diagrams are clearer and the key ensure that they can be assessed correctly.*

31. RICS AUSTRIA - Group Response, Austria: *In the Austrian market rental agreements are based on Net floor area. Due to a standardized and harmonized market there will be no need for additional regulations. Net Floor Area as it is understood in our country and as it is regulated in in Austrian Standards (B1800) does not correspond with IPMS. Splitting of areas, bearing and not bearing partition walls is quite different in both systems.*

32. RICS BELUX - Group Response, Belux: *Sorry to say that in comparison to the former IPMS Office Area 3 the now defined IPMS 3 – Office doesn't bring a lot of added value. Including our remarks given during the first consultation round (inclusive the opportunity to define specific areas which would make it possible to 'switch' easily from local measurements to IPMS) on the IPMS Office Area 3, it was a much richer type of area with broader field of application.*

32. RICS GERMANY - Group Response, Germany:
- a) *Inconsistency between IPMS 1, 2 and 3 when it comes to balconies and galleries and the basement with parking.*
 - b) *The calculation of commonly used areas is completely missing in IPMS 3*
 - c) *The calculation of restricted areas is not separately presented in the sample spread sheet.*
 - d) *The definition of dominate face is not clear.*

33. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *In practice, the structural elements are excluded from the rentable space. So for example columns will be excluded, but partitions will be included.*

34. RICS HUNGARY- Group Response, Hungary: *Lettable or income generating areas are missing.*

35. RICS ITALY - Group Response, Italy: *None related to the document.*

36. RICS PORTUGAL- Group Response, Portugal: *Our main concern is about IPMS Office 2.*

In the Portuguese market asset managers, brokers, cost consultants, facility managers, occupiers, property managers, researchers and valuers, normally include external walls in the area reported for the different purposes."

37. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *IPMS 1 should not comprise Covered Galleries and Balconies. Otherwise key figures calculating for example space efficiencies of buildings are getting wrong and meaningless.*

IPMS is not detailed enough to be used by occupiers or facility managers. There should be an additional sublevel for example for Workspace for usages such as meeting rooms, social areas, server rooms, open space, etc.

Structural porting elements should never be part of the rentable area such as defined in IPMS 3.

38. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *IPMS shows conflicts with actual Swiss Standards (SIA 416) and is less detailed as applicable regulations in Switzerland (SIA 416, DIN 277)*

IPMS 2: conflict with "Nettogeschossfläche" of SIA 416 (non-structural walls are not part of the measurement)."

39. VALAD EUROPE - Per Nordström, Europe: *As always, in the specific case, local regulations has to be taken under consideration e.i sizes & number of rest rooms and/or other public or more private facilities. Fire exits etc.*

40. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *The only concern is that this new standard will just be as any other standard: incomplete, multiple interpretable, and not the standard. We see a very strong field of participants. This is a change to achieve the one and only international standard. Only with a complete and unambiguous way of surface determination (and determination of volumes) a standard measuring method will be created with a long service life. Such a standard must be fit for multipurpose.*

In our opinion, further development of the IPMS standard should be the method in which each type of floor area is split up in (mostly) two other floor areas, as well as the fact that there is a checklist of items that do or do not belong to a certain floor area. A description of how to measure the rentable floor areas should be part of the international standard. We would strongly recommend a thorough investigation if European and global stakeholders encouraged this thought.

41. ZIA - Sabine Georgi, Germany:

a) Further guidance is needed. Our concerns are that the present standard without further guidelines can't work properly. We therefore would suggest to combine the standards with more detailed guidelines in the future and in meantime to combine them with national established guidelines.

b) Inconsistency between IPMS 1, 2 and 3 when it comes to balconies and galleries and the basement with parking.

- c) *The calculation of commonly used areas is completely missing in IPMS 3*
- d) *The calculation of restricted areas is not separately presented in the sample spread sheet.*
- e) *The definition of dominate face is not clear"*

Response Summary: There were 41 responses to this question. A number of respondees stated fundamental concerns in relation to clarification of terms and definitions contained within the document and inconsistencies of approach. Further respondees felt that the inclusions and exclusions of area such as balconies within IPMS 1, IPMS 2 - Office and IPMS 3 –Office was inconsistent. Further concerns were stated in relation to Component Areas, Dominant Face and integrating with existing national standards.

SSC Rationale: The SSC has revised IPMS: Office Building to provide further clarity and consistency across IPMS 1, IPMS 2 – Office and IPMS 3 – Office. The definition of Internal Dominant Face has also been slightly revised post-feedback and additional diagrams have been added to provide further clarification. Finally we have revised the Component Area spreadsheet to include Limited Use Areas and added an Interface Adjustment section to better allow better translation between IPMS and existing standards.

Q1b. Please state whether or not you (b) consider there are matters that need clarification.

1. BAM CONSTRUCT - John Burke , UK: *See Definitions.*
2. CAMARA AND SMITH - Paulo Câmara, Brazil: *How are exclusive covered parking areas treated in IPMS – 3 - Offices?*
3. CASLE - Tony Westcott, UK:

Page 3 – order of paragraphs can be improved by moving para.5, which starts ‘IPMS principles, methodology and measurement practices...’ and ends ‘...same for all classes of building’ to be last para.

4. CAXTONS - Charles Oliver, UK: *No - but see page 7.*
5. CBRE BRAZIL - Walter L M Cardoso, Brazil: *Concerning underground levels: In page 16, Internal car parking is referenced in the component area H. In the same page the standard states that “basement car parking may also be reported by the number of spaces”. In page 11, the draft scheme illustrates the basement area as included in the calculation. We would like to ask for a clarification on how basement areas should be treated in the standards.*

Concerning areas of shared use: comparing pages 18 and 19 regarding standard building facilities or areas that would provide share facilities we would like to ask for a clarification on inclusion/exclusion of shared areas in IPMS 3 since the text does not necessarily match the scheme on page 19 that seems to include a part of the shared area in the measurement in case of multiple occupation.

6. CLGE - Group Response, Europe: *"The definition of the location on the external face of buildings, to which IPMS1 is to be measured is unclear. There are inconsistencies between the text and the diagrams.*

Similarly, the definition of the internal face of the External Structure and Weatherproofing Envelope, to which IPMS2 should be measured, is also inadequately defined."

7. DUBAI LAND DEPARTMENT - Mohamad Al-Dah, Dubai: *Based on the market in Dubai, UAE we would like to see the "Common Areas" defined separately in IPMS.*

8. EXPERT INVEST - Petar Andonov, Bulgaria: *We consider there are no fundamental matters that need clarification.*

9. GENSLER - Area Analysis Team, USA:

"Dominant Face and "section of finished surface" (what constitutes a "section" seems up to interpretation).

General Principals of measurement and calculation (some are confusing) "physically capable of being measured".

Structural Elements component (will be difficult to ascertain from typically available information).

Circulation Areas component (will be difficult to apply in some situations).

Wall priority/treatment in Office 2 components (only expressed through the illustration)."

10. GIF - Dr. Ira Hoerndler, Germany:

"a) the calculation of not commonly used service areas in IPMS 3.

b) what to do if a wall does not have a dominant face (e.g. several surface areas each less than 50%)

c) what to do with curved walls.

d) how should low ceiling heights (e.g. due to roof slopes) be dealt with?

11. GLADMAN DEVELOPMENTS - Greg Limb, UK: *The new code is not written in plain English and will cause confusion.*
12. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"Yes. The example of a floor area being extended to the surface of a window instead of the surface of the structural wall where the area of glass exceeds 50% of the area of the wall in question is plainly daft. Based on this definition a window that runs from 1 metre above the floor to the ceiling in a 2.5 metre room would qualify for the measurement to be taken to the surface of the glass not the wall, when clearly the surface of the wall defines the limit of the useable floor area."*
13. IPD - Christopher Hedley, UK: *The definitions of (Standard) Building Facilities and other measures need further thought to ensure global consistency of measurement. So too do the Restrictions in Section 2.7.*
14. JLL INDIA LIMITED - Sachin Gulaty, India: *Clarifications are required in some places. These are stated subsequently in this Feedback Form.*
15. KNIGHT FRANK LLP - Group Response, UK: *"We understand that it is proposed that both IPMS and the current GEA/GIA/NIA definitions will be adopted in a revised Code of Measuring Practice for a transition period.*

There appears to be allowance in the consultation paper that local rules could apply. In the case of the mature UK property market and advanced Code of Measuring Practice, we would suggest to the RICS that the revised Code of Measuring Practice include IPMS 1, 2 and 3 in addition to the current GEA/GIA/NIA. Not as a transition period, but permanently, once agreement on IPMS has been reached.

This would allow the market to continue adopting the accurate RICS definitions of the current Code whilst allowing global organisations, or global analysis, to adopt the new IPMS definitions where they wish.

Above all else, there needs to be certainty.

We would like to raise a point concerning IPMS1 and why this does not include all the building? Is there a reason why it is not exactly akin to GEA?

16. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *No, very clear.*
17. PCA - Ken Morrison, Australia: *"Yes. The definition of IPMS 1 includes balconies, which are to be measured to their outer face. However the definition specifically excludes terraces, patios and decks. In many jurisdictions, the technical distinction between a balcony and another external area such as a deck is unclear. In fact, these terms are often used interchangeably. Within IPMS Offices there is no clear definition of these terms. Therefore the Property Council recommends that all spaces that would be considered balconies, terraces, patios or decks be excluded from IPMS L to ensure the standard is applied consistently."*
18. PCNZ - John Darroch, New Zealand: *IPMS 3 would be the most common and appropriate method for determining the net lettable area of an office building. The general thrust and direction of this standard is good, but it is confusing and overly prescriptive in some areas. It confuses the reader by introducing the overarching phrase "standard building facilities". This new phrase is then further defined (more work required for the reader to understand), simply as "shared facilities". These in turn are only defined in a default manner i.e "was the building to be in multiple occupations ". The question of multiple occupations (no definition given) will cause confusion. e.g. 10 storey building with one tenant on 9.5 floors and an external tenant on .5 floors – technically that would be termed as "multiple occupied ", but does the general property market agree with that? The reader is required to define the "shared facilities", some of which may not even exist e.g. circulation space may not exist on all floors in the example above of one tenant on 9.5 floors. Where do shared facilities start and end? Presumably they include; Hygiene, Amenities*

and Circulation areas. I can see some users interpreting them to include other components e.g. Technical Services.

19. PERSONAL RESPONSE - JENN MCARTHUR, UK: *The IPMS3 is quite vague and drawing needs a legend to be more easily understood.*
20. PERSONAL RESPONSE - Susan Pegg, UK: *Plain English required.*
21. RICS ASIA - Group Response, Hong Kong: *Yes, though it may be simpler to have only IPMS 1 and 2. IPMS 1 indicate the gross floor area. IPMS 2 indicate the net floor area (or carpet area). Net floor area is applicable to occupier who takes up the whole floor or occupier who take up a divided unit.*
22. RICS AUSTRIA - Group Response, Austria: *No clarification needed. Approach and point of view differ fundamentally.*
23. RICS BELUX - Group Response, Belux: *See specific remarks further. In general, be more explicit in separate chapter the IPMS doesn't replace the local standards and practices, but both are advised to exist next to each other, local standards to make IPMS compliant. The creation of this compliance will be 'the' way to implement IPMS.*
24. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *IPMS 2: How are areas below ground measured?*
25. RICS CYPRUS - Jennifer Petridou/Kleanthis Tofarides/Yiannis Roussos, Cyprus: *"Additionally, it was currently shared by the group that the layout and structure of the document appeared rather complicated to comprehend and perhaps for third parties to apply, especially with the categories and sub-categories. Perhaps this could be simplified into just one approach, preferably along the lines of IPMS 2.*

Further, it appeared especially conflicting the separate definition of a Floor Area and an IPMS 1, 2, 3 definitions – perhaps the Floor Area could be avoided.

Lastly, it would be interesting to see the outcome of IPMS, especially with regards a possible implementation from the District Lands Office, and, more specifically, with the areas included in each title deed issued.

26. RICS GERMANY - Group Response, Germany:

"a) The calculation of not commonly used service areas in IPMS 3

b) What to do if a wall does not have a dominant face (e.g. several surface areas each less than 50%)

c) What to do with curved walls

d) How should low ceiling heights (e.g. due to roof slopes) be dealt with?

27. RICS PORTUGAL- Group Response, Portugal: No.

28. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland:

"IPMS 3: The figured out example is very easy one. How to handle exclusive and non-exclusive rentable space such as defined in the German gif Standard?

How to handle other rentable areas in an office building such as storage rooms?"

29. SVIT SWITZERLAND - Beat Ochsner, Switzerland:

"IPMS 1 and 2: a, b and d (should be marked differently (same colour but striped for example, see SIA 416)

IPMS 2 Pages 15/16: Covered Gallery and Balcony are not mentioned in components on page 16. Component H is missing on plan page 15."

30. VALAD EUROPE - Per Nordström, Europe: *Difference in measuring area, measuring to glazing/measuring to wall may need further explanation.*

31. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands:

"Dominant face': in diagram3 the coloured part of the floor plan of the right top room shows a part measured to the glazing as well as a part measured to the inside wall in this (same) room. It is unclear what area to count as dominant face. Take into account per section, on the entire wall side of the room or on the total facade on this floor level?

32. ZIA- Sabine Georgi, Germany:

"a) The calculation of not commonly used service areas in IPMS 3

b) What to do if a wall does not have a dominant face (e.g. several surface areas each less than 50%)

c) What to do with curved walls

a) How should low ceiling heights (e.g. due to roof slopes) be dealt with?"

Response Summary: There were 32 responses to this question and the majority of these responses reiterated the response to question 1a. The majority of respondees required further clarification of terms, definitions and diagrams within the document.

SSC Rationale: The SSC has revised terms, definitions within IPMS: Office Buildings to provide further clarity and consistency. The definition of Internal Dominant Face and Component Areas has also been further revised and the Component Area spreadsheet now includes Limited Use Areas. Further clarification has also been provided to IPMS 3 - office (the exclusive area) to allow better identification of shared/public areas and better translation between IPMS and existing standards.

Q1c. Please state whether or not you (c) consider there are matters require more detail?

1. BAM CONSTRUCT - John Burke , UK: *See Definitions.*
2. CASLE - Tony Westcott, UK: *Ensure document is legible in B&W as well as colour – see comments below.*
3. CAXTONS - Charles Oliver, UK: *No.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"The measurement of basement levels in IPMS 2 requires more details. What is the criterion for pricing parking spaces? Does the standard differentiate single, double or triple parking spaces?"*
5. CLGE - Group Response, Europe: *"Amenity Areas and Hygiene Areas are inadequately specified. Many areas which IPMS defines as amenity would be equally usable as workspace, i.e. there is no qualitative reason why day-care rooms, fitness areas and prayer rooms may not be used as workspace. Equally, there is no qualitative reason why the dining part of a cafeteria could not be used as Workspace and the kitchen part designated as Hygiene Area. Amenity is simply a specialist workspace and it is questionable whether it needs to be designated as a separate component.*
6. EXPERT INVEST - Petar Andonov, Bulgaria: *We consider the standard does not need more detail excluding comments below.*
7. GENSLER - Area Analysis Team, USA: *"IPMS 1 - measurement boundary specifics. Dominant Face and "section of finished surface". Structural Elements component. Circulation Areas component. Wall priorities in Office 2. More stringent guidelines on reporting results – perhaps standardized format to regularize data.*
8. GIF - Dr. Ira Hoerndler, Germany:

a) the definition of section (def. dominate face)

b) the definition of open light well

9. GLADMAN DEVELOPMENTS - Greg Limb, UK: *See above – very badly written.*
10. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"Yes. The example of a floor area being extended to the surface of a window instead of the surface of the structural wall where the area of glass exceeds 50% of the area of the wall in question is plainly daft. Based on this definition a window that runs from 1 metre above the floor to the ceiling in a 2.5 metre room would qualify for the measurement to be taken to the surface of the glass not the wall, when clearly the surface of the wall defines the limit of the useable floor area."*
11. IPD - Christopher Hedley, UK: *Generally, the document is about the right length. The simplifications and editing since the first draft are a major improvement.*
12. JLL INDIA LIMITED - Sachin Gulaty, India: *Little more detailing is required in some places. These are stated subsequently in this Feedback Form.*
13. KNIGHT FRANK LLP - Group Response, UK: *"In a single-let office building, an occupier may benefit from areas that do not appear covered in IPMS3 (eg. Cafes in atrium base, reception areas). IPMS3 needs to expand to cover this, and we understand that you are considering this. Also, IPMS3 requires a greater level of detail; it is currently more simplistic than the Code. It lacks the same detail that the UK market is used to, for instance how to deal with radiators, perimeter air conditioning systems and other items that either defined as included or excluded from NIA.*
14. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"We suggest describing concept of the object of measurement - Building – in a more exact way and do not regulate measurements of other engineering structures (like external car parking, yard equipment, waste/trash enclosures, etc.) which are outside of this object in the same standard. It*

would be useful to supplement the definition of concept of the building with building component parts, e. g. above ground and underground (basement, cellar) floors, attic, addition, superstructure (bulkhead), etc.

In other case we have to change name of the standard (e. g. IPMS: Offices and fixtures) and to identify what fixtures exactly have to be measured.

15. PCA - Ken Morrison, Australia: *Yes. A section that discusses how IPMS: Offices interfaces with existing standards would further promote its adoption around the world.*
16. PERSONAL RESPONSE - Susan Pegg, UK: *No- revert to terminology within existing code.*
17. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *It is our opinion that any further detail would come from the local governing body (RICS, BOMA, GIF etc.) as this standard is a high level document to provide a consistent reporting of information, rather than being drawn into local anomalies or quirks.*
18. RICS AUSTRIA - Group Response, Austria: *No more details necessary.*
19. RICS BELUX - Group Response, Belux: *See specific remarks further.*
20. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *In Switzerland common areas such as sanitary or circulation may be included in the rentable area. How would this work with IPMS?*
21. RICS GERMANY - Group Response, Germany:

*"a) the definition of section (def. dominate face)
b) the definition of open light well."*
22. RICS PORTUGAL- Group Response, Portugal: *We think the level of detail is sufficient.*

23. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *How to handle the basement levels within office buildings?*

24. SVIT SWITZERLAND - Beat Ochsner, Switzerland:

Page 19: missing explanations for colour marked surfaces.

25. VALAD EUROPE - Per Nordström, Europe: *Satisfactory as is at present.*

26. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Compared with our common practice, the IPMS concept for offices is lacking detail. Further decomposition and a detailed schematically visual built up of the (de)composition of measurement areas and categories would create a better understanding of the measurement structure. Starting point must be that the equivalent of all is the sum of its parts. It is very desirable to prevent interpretation differences that the different surfaces can be summed. The European standard for FM , EN 15221-6 , for example follows this procedure. $A + B = C$, $A = C - B$ and so on. Of each measurement in this standard, it is clear by means of a check list, if a component is part of not part to a certain floor area. This is not the case in the IPMS standard for offices at the moment. "*

27. ZIA- Sabine Georgi, Germany:

"a) the definition of section (def. dominate face)

b) the definition of open light well."

Response Summary: There were 27 responses to this question and the majority of respondees reiterated their response to the previous questions.

SSC Rationale: As previously stated the SSC has revised terms and definitions within IPMS: Office Building to provide further clarity and consistency.

Q2. Are there any further concepts that you would like introduced into IPMS: Offices?

Consultation Responses:

1. BAM CONSTRUCT - John Burke, UK: *Treatment of reception areas in sole occupancy buildings.*
2. CASLE - Tony Westcott, UK: *Examples of specific height restrictions would be useful.*
3. CAXTONS - Charles Oliver, UK: *No, keep it simple.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil:
 - a) *Ground level: How are areas of shared use in the ground level treated in IPMS 2? Eg. Building Reception.*
 - b) *In case of a building that comprises retail areas on the ground level and those areas would be included in a sale, how should those areas be treated in IPMS2?*
5. CLGE - Group Response, Europe: *"Yes. As already outlined above, the concept of Full Use Workspace and Limited Use Workspace as set out in Q1(a) above. This separation should also apply to Circulation Areas and Hygiene Areas where similar legal restrictions on use might also apply.*

The concept of Permanent Partitions should be introduced as a component. What constitutes a Permanent Partition has been defined in position paper. This component is required as the floor area occupied by such partitions cannot be cleared and incorporated into Workspace or any other usable space and so should not be measured as part of these other components.

External and semi-external parts of a building, such as balconies, galleries, roof terraces, etc. should be included as a new component.

Circulation Space consists not alone of partitioned corridors but also exists within open-plan office layouts. Allowance should

be made for Circulation Space within open-plan layouts. This issue has not been addressed at all in IPMS.

6. DUBAI LAND DEPARTMENT - Mohamad Al-Dah, Dubai:

"We favour adopting a formula along the lines:

IPMS 1 (Gross) = IPMS 2 (Common) + IPMS 3 (Net)

I realise the SSC does not want to use words such as "Gross" or "Net", but these are intended here for clarification purposes only.

This is based on a plethora of legal disputes between various stakeholders in Dubai on what has been bought versus what has been built etc. We believe this suggested formula would go a long way to help prevent such disputes in the future. Also, an important point would be that the proposed IPMS 3 (Net) could be compared between properties from the Americas to Europe to the Middle East and Asia. This would make the IPMS truly global.

7. EXPERT INVEST - Petar Andonov, Bulgaria: *There are no further concepts that we would like introduced into IPMS: Offices.*

8. GENSLER - Area Analysis Team, USA: *"Additional resources (appendices with additional illustrations and photographs of building conditions as well as best practices) to aid interpretation by practitioners – the oversimplified illustrations in the standard will likely be of little use when putting the method into practice on actual building conditions.*

9. GIF - Dr. Ira Hoerndler, Germany: *We recommend reporting restricted areas (e.g. those listed in 2.7 'restrictions') as separate items, because certain costs might also have to be applied on unusable areas while income is normally solely generated from usable areas. We believe it would make sense to provide two numbers for each component in the sample spreadsheet IPMS 2.*

10. GLADMAN DEVELOPMENTS - Greg Limb, UK: *Drop it.*
11. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"Useable floor area or NIA as defined by the RICS Code of Measuring Practice 6th Edition (if it isn't broke don't fix it)."*
12. IPD - Christopher Hedley, UK: *It might be helpful to insert a list of Standards of which the Committee is aware.*
13. JAPAN BOMA - Shigeru Takagi, Japan: *Yes. I would like you to admit the measurement to the centre line of the wall.*
14. JLL INDIA LIMITED - Padman Arulampalam, India: *"The concept of Net Lettable Area / Carpetable Area. I would use a similar definition to Net Internal Area per RICS Code of Measuring Practice. This is a very important definition that cannot be omitted from the list of definitions under IPMS Offices."*
15. JLL INDIA LIMITED - Sachin Gulaty, India: *"Yes. While these Standards are quite succinct yet comprehensive, they may not talk to drawings that are permitted for development by local authorities under their respective jurisdictions. It would be great if we could have a section that connects the two and allows checks for compliance of building areas with locally-permitted development controls and regulations, byelaws, and codes, among others.*

Separately, we may need some guidance on measurement standards where heritage buildings may be used as offices. Elaborate structural elements may need some specific measurement standards."

16. JONES LANG WOOTTON - Padman Arulampalam, India: *"The concept of Net Lettable Area as described above in Q1 (a). In relation to Net Lettable Area, preference is to adopt a similar definition to Net Internal Area per RICS Code of Measuring Practice. This is a very important definition that cannot be omitted from the list of definitions under IPMS Offices.*

17. KNIGHT FRANK LLP - Group Response, UK: *"A definition of single-let office building measurement is required."*
18. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"IPMS2 does not contain a component, which shows real (net) area of inside premises (without partitions). Therefore, our additional proposal is related to area of the component „Workspace“. The main problem here is the following: if we include areas occupied by partition walls in the component „Workspace“ area, we will need to create a very complex hierarchical system, i. e. we will need to list all possible cases of the connection (full and partial) of different components and to decide in every case what component areas occupied by partition walls should belong to. We think this is too complex and wrong way. Instead of this, we propose to calculate net areas for the component „Workspace“, i. e. to exclude areas occupied by partition walls. Also to create an additional concept (component) „Non-structural elements“, which would include areas occupied by partition (not load bearing) walls. We also suggest not trying to calculate what area of partition walls belongs to other components, because here we will face again a problem of „hierarchical system“."*
19. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *"I would like to widen out to "IPMS – Buildings."*
20. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *"How to deal with spaces that are too low to walk on. On page 8 there is the example 3 for areas with limited height. But this example is dealing with limits set by regulations. For instance how to deal with workspace with a height of 2 meter, while regulations require a height of 2.5 meter. But space with a height of for instance only 1 meter can not be used at all. For that reason we think that areas with a height of for instance 1.5 meter should be excluded from the IPMS-2 area."*
21. PCA - Ken Morrison, Australia: *No.*

22. PCNZ - John Darroch, New Zealand: *An overriding principle followed in New Zealand guide (PCNZ/ PINZ Guide to the Measurement of Rentable Areas) , for Office Buildings, is that the floor or building will always be measured the same irrespective of whether the floor or building is single or multiple occupancy. Ie the sum of the parts must always equal the whole. Your new guide is trying to say the same thing, but not in a clear manner.*

23. RICS AUSTRIA - Group Response, Austria : *"Proposal - additional IPMS office Area 4; in Austrian office market lettable areas are specified as Net Usable Area. In the present form of the IPMS Consultation Document no area is given without structural, non- structural enclosing walls and columns.*

In our view an extension/expansion/enlargement of the definition IPMS Office Area 3 A-E reduced by structural, non-structural enclosing walls and column would be desirable, in order to achieve acceptance at the Austrian market."

24. RICS BELUX - Group Response, Belux: *Concepts like defined in the previous IPMS Office Area 3.*

25. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *How will the areas under the roof in traditional buildings be measured (roof pitch)?*

26. RICS GERMANY - Group Response, Germany: *"We recommend reporting restricted areas (e.g. those listed in 2.7 'restrictions') as separate items, because certain costs might also have to be applied on unusable areas while income is normally solely generated from usable areas. We believe it would make sense to provide two numbers for each component in the sample spreadsheet IPMS 2*

27. RICS HUNGARY- Group Response, Hungary:

"IMPS 4 – Offices

Part A) exclusively used areas (not including the areas below the columns)

Part B) non-exclusively used areas
Part C) terrace areas if applicable
Together = Lettable/income generating areas

This needs to be separated to functions as well in time, as there might be areas, which are not worth as much in terms of rent (storage on the floors, offices on the floors, or retail unit on the ground floor will be priced differently). Also parking will be measured in pcs, not m2 for income.

28. RICS ITALY - Group Response, Italy: *No.*
29. RICS PORTUGAL- Group Response, Portugal: *No.*
30. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Storage and other spaces in main or underground levels are missing.*
31. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *The German gif standard for office buildings.*
32. VALAD EUROPE - Per Nordström, Europe: *None at present.*
33. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Yes of course. By not thinking in terms of floor space but in terms of volumes, it becomes possible to make a decomposition of the building into cubes. The floor area of the cubes (the vertical projection on a horizontal plane) sets a certain standard floor area. The sum of its parts is so equal to the whole. This yet not the case in any standard except ISO 9836.*

As an additional comment we would like to add that results of measurements should be clear in status and quality. Therefore, we strongly recommend that the results represented in any document should also specify status and quality, such as measured from a design, in situ, or as built. It should also state whether or not the measurement has been reviewed, the qualifications of the chartered surveyor and reviewer, and the date of execution of the measurement and review.

34. ZIA- Sabine Georgi, Germany: *We recommend reporting restricted areas (e.g. those listed in 2.7 'restrictions') as separate items, because certain costs might also have to be applied on unusable areas while income is normally solely generated from usable areas. We believe it would make sense to provide two numbers for each component in the sample spreadsheet IPMS 2.*

Response Summary: There were 34 responses to this question. A number of responses required further clarification of Limited Use Areas (formerly Restricted Areas) and for their measurements to be separately stated within the Component Area Spreadsheet. Further response required IPMS 3 – office to include a further diagram for an office floor in single occupation.

SSC Rationale: The SSC has revised the Examples contained within the Limited Use Areas and provided further detail. The revised draft now states that “Limited use areas as defined in Section 2.3 are included in the overall **IPMS 2 - Office** total floor area, but must also be identified, measured and stated separately within **IPMS** reported areas.” The Sample Component Area Spreadsheet contained within the standard now includes a separate line to quantify Limited Use Areas such as height in Component Areas B to H. Finally the SSC has also revised the definition of Standard Facilities contained with IPMS 3 to provide further definition of exclusive and shared/public areas and to include a diagram for an office in single occupation.

Q3. Are there any parts of IPMS: Offices that would be better left out?

Consultation Responses:

1. BAM CONSTRUCT - John Burke, UK: *No comment.*
2. CASLE - Tony Westcott, UK: *No.*
3. CAXTONS - Charles Oliver, UK: *No.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"To leave any information out the standard could generate more questions than answers. Best to clearly define the inclusion/exclusion of all components even in the case they would not be included in any given area measurement criteria. However, concerning IPMS 3 we consider these criteria as best to be left out for consistency purpose on a comparison standpoint. "*
5. CLGE - Group Response, Europe: *"Yes. IPMS3, as presently constituted should be omitted. It is merely an application or an example of a particular measurement under the standard and is superfluous. Instead, the sub-division of internal building space (currently part of IPMS2) into separate components should be designated as IPMS3.*
6. DUBAI LAND DEPARTMENT - Mohamad Al-Dah, Dubai: *"Yes, we propose merging IPMS 1 and IPMS 2 into a single definition as mentioned earlier."*
7. EXPERT INVEST - Petar Andonov, Bulgaria: *There are no parts.*
8. GIF - Dr. Ira Hoerndler, Germany: *"a) Definition of contamination as restriction. Of course contamination is a restriction, but the question whether an area is contaminated or not, cannot be accomplished with an area calculation by a surveyor.*

The term accuracy, because the term tolerance is the correct one for this purpose. "

9. GLADMAN DEVELOPMENTS - Greg Limb, UK: *All of it.*
10. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *Dominant Face definition.*
11. IPD - Christopher Hedley, UK: *Consider taking some of the detail out of IPMS2 – Offices.*
12. JAPAN BOMA - Shigeru Takagi, Japan: *No, in particular.*
13. JLL INDIA LIMITED - Sachin Gulaty, India: *No. All aspects are important and need to be addressed.*
14. KNIGHT FRANK LLP - Group Response, UK: *"Yes, elements of construction (i.e. corridors, walls, columns, radiators) that are of no benefit to occupancy in IPMS3."*
15. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *No, gets it about right.*
16. PCA - Ken Morrison, Australia: *No.*
17. PERSONAL RESPONSE - Susan Pegg, UK: *Refer to each standard by a common sense description rather than IPMS 1, 2, 3.*
18. RICS AUSTRIA - Group Response, Austria: *"No."*
19. RICS BELUX - Group Response, Belux: *"We suggest not to list all the coalition partners on page 2 (44 at the time of the issuing of the exposure draft and in the meantime maybe already more than that), but to work with only a link to the website where all partners can be found (and can be updated when needed)."*
20. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *No.*
21. RICS GERMANY - Group Response, Germany:

"a) Definition of contamination as restriction. Of course contamination is a restriction, but the question whether an area is contaminated or not, cannot be accomplished with an area calculation by a surveyor.

b) The term accuracy, because the term tolerance is the correct one for this purpose. "

22. RICS ITALY - Group Response, Italy: *No.*
23. RICS PORTUGAL- Group Response, Portugal: *No.*
24. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *No.*
25. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *No.*
26. VALAD EUROPE - Per Nordström, Europe: *Sufficient as is.*
27. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Example 4 of 2.7."*
28. ZIA- Sabine Georgi, Germany:

"a) Definition of contamination as restriction. Of course contamination is a restriction, but the question whether an area is contaminated or not, cannot be accomplished with an area calculation by a surveyor.

b) The term accuracy, because the term tolerance is the correct one for this purpose."

Response Summary: There were 28 responses to this question and the vast majority felt that there was nothing that should be left out of the Standard. Some respondents felt Contamination should be removed from Restricted Areas and the term Accuracy should be removed.

SSC Rationale: The SSC have removed contamination from Limited Use Areas and replaced the term 'Accuracy' with 'Tolerance.'

Q4. Do you feel there is sufficient information within IPMS: Offices to allow you to interlink with existing standards?

Consultation Responses:

1. BAM CONSTRUCT - John Burke , UK: Yes.
2. CASLE - Tony Westcott, UK: *See comments below re use of 'Component' & 'Element'.*
3. CAXTONS - Charles Oliver, UK: *There is no equivalent of Net Internal Area – see comment on Page 19.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil : *"There are a few clarification and details to be treated as stated above. Underground levels and areas of shared use have currently no sufficient information to adopt IPMS as is. "*
5. CLGE - Group Response, Europe: *"There are serious conceptual differences between IPMS and euREAL which would prevent euREAL from operating as a detailed European variant or flavour of the IPMS world standard. These have already been alluded to (undifferentiated workspace, the anomalies of Dominant Face)."*
6. DUBAI LAND DEPARTMENT - Mohamad Al-Dah, Dubai: *"The level of information is good, but that is best left to the local organisations in each jurisdiction to write a bridging document of sorts which could then be approved by the SSC."*
7. EXPERT INVEST - Petar Andonov, Bulgaria: *We feel there is sufficient information within IPMS: Offices to allow being interlinked with existing standards.*
8. GENSLER - Area Analysis Team, USA: *"I think this is one of the most difficult concepts introduced in the standard and may cause the most confusion among building measurement professionals. It could have the unintended consequence of producing inconsistent data about buildings.*

The area measurement practices do not align with the existing U.S. based BOMA office measurement standards. To appropriately apply IPMS: Offices guidelines and appropriately apply BOMA office measurement guidelines would require two separate exercises and yield two different sets of data.

Only if BOMA rewrites their standards and changes their measurement concepts would it be possible to use the two standards in conjunction with one another. Otherwise, we have a new standard in the mix which recommends interlinking with existing standards. The result could be that building measurement professionals use concepts or terminology from both standards and neither of the two standards are followed appropriately. This type of practice could make the problem of inconsistent building measurements worse.

I would suggest avoiding the premise that this standard can be related to local standards. Or, there would have to be very specific guidelines on how this standard can be related to each of the specific local standards so that consistency can be achieved. The task of creating such guidelines would be a difficult undertaking."

9. GIF - Dr. Ira Hoerndler, Germany: *"In Germany existing standards are established, including detailed regulations for many special situations. If IPMS deviates in this special provisions (like the definition of a dominate surface, or the incl. / excl. of restricted areas) the figures will not be transferable from one standard into the other. Therefore IPMS will have to be calculated alongside with the regulated and established standards.*

As a result the effort (i.e. the cost) necessary to perform such calculations will strongly influence the acceptance within the industry. "

10. GLADMAN DEVELOPMENTS - Greg Limb, UK: "No."
11. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *The examples given are very limited. See RICS Code of Measuring Practice 6th Edition.*
12. IPD - Christopher Hedley, UK: *As the document exists at present, it is very difficult for lay people to understand how this Exposure Draft differs from the standards they may be used to in their own country. Such explanation is not appropriate in this Exposure Draft; rather, further guidance will be required following the publication of the Offices Standard.*
13. JAPAN BOMA - Shigeru Takagi, Japan: *No, the information to convert the space measured to the centre line of the wall into the space measured to the dominant face is insufficient. I would like you to show the easy calculating formula converting the space measured to the centre line of the wall into the space measured to the dominant face. I would like you to admit the measurement to the centre line of the wall, but you adopt the internal dimension, you should adopt the measurement to the internal surface of the wall, not to the dominant face. Dominant face is very difficult to apply. Dominant face makes the measurement cumbersome and complicated. It does not fit the actual practice.*
14. JLL INDIA LIMITED - Sachin Gulaty, India: *Can you please clarify what you mean by "existing standards" with a couple of examples?*
15. KNIGHT FRANK LLP - Group Response, UK: *"IPMS does not appear to state definitively that it will replace the current standards in the RICS Code of Measuring Practice for the UK and we feel this needs to be clarified. See our response above under Q1 a) & b)."*
16. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"Surveyors in Lithuania have been determining cadastral data (areas, volumes, and other cadastral data) of buildings for more than 60 years. A National standard was*

created and developed during this period. There are big differences between the provisions of national standard and IPMS: Offices. Therefore, they cannot be interlinked. But IPMS: Offices can be used as a parallel standard for the foreign investors' purposes, etc."

17. PCA - Ken Morrison, Australia: *A section that discusses how IPMS: Offices interfaces with existing standards would further promote its adoption around the world.*
18. PERSONAL RESPONSE - JENN MCARTHUR, UK: *There is certainly sufficient information, but to help to gain acceptance of this new standard, a table summarizing the key differences would be extremely helpful.*
19. PERSONAL RESPONSE - Mark Griffin, UK: *"Supplementary guidance may not be necessary but it would be comforting to know that interlinking with existing standards is OK i.e. we need more engagement with land surveyors in the various regions of the world."*
20. PERSONAL RESPONSE - Susan Pegg, UK: *No- also do not think it is appropriate to phase new code in over different property types.*
21. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *I think it will be important for all member of professional bodies who use an existing standard to understand how the IPMS relates to their current standard and what the differences are. This will help professionals like we explain to clients how the IPMS relates to an existing standard so they can draw easier comparison.*
22. RICS AUSTRIA - Group Response, Austria : *"No"*.
23. RICS BELUX - Group Response, Belux: *It could be a bit more explicit that IPMS allows to link with local standards. Supplementary guidance would indeed make adoption of IPMS easier. Making a suggestion to define in a local update of the existing standards how to interlink with IPMS, for instance with the suggestion to define in the local standard the surface that*

would enable Users to step from the local surfaces to the IPMS surfaces (eg from local lettable area to IPMS 1 or IPMS 2 – Office or IPMS3 – Office) could be helpful and could even initiate a certain ‘standardisation’ in the way the link between the local practice and the IPMS would be created... A suggestion could also be made to produce visual schemes that show the difference between local and IPMS definitions.

24. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *The current standard is SIA d 0165 “Kennzahlen zum Immobilien Management”. IPMS needs to be compliant with it to ensure good acceptance.*
25. RICS GERMANY - Group Response, Germany: *"In Germany existing standards are established, including detailed regulations for many special situations. If IPMS deviates in this special provisions (like the definition of a dominate surface, or the incl. / excl. of restricted areas) the figures will not be transferable from one standard into the other. Therefore IPMS will have to be calculated alongside with the regulated and established standards.*

As a result the effort (i.e. the cost) necessary to perform such calculations will strongly influence the acceptance within the industry."

26. RICS HUNGARY- Group Response, Hungary:

"IMPS 4 – Offices

Part A) exclusively used areas (not including the areas below the columns).

Part B) non-exclusively used areas.

Part C) terrace areas if applicable

Together = Lettable/income generating areas

This needs to be separated to functions as well in time, as there might be areas, which are not worth as much in terms of rent (storage on the floors, offices on the floors, or retail unit on the ground floor will be priced differently)

Also parking will be measured in pcs, not m2 for income. "

27. RICS PORTUGAL- Group Response, Portugal: *We think there is sufficient information to allow to interlink with the current practice.*
28. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *As mentioned in Q1(a) IPMS is not really usable yet for the purposes of Facility and Corporate Real Estate Managers yet, where areas are strategic resources to support the core activities of non-property companies.*
29. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *No. See comments above.*
30. VALAD EUROPE - Per Nordström, Europe: *Some areas not specified, may be depending on local or state authority regulations.*
31. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"As described in our comments above (comments on Q1 and Q2) the IPMS standards needs to be developed further to Further development of the standard is necessary in order to eradicate interpretation and to complete the standard."*
32. ZIA- Sabine Georgi, Germany: *"In Germany existing standards are established, including detailed regulations for many special situations. If IPMS deviates in this special provisions (like the definition of a dominate surface, or the incl. / excl. of restricted areas) the figures will not be transferable from one standard into the other. Therefore IPMS will have to be calculated alongside with the regulated and established standards.*

As a result the effort (i.e. the cost) necessary to perform such calculations will strongly influence the acceptance within the industry."

Response Summary: There were 32 responses to this question and the responses were divided between those who felt the information provided was consistent and those who had concerns over interlinking IPMS with existing national measurement standards.

SSC Rationale: The SSC was sensitive to the concerns raised and in order to address these concerns have created a new section called Interface Adjustments to deal with this issue. The section on Interface Adjustments states as follows:

*"The **SSC** is aware that there are many different measurement conventions in use. In some markets **Floor Area** is measured to the wall-floor junction, in others it is taken to the midpoint of walls or the external face. Other markets have adopted varying interpretations of the dominant face of an inside finished surface. Against that background of different measurement practices the **SSC** has adopted **Internal Dominant Face** to define the extent of **IPMS 2- Office** and **IPMS 3-Office**.*

***Users and Service Providers** wishing to interface with other measurement conventions will need to identify and state the **Floor Area** variation from **IPMS**."*

Moreover the SSC have revised the Component Areas and the Component Area spreadsheet to include separately stated Limited Use Area measurements to allow interface with standards where measurement to the Dominant Face is not the accepted approach.

Finally the Coalition has tasked the SCC with approving all future guidance in relation to IPMS: Offices to ensure that IPMS is consistently used and interpreted across markets.

Q4. Cont. If not, please state what, if any, supplementary guidance would assist your organisation or membership in adopting IPMS: Offices?

1. PCA - Ken Morrison, Australia: *A section that discusses how IPMS: Offices interfaces with existing standards would further promote its adoption around the world.*
2. RICS AUSTRIA - Group Response, Austria :*"Proposal - additional IPMS office Area 4; in Austrian office market lettable areas are specified as Net Usable Area. In the present form of the IPMS Consultation Document no area is given without structural, non- structural enclosing walls and columns.*

In our view an extension/expansion/enlargement of the definition IPMS Office Area 3 A-E reduced by structural, non-structural enclosing walls and column would be desirable, in order to achieve acceptance at the Austrian market."

Response Summary: *There were 2 further responses to this question both feeling that further clarification and flexibility was required to allow successful implementation and adoption across markets.*

SSC Rationale: *The SSC felt that the creation of the additional section on 'Interface Adjustments' contained within IPMS: Office Buildings and outlined in the response to the first part of this question deal with the majority of these issues.*

Moreover the further level of clarification in respect of 'Limited Used Areas' and the revised sample spreadsheet contained within IPMS 2 – office, facilitates interface between IPMS and other standards.

Q5. Any other comments.

Consultation Responses:

1. BAM CONSTRUCT - John Burke, UK: *No.*
2. CASLE - Tony Westcott, UK: *No.*
3. CAXTONS - Charles Oliver, UK: *No.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *No further comments.*
5. CLGE - Group Response, Europe: *"A full comment on IPMS is provide in the CLGE position paper."*
6. DUBAI LAND DEPARTMENT - Mohamad Al-Dah, Dubai: *"The 2nd Draft of IPMS is much better written. Good job guys! "*
7. GIF - Dr. Ira Hoerndler, Germany: *"IPMS 1: In Germany GLA is differentiated between a (closed on 4 sides and covered), b (open on at least one side but covered) and c (not covered)."*
8. GLADMAN DEVELOPMENTS - Greg Limb, UK: *Badly written, ill conceived and wholly unnecessary change to existing code of practise.*
9. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"I am surprised that such an eminent group of property professionals could come up with the definition of Dominant Face without understanding its full implications."*
10. IPD - Christopher Hedley, UK: *Page 3: last section needs an edit since it is unclear to the reader what the difference is between IPMS1, 2 and 3. Also I don't see how the component areas and IPMS3 – Office will allow users to translate "existing measurement conventions or standards into IPMS".*
11. JAPAN BOMA - Shigeru Takagi, Japan: *I think the idea of the creation of IPMS is wonderful and I agree the concept. But the current IPMS is too different from Japanese custom. So if Japanese properties adjust*

the IPMS, Japanese property owners and managers must take a lot of work. So I request you to adopt the measurement to the centre wall or show the easy calculating formula converting the space measured to the centre line of the wall into the space measured to the dominant face.

12. JLL INDIA LIMITED - Padman Arulampalam, India: *"IPMS should approach the Royal Institution of Surveyors Malaysia (RISM) to buy-in into IPMS. RISM is a professional body of surveyors in Malaysia and their Uniform Method of Measurement of Buildings is widely used by surveyors in Malaysia. Hence a buy-in from RISM to use IPMS would be a big boost in relation to Malaysia, but on the basis that NLA per above is equally introduced in IPMS Offices.*

The Board of Valuers, Appraisers and Estate Agents Malaysia is a regulatory body that may also support this endeavour provided NLA is incorporated into the definition and IPMS approach them for a buy-in.

As a Tenant Rep, I insist on Net Lettable Area in the course of my professional work (often using the NIA per RISM / RICS codes) and would hesitate to use IPMS Offices 3 for the simple fact that the space is gross, not net. Occupiers are concerned solely on the use of net space and they would pay for space they can effectively use.

Therefore it is of paramount importance that the concept of NLA and its definition be introduced."

13. JLL INDIA LIMITED - Sachin Gulaty, India: "No. "

14. JONES LANG WOOTTON - Padman Arulampalam, India: *"IPMSC should approach the Royal Institution of Surveyors Malaysia (RISM) to buy-in into the adoption of IPMS. RISM is a professional body of surveyors in Malaysia and their Uniform Method of Measurement of Buildings is widely used by surveyors in Malaysia. Hence a buy-in from RISM to use IPMS would be a big boost in relation to Malaysia embracing and adopting IPMS Offices and subsequent measurement standards, but the basis of Net Lettable Area is fundamentally important to property professionals and other surveyors. Hence it is important that IPMSC look into defining Net Lettable Area in its IPMS*

Office in order to convince RISM to adopt IPMS Offices and subsequent measurement standards. The Board of Valuers, Appraisers and Estate Agents Malaysia (BOVEA) is a regulatory body in Malaysia governing property professionals. They too will support an endeavour by IPMSC provided Net Lettable Area is incorporated into the definition. IPMSC should also approach BOVEA for a buy-in into IPMS Offices.

As a Tenant Rep, I insist on Net Lettable Area in the course of my professional work (often using the NIA per RISM / RICS codes) from Landlords / Developers and would hesitate to use IPMS 3 Offices for the simple fact that this basis of measurement is a Gross basis and not Net. Occupiers are predominantly concerned on the use of net space and they want to pay for space they can effectively use.

Therefore it is of paramount importance that the concept of NLA and its definition be introduced. "

15. KNIGHT FRANK LLP - Group Response, UK: *"We understand the benefit of having a global standard for global office analysis and comparison.*

However as the RICS Code is more detailed and sophisticated, we firmly believe that the detailed RICS Code should be allowed to continue for UK offices. This should not preclude IPMS being incorporated for specifically global occupiers to adopt for their management purposes. However for the above reasons we cannot see IPMS, in particular IPMS3, working for UK landlords and occupiers who do not have overseas holdings.

We expect the above points may have been made by others represented on the SCC, which we note also includes representation from the BPF. Given the general feedback above, we feel that further commenting below on individual aspects will only be duplicating observations already made by us and hopefully by the RICS about their RICS Code of Measuring Practice. "

16. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"IPMS2, IPMS3. Height of premises is a very important parameter (especially for the premises in usable (converted) roof space, where part of the walls can be not vertical). We think that heights of premises have to be determined and presented in CAD plans. Also we suggest introducing an additional IPMS2 component which would show area with headroom less than 1.50 m and less than 2.10 m. "*
17. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *I hope "IPMS – Buildings" will come out next!*
18. PCNZ - John Darroch, New Zealand: *The level of detail in the guide is very high and will add to the cost of survey and measurement. Furthermore, the high level of reporting detail (floor by floor / component by component) will be complex and costly to manage and maintain. Costs will be doubled where the guide sits alongside the indigenous guide already prevalent in the country.*
19. PERSONAL RESPONSE - DAVID PARK, UK Page 1: *In the right hand column, third para, last sentence I wondered whether "firms and organisations" might read better than "companies" (the latter a bit UK-focussed, the former echoing the language of the Red Book). Also in this preface, might a reference to BIM be appropriate? And would an acknowledgement of the initial 2D focus (rather than 3D) be worthwhile, as mentioned at the UK Board yesterday? [NB: Atria bring home the fact that it is not just restricted height that may be a relevant factor in "characterising" a building]*
20. PERSONAL RESPONSE - Mark Griffin, UK: *I am not sure about the style of the document where previously defined words are bolded throughout. This distracts from the document's readability (it is irritating) and means that bolding cannot be used for emphasis.*
21. PERSONAL RESPONSE - Susan Pegg, UK: *I do not think 100 responses are good given the membership of the RICS in the UK.*
22. RICS AUSTRIA - Group Response, Austria: *"No. "*

23. RICS BELUX - Group Response, Belux: *Add FAQ's. We fully support the paragraph 4 with the exiting text "In more developed markets, where existing measurement standards are set in law or custom, we would expect IPMS to work in conjunction with local standards or for a dual reporting basis to be adopted where appropriate."* This is a great step forward in comparison with the previous draft for Consultation 1. Further guidance could be helpful (see suggestions elsewhere already). In relation to paragraph 9 with text "IPMS 2 - Office is divided into Component Areas, which, in conjunction with IPMS 3 - Office, will enable Users, where necessary, to translate existing measurement conventions or standards into IPMS." This is only partly true, because in our opinion the concept of the previous IPMS Office Area 3 (Consultation 1) could have been more relevant, by adding nevertheless some extra categories. We can admit nevertheless, with the allowance to keep local practices and guidance how to interlink with IPMS a lot will be solved already...
24. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: "No. "
25. RICS GERMANY - Group Response, Germany: *"IPMS 1: In Germany GLA is differentiated between a (closed on 4 sides and covered), b (open on at least one side but covered) and c (not covered). "*
26. RICS PORTUGAL- Group Response, Portugal: No.
27. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *No other comment.*
28. SVIT SWITZERLAND - Beat Ochsner, Switzerland: No.
29. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Recommendations. Measurement certificates based on NEN 2580, constitute the basis for the conduct of purchase, sales and leasing transactions in the Dutch property market. The manner in which a measurement survey report is prepared is not part of NEN 2580. There is also no other standard that deals with this component. This means that anyone with a measurement certificate can prepare a measurement survey report, without any guarantees about the procedure followed and, above all, the results. In order to be able to prepare high-quality measurement survey reports with measurement*

certificates, and to be able to offer more guarantees in terms of quality, clarity of meaning, accuracy and recognition, in 2009, the Association “De Vierkante Meter” took the initiative of drafting a ‘Guideline for the preparation of measurement certificates’ and converted it into the NTA 2581 “Preparing NEN 2580 Measurement Survey Reports”. This NTA seeks to widen the dissemination of the quality aspect to principals and also seeks to give maximum encouragement to professionals to use this NTA when preparing measurement survey reports. This NTA is also meant as a tool for ISO 9000 certification for the component ‘preparing NEN 2580-compliant measurement survey reports’.

Because of this, we strongly recommend studying this NTA standard with regard to its reliability to set an international standard. Although the NTA 2581 is in Dutch, The Association recently took the initiative to translate this NTA into English. An unofficial translation of this NTA will be sent separately. I would, however, like to emphasize that this NTA is copyright protected (©2011 Nederlands Normalisatie-instituut)

30. ZIA- Sabine Georgi, Germany: *IPMS 1: In Germany GLA is differentiated between a (closed on 4 sides and covered), b (open on at least one side but covered) and c (not covered)*

Response Summary: There were 30 responses to this question and the majority of these responses had no further comments. However a number of responses required greater clarity and flexibility to enable IPMS to successfully interface with other standards and for a dual reporting to be adopted.

SSC Rationale: SSC has responded to these concerns and within the introduction to IPMS: Office Buildings state as follows: *“IPMS is a high level standard. Markets that do not have an existing established measurement standard are encouraged to adopt IPMS. The SSC did not identify any existing measurement standard that was suitable for adoption internationally.....We expect IPMS to work initially in parallel with local standards and for a dual reporting basis and interface to be adopted where appropriate. In time we expect IPMS to become the primary basis of measurement across markets.”*

Page 3 - 4. Introduction and IPMS Standards Setting Committee

Consultation Responses:

1. BAM CONSTRUCT - John Burke , UK: *No comment.*
2. CASLE - Tony Westcott, UK: *"Ok."*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
4. GENSLER - Area Analysis Team, USA: *"SSC does not promote the use of any particular measurement standard, but encourages the modification of existing market standards to comply with IPMS.*

Is this a recommendation that the existing market standards be re-written by the publishing organizations? Or, is this a recommendation that practitioners use IPMS principles of measurement to report data for existing market standards or vice versa? The latter of the two could cause unintended consequences in measurement practices."

5. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"I am surprised that such an eminent group of property professionals could come up with the definition of Dominant Face without understanding its full implications."*
6. IPD - Christopher Hedley, UK: *On page 3, the last three paragraphs are confusing for people who have not yet read the Standard. Editing required to introduce the concepts of IPMS 1, IPMS2 and IPMS3. This Standard will not in itself allow users to "translate existing measurement conventions or standards into IPMS".*
7. PERSONAL RESPONSE - JENN MCARTHUR, UK: *Good to see a range of input globally; is quite USA-heavy at first glance.*
8. RICS AUSTRIA - Group Response, Austria: *"We admire you, administrating this enlarged committee."*

9. RICS BELUX - Group Response, Belux: *"Paragraph 3 with "The SSC does not promote the use of any particular measurement standard, but encourages the modification of existing market standards to comply with IPMS." Indeed, but here with our suggestion to give this guidance on how this could be done (see above – Q4)."*
10. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Missing important Facility Management Associations as being part of Committee.*
11. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Missing reference to local standards and regulations.*
12. VALAD EUROPE - Per Nordström, Europe : *As is.*

Response Summary: There were 12 general responses in relation to the Introduction and Standard Setting Committee. The majority provided no further comment though some respondees felt that the introduction needed to provide further clarification of IPMS 1, IPMS 2 – office and IPMS 3 – office and its interrelation with existing standards.

SSC Rationale: The SSC have revised the IPMS: Office Buildings introduction and now states the following in relation to IPMS 1, IPMS 2 – office and IPMS 3 – office: *"The SSC consulted widely to understand the measurement conventions used in different international markets. Our research found there was a need to measure the external area of a Building, for planning purposes or the summary costing of development proposals. The SSC decided to refer to this as IPMS 1 and apply it to all classes of Building. There was also a requirement to identify and categorise internal areas. This is referred to as IPMS 2 – Office and will assist the Property Industry to make efficient use of space and benchmarking data. It was also important to measure areas in exclusive occupation for transactions and the SSC created IPMS 3 – Office for this purpose."*

In relation to interlinking with other standards the introduction now states the following: *"We expect IPMS to work initially in parallel with local standards and for a dual reporting basis and interface to be adopted where appropriate. In time we expect IPMS to become the primary basis of measurement across markets."*

Page 5. 1.1 Definitions

Consultation Responses:

1. APREA - Noel Neo, Singapore: *"Can an example of the Component Areas for each IMPS standard be included here so it is clear what Component relates to practically. Reference is made to buildings in multiple occupation. Can you clarify whether it is intended that each floor is assumed to be used by a single occupier that is a different entity to the other floors occupiers or multiple occupiers on each floor. I ask this as a single floor occupier would have exclusive use of areas marked E "circulation areas" including lift lobbies shown in the IPMS 2 plan shown on page 15, particularly where the corridors have been removed and therefore these may be included in the IMPS 3 area when in reality areas such as the lift lobby would have limited separate value.*

Equally Hygiene areas such as toilets / pantries may also be in exclusive use but again would have very limited additional value to the shared use value. Should it be assumed that each floor is in multiple occupations? If this is the case where there is a single occupier then it ought to be stated that a notional corridor / lift lobby is created so that these areas are not included. Alternatively if these areas are to be included then clarify this in the statement. There is a very helpful plan showing what is to be measured in the multiple occupied floor, can an example for a single floor occupier be given too."

2. BAM CONSTRUCT - John Burke, UK: *Floor area definition of load bearing may conflict with measuring to glass face - see P. 14.*
3. CASLE - Tony Westcott, UK: *"1. Definition of 'Component' and 'element' will cause confusion with use of these terms by the construction sector, especially if used in a standard method of measurement for the purpose of construction cost estimating and analysis. An 'element' is used in the RICS Standard Form of Cost Analysis to identify universal building cost centres, eg. External walls, Upper floors, Roof, Floor Finishes, which can be classified under Group elements, eg. Substructure, Superstructure, Internal finishes, etc. 'Component' is used to describe fabricated parts of a*

building within elements, eg. prefabricated wall panel as part of External walls. It would be more appropriate to use 'function' to describe the various purposes into which the Floor Area of a Building can be allocated.

Definition of 'Dominant Face' – better to replace 'section' with 'face'. 'Section' is normally used in construction & architectural / engineering drawings to signify an illustration of a detail taken at right angles to the main 2D diagram, eg. a vertical section through an external wall elevation.

Definition of 'Floor Area' – the floor may normally be horizontal, but the key point is that the Floor Area is measured in the horizontal plane, irrespective of whether it is actually horizontal."

4. CAXTONS - Charles Oliver, UK: *I do not like Dominant Face – if a 2.5 metre high exterior has a solid wall one metre high, and a window above 1.5 metres high then the glazed window would be more than 50%, so would be the Dominant Face. However apart from putting pot plants on the window ledge, this space is useless – the occupier cannot put his desk against the glass, only as far as the wall. If the glass goes to the floor, then measure to the glass. Measurement should be at floor level unless the wall slopes – see 7.2.2.*
5. CBRE BRAZIL - Walter L M Cardoso, Brazil : *"Dominant Face: The inside finished surface of the external construction features of an office building, which is 50% or more of the surface area of each section of the finished surface. Per the dominant face definition, how should the measurement of a building wall be treated in the case of an opened balcony?"*

IPMS 3 – Office: The floor area available on an exclusive basis to an occupier, but excluding Standard Building Facilities, and calculated on an occupier-by-occupier or floor-by-floor basis for each Building. Regarding the standard building facilities, would there be any area of shared use that could be leased to a single company in case of no interference with circulation of multiple occupations?"

6. CLGE - Group Response, Europe: *"The limitation of the standard to office buildings is unnecessary. The standard is of a nature that can*

apply to a much wider range of buildings. It is recommended that the title be altered to meet this possibility - International Property Measurement Standards: Buildings

7. GENSLER - Area Analysis Team, USA: *"Building" and "Property" – The definition states that a building forms "part of a property." Can't a building ("independent structure") contain multiple properties ("assets in the built environment"), such as in a condominium type of arrangement?*

IPMS 1 – "Outer perimeter of external construction features" could lead to varied interpretations for particular building conditions

Standard Building Facilities – This is a good idea, but it requires judgement by the service provider for many types of space. It would become especially difficult in facilities designed for a single occupant. This concept may be an area where "consistency in measurement" is compromised."

8. GIF - Dr. Ira Hoerndler, Germany:

(a) Please define atrium + open light well.

(b) dominant face : definition of "50% surface area of each section" not clear, it is preferable to measure only the height, not the surface. The interpretation of "section" may vary otherwise.

9. GLADMAN DEVELOPMENTS - Greg Limb, UK: *Extremely poorly written.*

10. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"I am surprised that such an eminent group of property professionals could come up with the definition of Dominant Face without understanding its full implications."*

11. IPD - Christopher Hedley, UK: *"There is a significant issue with definitions that can cause floorspace measurements to vary considerably from country to country. Foremost of these are Standard Building Facilities. The word "Standard" should be removed from the name of this category of space.*

We question the interpretation of the term “exclusive use” under definition of IPMS 3 – Office. How would a serviced office work desk be treated for this purpose?

The term User normally refers to occupiers and should be reconsidered.”

12.JLL INDIA LIMITED - Sachin Gulaty, India:

“a. Fundamental concern with definition of IPMS 3 – Office: While areas for “Standard Building Facilities” are proposed to be excluded from area calculations, these areas are considered as “loading” in a number of projects in India when rental agreements are executed. Consequently, the tenant/occupier ends up paying for these “Standard Building Facilities” areas while these areas are not under their occupancy. We could consider including a table separately within IPMS 3 – Office that clearly states the “Standard Building Facilities” area apportioned to each respective tenant/occupier, and the same is reconciled with overall area calculations.

b. Definition of “Dominant Face” needs to slightly more elaborate, stating clearly that the “Dominant Face” is either a fenestration/glass curtain wall or a hard surface wall (brick / concrete / etc.) wall. Maybe “Diagram 4” on Page 14 of the Exposure Draft could be brought here; it would accord more clarity if seen with the definition.”

13.JLL VIETNAM LIMITED - Chris Murphy, Vietnam : *“Building: There are problems with the definition as an ‘independent structure’; this can be construed as equivalent to ‘detached’. Suggest improving this definition.*

Dominant face: Should clarify that this may be the internal face of glazing as required by the drawings on page 14. Nevertheless we have reservations on the use of glazing as a boundary for floor area. Our comment on this is included in the comment on page 14 below.

IPMS 1: ‘floor level’ should be ‘level’ for consistency with definition of Floor Area.

'Standard Building Facilities' – the word 'Standard' adds nothing to the definition and may imply a specific set of 'standard facilities' to be provided in any building. The word 'standard' should be deleted."

14. JONES LANG WOOTTON - Padman Arulampalam, India:

"Vertical Protrusions – Any solid material that runs vertically across from floor to ceiling or vice versa and typically is used to accommodate the running of Building Services in an Office Building but shall exclude any such installation by an occupier for its own use.

Horizontal Protrusions – Any solid material that runs horizontally across the inside finished surface of the external construction feature, which typically is used as a safety, security or architectural feature.

Solid Material – Classes of solid comprising of metal, ceramics, organic or a combination that is typically used in the construction and design of an Office Building."

15. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *Definition of the concept "Dominant face" is unclear (item 1.1.). Also the idea of measuring to the dominant face (Item 3.2.2.) is doubtful, because in such case windowsills and parts of areas of the external walls have to be added to the IPMS2 area. It does not correspond with the declared floor area measurement. We suggest measurements to be taken around the perimeter of the premises between walls (structure, partition walls or other) and include niches which are higher than e.g. 1.60 (from the floor/wall intersection) and wider e.g. 1.50 m.*

16. MISSELWITZ & KADEN - Mathias Kaden, Germany: *"The definition of a space measurement professional. There is no change in the new draft. It's better to call it a land surveying professional qualified by experience or training to measure buildings. Land surveying professionals are well equipped and experienced to meet the needs of accuracy.*

Poor definition of 'as-built CAD-plans' or 'as-built non CAD-plans'. This should be more detailed. And a result of a measurement should always be a CAD-plan."

17. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *I preferred GEA, GIA and NIA as more descriptive, could these not be retained? Otherwise, unless we are doing them daily, we will have to refer to documentation for definitions every time.*

18. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *We like to introduce a clear, uniform distinction between areas with limited height (e.g. 1.5 meter) and areas that have a normal/usable height.*

19. PERSONAL RESPONSE - Mark Griffin, UK: *"Dominant Face – This term is used elsewhere to refer to either the internal or external face. Confusion is likely if it is used without clarification and/or if IPMS is expanded in the future. Perhaps 'Dominant Internal Face' could be used.*

Space Measurement Professional – As I mentioned before this practitioner does not exist and may be directly compared with the definition of Valuer. The professional most appropriate to measure the building is a land surveyor and the professional most appropriate to estimate the value of a building is a valuer. If the intention of creating a new term is to avoid being elitist i.e. the professional may be qualified by experience or training then this should be applied to the Valuer or 'Space Value Estimating Professional' or 'Estimator' as well i.e. A Service Provider qualified by experience or training to value buildings in accordance with IPMS."

20. PERSONAL RESPONSE - Susan Pegg, UK: *"I thought a building and property were one and the same but now a building is structure forming part of a property? This does not make sense.*

A space measurement professional..., do you mean an RICS qualified surveyor????

Components?

Would prefer reference to floor levels/areas/rooms"

21. RICS ASIA - Group Response, Hong Kong: *"1.1 Definitions Component Area. Can an example of the Component Areas for each IPMS standard be included here so it is clear what Component relates to practically?"*

Definitions Standard Building Facilities Reference is made to buildings in multiple occupations. Can you clarify whether it is intended that each floor is assumed to be used by a single occupier that is a different entity to the other floors occupiers or multiple occupiers on each floor. I ask this as a single floor occupier would have exclusive use of areas marked E "circulation areas" including lift lobbies shown in the IPMS 2 plan shown on page 15, particularly where the corridors have been removed and therefore these may be included in the IMPS 3 area when in reality areas such as the lift lobby would have limited separate value.

Equally Hygiene areas such as toilets / pantries may also be in exclusive use but again would have very limited additional value to the shared use value. Should it be assumed that each floor is in multiple occupation? If this is the case where there is a single occupier then it ought to be stated that a notional corridor / lift lobby is created so that these areas are not included. Alternatively if these areas are to be included then clarify this in the statement. There is a very helpful plan showing what is to be measured in the multiple occupied floor, can an example for a single floor occupier be given too. "

22. RICS AUSTRIA - Group Response, Austria: *"Are correct."*

23. RICS BELUX - Group Response, Belux: *"In general: please let the definition include both 'singular and plural' (so User / Users; Property/ Properties; Service Provider / Service Providers; etc) because singular and plural is also always mixed in the text. Dominant Face: We find it a strange definition and wouldn't use it in this form for IPMS 2 – Office measurement for instance: see below.*

Service Provider: add other parties like real estate / workplace consultants, tenant representation parties, etc.

Floor Area: in IPMS 1 there are clearly surfaces that are not 'load-bearing structure' like eg the façade itself, void part of the shaft, etc. Not all parts of a measured Floor Area have to be 'loadbearing'.

Suggestion to include a definition for 'Occupier', term that is used a lot in the text next to Valuer, Service Provider, etc. Maybe also if 'Valuer' is defined separately as one of the Service Providers, one could consider to define other kinds of Service Providers too."

24. RICS CH & PSP & IPB - Pierre Stämpfli, Switzerland: *"IPMS 3 should allow for non-exclusive space to be included."*

25. RICS GERMANY - Group Response, Germany:

a) Please define atrium + open light well

b) dominant face : definition of "50% surface area of each section" not clear, it is preferable to measure only the height, not the surface. The interpretation of "section" may vary otherwise.

26. RICS ITALY - Group Response, Italy:

COMPONENT DEFINITION SHOULD BE MADE CLEAR HERE (IE THOSE REPORTED ON PAGE 16). WE WOULD ADD THE DEFINITION OF 'MEMBER' AND 'PARTNER' AND THE WAY TO BECOME ONE OR THE OTHER.

27. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *More detailed would be helpful (non-structural walls for example). Accordance to lease/letting standards is important/to verify.*

28. VALAD EUROPE - Per Nordström, Europe: *As is. Note b pg. 1*

29. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Dominant face: This definition is based on the starting point that there are sections. Office buildings without clear*

sections exist. What to do to in such case to determine the dominant face? Take the entire wall side of the room or of the total facade on this floor level? We see that the focus is on offices only yet, but if the standard will be extended to other real estate objects it is necessary to involve the stakeholders of the other real estate objects already now. An active approach is needed. Setting the standard for offices with the goal to further expansion into other real estate, a revision of the aim of the standard is necessary.”

30.ZIA- Sabine Georgi, Germany:

- a) Please define atrium + open light well*
- b) dominant face: definition of “50% surface area of each section” not clear, it is preferable to measure only the height, not the surface. The interpretation of “section” may vary otherwise.*

Response Summary: There were 30 general responses in relation to the definitions.

SSC Rationale: In finalising IPMS: Office Buildings the SSC have considered these responses. Definitions have been re-considered for Component, Component area, Internal Dominant Face, IPMS 1, IPMS 2 – office, IPMS 3 – office, Standard Facilities and Vertical Section and where the SSC believed beneficial, amended.

Page 6. 1.2 Aim of the Standards

Consultation Responses:

1. BAM CONSTRUCT - John Burke, UK: *Agreed.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"Comparing IPMS with existing standards, IPMS 1 is similar to the requirements landlords and developers or even the valuation team use to measure space for replacement cost purposes. IPMS 2 with minor changes could also meet the requirement of landlords and tenants in Brazil. IPMS 3 also does not include components that could have commercial value to the space."*
4. CLGE - Group Response, Europe: *"The standard applies to horizontal floor space (plan area) and not to volumes. The aim of the Standard should be rephrased as:*

The aim of IPMS: Buildings is to meet the requirements of users for consistency in the measurement of specified components of buildings in two dimensional horizontal space."

5. IPD - Christopher Hedley, UK: *"Mention should be made of valuation in the second paragraph."*
6. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"Delete the second sentence. This is not an aim. It is a background description of the problem which the aim intends to overcome. The use of the word 'now' is particularly inappropriate in a document intended for long term use."*
7. PERSONAL RESPONSE - Mark Griffin, UK: *Having defined 'Floor Area' I think it is better to use this instead of 'floorspace' throughout the document.*
8. PERSONAL RESPONSE - Paul Collins, UK: *"3. P5/6 - the aim and use of standards should come before the definitions*

It should be made clear that the standards do not fully cover aspects of a building's volume (other than the head height issue) and that this might be included in a future update (though as I have shared back I cannot see any reason why it could not now, as regards solid floor, raised floors, suspended ceilings etc – but the key reason for having reference to floor ceiling heights is to enable occupiers to have regards to space heating, cooling issues etc)."

9. PERSONAL RESPONSE - Susan Pegg, UK: *"An international standard is not required. The UK code ties in with our legal and taxation system. If investing abroad there are always differences for example in lease length, structure the way in which dilapidations are dealt with, therefore measurements will be different based on each countries standard practice. "*
10. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *We think that the aim is for consistency in reporting as well as measurement.*
11. RICS AUSTRIA - Group Response, Austria: *"Are correct."*
12. RICS BELUX - Group Response, Belux: *If we talk about the User and Third Party, please also mention the Service Provider.*
13. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Not only to meet the requirements of Users of Property but of all major stakeholders being concerned by owning, using and operating space.*
14. VALAD EUROPE - Per Nordström, Europe: *To state and secure accurate measures of property, as built & buildings under construction*

Response Summary: There were 14 general responses in relation to the 'Aim of the Standards' with the majority feeling that the aim was correct.

SSC Rationale: The SSC have considered these responses and where the SSC believed beneficial, amended.

Page 6. 1.3 Use of the Standards

Consultation Responses:

1. BAM CONSTRUCT - John Burke, UK: *Do Service Users use the standard as a compulsion? How does the practitioner deal with local practice? Quote both or qualify local custom as not IPMS?*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
4. GENSLER - Area Analysis Team, USA: *"IPMS is drafted for use by Service Providers, who should relate IPMS to the basis of measurement that is most commonly used in each market sector or location." This is difficult to understand and leads me to think that practitioners are directed to create a hybrid measurement standard in some way. If measurement standards conflict, there is no way to relate them other than to create a third standard that mixes concepts or measurement practices from the two conflicting standards. With the level of detail that this standard goes into, for the sake of consistency it would be beneficial to be very specific about how results are attained and how the results are reported—preferably in some standardized format."*
5. IPD - Christopher Hedley, UK: *"The Standard introduces a unified way of representing floorspace around the world. There is no question of challenging national legislation. The text needs editing. We simply do not understand why IPMS is drafted for use by Service Providers. It is for the use of all Users (as defined). It is also not clear how Service Providers should relate IPMS to local market sectors."*
6. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *I preferred GEA, GIA and NIA as more descriptive, could these not be retained? Otherwise, unless we are doing them daily, we will have to refer to documentation for definitions every time.*
7. PERSONAL RESPONSE - Mark Griffin, UK: *"as-built CAD plans' are mentioned here for the first time but without definition. There is much confusion in the construction industry and regionally (and*

apparently in this exposure draft), hence definition is needed. It must be clear if the 'as-built' plan is theoretical or the result of a survey. Similarly it must be clear if the plan is digital or hardcopy. I also think there is inconsistency in the document regarding the necessity of plans. I think plans are essential in every case but as a minimum would like to see them recommended (rather than 'where possible' or 'whenever possible') throughout. The type of plan need not be an as-built plan that is the result of a survey although this is desirable."

8. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *In the 3rd para following "inevitably" there should be a comma. In the 5th para floorspace should be 2 words – floor space.*
9. RICS AUSTRIA - Group Response, Austria: *"Are correct."*
10. RICS BELUX - Group Response, Belux: *OK. It is now clear that it can be used for purposes between parties and that it should be related to the measurement that is most used in each market. We think this is a very good position and a way to link IPMS with known practices and make adoption easier.*
11. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *A common sense approach in the event of conflict between IPMS and domestic standards is not always possible. For example for the dominant face approach it is just not possible to translate IPMS square meters of a certain floor area into square meters of a similar floor area of the domestic standard and vice versa in the case not all measures are known of could be measured from a drawing. What is common sense: measure in situ or guess? As a result of this observation a disclaimer to be considered.*

Response Summary: There were 11 general responses in relation to the 'Use of the Standards' with the majority feeling that this paragraph was fit for purpose.

SSC Rationale: In preparing the IPMS: Office Buildings the SSC have considered these comments and redrafted where appropriate.

Page 7. 2.1 General Principles of Measurement and Calculation

Consultation Responses:

1. BAM CONSTRUCT - John Burke, UK: *Noted.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CLGE - Group Response, Europe: *"Measurement should be fit for purpose. It is clear that the purpose of a survey may vary considerably from situation to situation. It is therefore important to state the purpose for which the measurement was carried out, the methodology used, and indication of the precision achieved, the date for which the survey is valid and the name of the service provider carrying out the measurement."*
4. GENSLER - Area Analysis Team, USA: "The item must be physically capable of being measured" – This is confusing. It is common for unbuilt projects to require area measurements, yet they are not physically, dimensionally in existence yet. Also, many areas in a building are physically inaccessible to people and the technologies they are using to measure the building, but they are measurable on dimensional CAD plans and should likely be measured.
5. GIF - Dr. Ira Hoerndler, Germany:

*"a) The spreadsheet sample seems not verifiable, define therefore the provision verifiable.
b) Define the measurement tolerance, when measurements are taken from building plans by hand."*
6. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"I query whether Item 3 'The measurement must be transparent' adds any value. The elements of the required transparency are covered in item 4."*
7. PERSONAL RESPONSE - Mark Griffin, UK: *"The tools used for measurement – clarification is needed. I think the intention is to record the method of measurement but the term 'method' has been avoided. 'Techniques' might work better than 'tools'. For example if*

the area was scaled from a digital CAD plan the tool could be a computer or CAD software (or even an AREA command) but we don't need to know this. "

8. PERSONAL RESPONSE - Paul Collins, UK: 5. P7 para 2.2 - *reasoning needs to be given as to the centre-line of a common wall. This is not the 'dominant face' – and may where plans are not available be difficult to ascertain.*
9. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"The coalition mention Tolerance here but then leave this open. In the original draft there was a table to how the tolerances. Should there be some guidance as to an acceptable tolerance? Perhaps a 1:100 scale providing measurements to +/- 20mm or 1:200 where it is +/- 50mm?"*
10. RICS AUSTRIA - Group Response, Austria: *"We agree."*
11. RICS GERMANY - Group Response, Germany:
 - a) *The spreadsheet sample seems not verifiable, define therefore the provision verifiable.*
 - b) *Define the measurement tolerance, when measurements are taken from building plans by hand.*
12. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Also the date of measurement has to be documented.*
13. VALAD EUROPE - Per Nordström, Europe: *Sufficient as suggested at this stage.*
14. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"The measurement tolerance must correspond to the represented accuracy (Note: a whole square meter suggest an accuracy of +/-0,5 m². For example 345,5 m² suggest +/- 0,05 m² so the accuracy is 345,45 – 345,55 m². And so on). The unit of measurement is metric."*
15. ZIA- Sabine Georgi, Germany:

"a) The spreadsheet sample seems not verifiable, define therefore the provision verifiable.

b) Define the measurement tolerance, when measurements are taken from building plans by hand."

Response Summary: There were 15 general responses in relation to the 'General Principles of Measurement and Calculation' and a number of suggested further amendments to this section.

SSC Rationale: In preparing IPMS: Office Buildings the SSC have considered these comments and revised this section deleted some elements and included a requirement to state the date of measurement, interface reconciliation where appropriate and the IPMS standard used is also stated.

Page 7. 2.2 Best Measurement Practice

Consultation Responses:

- 1) APREA - Noel Neo, Singapore: *"In respect of IPMS 3 – Office, to the centre –line of a common wall. What happens in instances where two buildings share a common wall. This is not uncommon in older tenement buildings in Hong Kong that share a common stair case between two buildings. This has also been seen in office buildings, eg Town Place, Asia Standard Tower and Fook Lee Commercial Building share a common wall between the two buildings. Where is the measurement supposed to go up to in these instances, the midpoint? Can this be clarified?"*
- 2) BAM CONSTRUCT - John Burke, UK: *This seems to be following the trend of Service Users delegating to expert measurers with the risk of a disconnect between the surveyor and the actuality. Is that wise?*
- 3) CASLE - Tony Westcott, UK: *Ok.*
- 4) CAXTONS - Charles Oliver, UK: *IPMS should state that areas are measured wall to wall at floor level or at 1.5 metres above floor level, whichever is least. This is to allow for sloping ceilings, especially in roof spaces, under eaves etc. Space below 1.5m should be excluded or measured separately; See 8.2.7.*
- 5) CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
- 6) CLGE - Group Response, Europe: *"Reference is made to a requirement to "seek the highest degree of accuracy possible". The phrase should be deleted. Accuracy, or more correctly precision, is a continuum. Greater degrees of precision can always be achieved by greater expenditure on methods and technology. All that is required is that the measurement is fit for purpose and that that purpose is clearly stated and that the methodology and equipment used to carry out the measurement is clearly specified. This allows a subsequent user decide whether the values given meet his particular requirement or not."*
- 7) EXPERT INVEST - Petar Andonov, Bulgarian: *Measurements are to be taken to wall-floor junctions, immediately above skirting board level,*

whether walls are vertical or non-vertical, to the outer perimeter of external construction features for IPMS 1, except where measurements are taken to a Dominant Face or, in respect of IPMS 3 - Office, to the centre-line of a common wall:

- 8) GENSLER - Area Analysis Team, USA: *I agree with these and think they should be continuously expanded upon.*
- 9) GIF - Dr. Ira Hoerndler, Germany: *It seems to be assumed that CAD Plans are available, what to do if not?*
- 10) JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"Floor Area dimensions are to be measured horizontally'. However this conflicts with the definition of Floor Area in 1.1 – 'The area of a normally horizontal...', which suggests that horizontal may not always be appropriate. One of these requires amendment."*
- 11) MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Useful clarification.*
- 12) PERSONAL RESPONSE - JENN MCARTHUR, UK Add "or Building Information Models" after "CAD Plans" as the design industry is increasingly delivering in BIM rather than CAD.
- 13) PERSONAL RESPONSE - Mark Griffin, UK: For an international audience 'skirting board' may need to be included in the definitions section.
- 14) RICS ASIA - Group Response, Hong Kong: *Part 2, 2.2 Best Measurement Practice "in respect of IPMS 3 – Office, to the centre – line of a common wall" What happens in instances where two buildings share a common wall. This is not uncommon in older tenement buildings in Hong Kong that share a common stair case between two buildings. I have also seen this in office buildings, eg Town Place, Asia Standard Tower and Fook Lee Commercial Building share a common wall between the two buildings. Where is the measurement supposed to go up to in these instances, the midpoint? Can this be clarified?*
- 15) RICS AUSTRIA - Group Response, Austria: *"We agree."*

- 16) RICS BELUX - Group Response, Belux: *"In the text 'Measurements are to be taken to wall-floor junctions, immediately above skirting board level, whether walls are vertical or non-vertical...': this is correct for IPMS 2 – Offices but not for IPMS 1."*
- 17) RICS GERMANY - Group Response, Germany: *"It seems to be assumed that CAD Plans are available, what to do if not?"*
- 18) SVIT SWITZERLAND - Beat Ochsner, Switzerland: *See comment regarding non-structural walls.*
- 19) UNIVERSIDAD POLITECNICA DE VALENCIA - Natividad Guadalajara and María José Ruá, Spain: *We think that the plans should go with a graphic scale, no matter if they are as-built CAD plans or not. It could help to keep proportions when the plan is printed and to check the measurement.*
- 20) VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: "If buildings are to be measured individually it is necessary to add the situation that if another building is built against an existing building by using the existing wall the gross floor area changes by means of accession. This results in the situation that the gross floor area of the old and the new building is measured to the centre of the common wall. Floor area dimensions are measured as a vertical projection on a horizontal surface. Add: See our comment Q5.
- 21) ZIA- Sabine Georgi, Germany: It seems to be assumed that CAD Plans are available, what to do if not?

Response Summary: There were 21 responses in relation to the 'General Principles of IPMS' and a number of responses asked for further clarification on Best Measurement Practice if no Cad plans were available.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments, revised this section accordingly and combined this section with Section 2.3 on 'Alternative Measurement Practice'.

Page 7. 2.3 Alternative Measurement Practice

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *No comment.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
4. CLGE - Group Response, Europe: *"This is a difficult area. The use of CAD plans makes the calculation of components and areas easier and more accurate. The difficulty, however, is whether available CAD drawings or paper drawings are correct with regards to the "as built" construction. How can their accuracy and precision be determined and validated? The use of the phrase "pre-agreed" areas, negates the whole purpose of a standard. A standard must have universal validity and measurement based on the standard must be acceptable to multiple users. Pre-agreed areas may be acceptable to two negotiators at a particular point in time but may not be acceptable to subsequent parties who were not privy to the agreement."*
5. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *It is not clear what "pre-agreed areas" mean. Does it mean that areas can be determined without measurements? If yes, we think that such concepts cannot be included in the "measurement standard".*
6. PERSONAL RESPONSE - JENN MCARTHUR, UK: *This is somewhat confusing; is this referring to hand-drawings?*
7. PERSONAL RESPONSE - Mark Griffin, UK: *"What are 'as-built non-CAD plans'? Does this mean hardcopy plans? Even if there are pre-agreed areas I don't see why plans should be absent. Plans are essential. "*
8. RICS AUSTRIA - Group Response, Austria: *"BIM and CAD are already standard."*
9. VALAD EUROPE - Per Nordström, Europe: *Laser and Bluetooth connected to computer. To be included.*

10. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"See our comment Q5. An IPMS 4, rental area, may exclude even: Vertical Penetrations, All structural walls and columns, and Technical Services."*

Response Summary: There were 10 responses in relation to the 'Alternative Measurement Practice' and a number of responses asked for further clarification.

SSC Rationale: In preparing the Exposure Draft the SSC have revised this section accordingly and combined this section with Section 2.2 on 'Best Measurement Practice'.

Page 7. 2.4 Accuracy and Tolerance

Consultation Responses

1. BAM CONSTRUCT - John Burke , UK: *No comment.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CLGE - Group Response, Europe: *"Accuracy is a measure of how close a measurement or a series of measurements approximate to the true physical reality. It is a theoretical concept and is rarely if ever fully achievable. Precision is a measure of the fineness, resolution and repeatability of the measurement system and subsequent plotting of the measurements, normally indicated in terms of plus or minus a tolerance value, i.e. what probability there is that certain percentages of the measurements will fall within given tolerances. Values should be quoted in the form VALUE +/- TOLERANCE and the nature of the tolerance specified i.e. as Root Mean Square Error (RMSE) or 3 standard deviations above and below the mean, or a probability that 99.73% of measured values will lie within the tolerance. etc."*
4. GIF - Dr. Ira Hoerndler, Germany: *Either tolerance or accuracy, both is not possible. Better would be only tolerance, this is better defined.*
5. JLL INDIA LIMITED - Sachin Gulaty, India: *While stating that "... highest degree of accuracy possible ..." needs to be achieved, it may be useful to set a minimum benchmark for unit measurement, say 0.0 metres.*
6. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *We think that IPMS should set accuracy of the measurements. Otherwise, the standard will not meet one of its aims - to compare buildings in different markets. We suggest returning Appendix 2 from IPMS: Offices consultation document.*
7. MISSELWITZ & KADEN - Mathias Kaden, Germany: *Accuracy of measurements. There was concept of accuracy depending of the scale. Now there is no explicit definition of accuracy. In my opinion that's not enough. It must be more explicit.*

8. PERSONAL RESPONSE - Mark Griffin, UK: *"In the earlier version of IPMS I criticised the Tolerances appendix and I can understand that it has probably now been left out in an effort to keep the standard high-level but the standard is still deficient in the area of accuracy and tolerance. As I mentioned before, the Service Provider should never be encouraged to seek the highest degree of accuracy possible. This is fundamentally wrong.*

I think users should be given some guidance on accuracy and tolerance but I don't know what to suggest. I think the SSC might be best placed to suggest some minima for consultation. Reaching the right audience of land surveyors would be important to confirm these.

If the SSC is unable to grasp this subject in the time available then the second sentence might be changed along the lines of 'In the absence of such specification the Service Provider should use professional judgement...' "

9. RICS AUSTRIA - Group Response, Austria: *"Yes, we agree."*

10. RICS GERMANY - Group Response, Germany: *"Either tolerance or accuracy, both is not possible. Better would be only tolerance, this is better defined. "*

11. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Experience show that it is difficult, not to say impossible, to indicate or specify tolerances. Normally, this will only be possible in a general statement (like a quote for costs).*

12. VALAD EUROPE - Per Nordström, Europe: *Suggested deviation +/- 1 mm /100m.*

13. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Add" The measurement tolerance must correspond to the represented accuracy (Note: a whole square meter suggest an accuracy of +/-0,5 m2. For example 345,5 m2 suggest +/- 0,05 m2 so the accuracy is 345,45 – 345,55 m2. And so on).*

14.ZIA- Sabine Georgi, Germany: *Either tolerance or accuracy, both is not possible. Better would be only tolerance, this is better defined.*

Response Summary: There were 14 general responses in relation to Section 2.4 on 'Accuracy and Tolerance'.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments and retitled this section 'Tolerance'. In relation to the comments received this section now states that: *"The measurement tolerance is to be specified in the scope of work and report. The Service Provider should provide an appropriate degree of tolerance having regard to the nature of the instruction, the equipment available and conditions at the time of measurement."*

Page 8. 2.5 Measurement Reporting

Consultation Responses

1. BAM CONSTRUCT - John Burke , UK: *No comment.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
4. GENSLER - Area Analysis Team, USA: *Contradicts the allowance of "Alternative Measurement Practice" in Section 2.5?*
5. GIF - Dr. Ira Hoerndler, Germany: *It would be preferable to have options to "coloured drawings".*
6. JLL INDIA LIMITED - Sachin Gulaty, India: *In addition, there should be a mandatory reference to building plans and sections that have been approved for development by the respective local authorities. This will help drawing convergence between permitted and actual developments, and will assist Users in determining whether developments are in line with permitted development regulations. This will allow certain Users, valuers for instance, to ascertain if there are any areas that may be subject to demolition in future as illegal developments, which would have a bearing on valuations of assets.*
7. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *We suggest that reports on building areas should contain date of the measurements and date of the preparation of report. It should be clear when measurements were done and other data were collected.*
8. MISSELWITZ & KADEN - Mathias Kaden, Germany: *Poor definition of 'as-built CAD-plans' or 'as-built non CAD-plans'. This should be more detailed. And a result of a measurement should always be a CAD-plan.*
9. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*

10. PERSONAL RESPONSE - Mark Griffin, UK: *"All reported measurements should also report the accuracy of those measurements. Without these details the situation will remain where identical spaces are described with different area values and the difference will not be understood. A further improvement would be to standardise the way that accuracy is reported. Area values will then be directly comparable. I offer the following for discussion: 95% of all areas measured are within 1% of the true area."*
11. PERSONAL RESPONSE - Paul Collins, UK: *6. P8 para 2.5 – appropriately coloured drawings and their details need to be clearly distinguished when copied black and white.*
12. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"It is important that any dimension can be repeated on site by another party looking to verify the data. Without the dimension's position it can not be objectively verified. This is why CAD plans (or any plans) are important to be included in the report to show where measurements have been taken. "*
13. RICS AUSTRIA - Group Response, Austria: *"Yes, we agree."*
14. RICS GERMANY - Group Response, Germany: *"It would be preferable to have options to "coloured drawings."*
15. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *There special measurement Web IT Tool for space measurement to automate space calculation, colouring and reporting (see www.visimove.com) as much better alternative to coloured CAD drawings or Excel spread sheets.*
16. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"See our comment Q5. The NTA 2581 can be helpful to develop the measurement reporting."*
17. ZIA- Sabine Georgi, Germany: *It would be preferable to have options to "coloured drawings".*

Response Summary: There were 17 general responses in relation to the section on 'Measurement Reporting'. However there was no consistency in response.

SSC Rationale: In preparing the IPMS: Offices have considered these comments and slightly revised this section.

Page 8. 2.6 Unit of Measurement

Consultation Response

1. BAM CONSTRUCT - John Burke, UK: *No comment.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CAXTONS - Charles Oliver, UK: *It would be nice if everyone reported in square metres.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
5. CLGE - Group Response, Europe: *"In a European context the metre should be the standard unit of measurement. "*
6. EXPERT INVEST - Petar Andonov, Bulgaria: *Users and Third Parties may require measurements to be converted, in which case the conversion factor should be agreed in advance and must be stated.*
7. JLL INDIA LIMITED - Sachin Gulaty, India: *In addition to local units of measurement, areas should also be required to be reported in a metric system for all buildings to enable consistency across the globe, and allow interested Users, such as investors, to compare properties.*
8. PERSONAL RESPONSE - JENN MCARTHUR, UK: *May be worth including accepted SI-IP conversion ratios and IP-SI (i.e. number of significant digits); lest there be disagreement on rounding one way or the other.*
9. PERSONAL RESPONSE - Mark Griffin, UK: *"I think I am right in assuming that this is really either m² or ft². If this is true it might be clearer to state this including a standard conversion factor. Better still might be to use m² as the standard and ft² as an acceptable alternative (including a standard conversion factor)."*
10. RICS AUSTRIA - Group Response, Austria: *"Yes, we agree."*
11. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Although this is a good approach, if a real*

international standard should be achieved is necessary to choose an unit measurement standard. Of course for us this can only be metric (square meters).

Response Summary: There were 11 general responses in relation to Section 2.6 on 'Unit of Measurement.

SSC Rationale: In preparing IPMS: Office the SSC has considered these comments and did not feel this section needed to be revised further.

Page 8. 2.7 Restrictions

Consultation Responses

1. APREA - Noel Neo, Singapore: *"Can you be specific what floor height is deemed to fall into this category. If the standard is supposed to be globally adopted then should it not have a single rule regardless of local nuances? Can you be specific what limited natural light means so that there is a common standard? If the standard is supposed to be globally adopted then should it not have a single rule regardless of local nuances?"*

What happens when a tenant's fit out has caused the limitation on light? E.g. a photographer's dark room? Presumably this natural light limitation only applies to such areas where there are structural limitations causing light to be restricted. If this is the case can this be specified."

2. BAM CONSTRUCT - John Burke, UK: *No comment.*
3. CASLE - Tony Westcott, UK: *Ok to say 'such areas are to be measured and included within IPMS reported areas' but better to reinforce with statement that these areas, should be identified separately, rather than just 'included'.*
4. CAXTONS - Charles Oliver, UK: *For example 2, space below 1.5 metres in height should be quoted separately.*
5. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
6. CLGE - Group Response, Europe: *It has already been stated that comparing like with like is critical in the context of the standard and that comparing floor area which is both physically usable in the fullest sense, and also legally usable, with floor area which is not, makes no sense. As already recommended, this should be changed to allow at least two levels of usability. Including area with restricted usability in IPMS1 is, of course acceptable in defined circumstances. It is equally acceptable to include it within IPMS2, in the sense of Gross Internal Area, also in defined circumstances. It is not acceptable to include it*

within the Workspace Component where the internal areas have been broken down by component.

7. EXPERT INVEST - Petar Andonov, Bulgaria: *Service Providers need to be aware that in certain markets there may be areas in Buildings that are incapable of occupation in the light of government regulation and labour legislation. Nevertheless, such areas are to be measured and included within IPMS reported areas and must be identified separately. The following examples are not exhaustive.*
8. GIF - Dr. Ira Hoerndler, Germany:
 - a) *It is recommended that in the relevant components separate calculation of restricted and not restricted areas are provided.*
 - b) *Is it reasonable that contamination is a suggested criterion for a measurement standard? This is not recommended."*
9. IPD - Christopher Hedley, UK: *"We are very concerned that the application of restrictions could cause variability of measurement from country to country. In particular, a minimum height should be considered, perhaps 1.5m. This point would not be so important if these restrictions did not apply to IPMS3."*
10. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"Example 1 states 'A Building is generally composed of floors above ground and floors below ground'.*

This is not true. This standard is intended for office buildings. However, the definition of Building in 1.1 is not restricted to offices. Most individual dwellings do not have floors below ground. In order to maintain the general nature of a Building, I suggest to replace with 'A Building may have floors below ground.'

Examples 1, 2 and 3 all relate to the practice of measurement of areas of the actual built structure, taking account of statutory and regulatory definitions.

Example 4 does not and indeed is not relevant to measurement. It should be deleted."

11. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *"We believe that, when looking at standards for rentable or usable floor areas such as IPMS-2 and IPMS-3, it is of great importance to distinguish between areas that are suitable to step foot on and those that are not. Besides this, there will be areas that are accessible, but cannot be used as office areas, because of regulation. The standard does not make any distinction between these three categories of floor areas, stating that also areas with limited height should be measured and reported. We believe measurements are more comparable when areas inaccessible because of limited height are not taken into account at all when measuring IPMS-2 and IPMS-3. Floors with limited height, that are accessible should be reported separately as non usable or limited usable, depending on local regulations."*

12. PERSONAL RESPONSE - Paul Collins, UK: *7. P8 para 2.7 – acknowledging the list is not exhaustive , it might be helpful to be more comprehensive, adding reference to eg areas with natural ventilation and those without as well as those with floor loading limits and those not.*

13. RICS ASIA - Group Response, Hong Kong: *"Part 2, 2.7. Restrictions – Example 2 Areas with Limited Height Can you be specific what floor height is deemed to fall into this category. If the standard is supposed to be globally adopted then should it not have a single rule regardless of local nuances?"*

Part 2, 2.7. Restrictions – Example 2 Areas with Limited Height can you be specific what limited natural light mean so that there is a common standard. If the standard is supposed to be globally adopted then should it not have a single rule regardless of local nuances?"

What happens when a tenant's fit out has caused the limitation on light? E.g. a photographer's dark room? Presumably this natural light limitation only applies to such areas where there are structural limitations causing light to be restricted. If this is the case can this be specified."

14. RICS AUSTRIA - Group Response, Austria: *"Work legislation is an important Factor for use of office areas."*

15.RICS BELUX - Group Response, Belux: *We recommend to oblige to state or indicate measurements of specific areas (below ground, limited height, limited daylight, etc.) separately!*

16.RICS GERMANY - Group Response, Germany: *"a) It is recommended that in the relevant components separate calculation of restricted and not restricted areas are provided. Is it reasonable that contamination is a suggested criteria for a measurement standard. This is not recommended.*

17.SVIT SWITZERLAND - Beat Ochsner, Switzerland: *See comment regarding additional areas as storage. Limited light and contamination has no impact to surface but to rent/lease. Remarque can be left out.*

Response Summary: There were 17 general responses in relation to Section 2.7 on 'Restrictions'. A number of responses felt that the measurements for restricted areas needed to be stated separately to allow Users to interface IPMS with existing national standards. Further responses felt that Example 4 – Contamination should not be included in IPMS.

SSC Rationale: The SSC have considered these responses and retitled this section 'Limited Use Areas.' IPMS: Office Buildings have further revised this section and *'Such areas and their limitations are to be identified, measured and stated separately within IPMS reported areas.'* The SSC have also revised the Sample spreadsheet for IPMS 2 – Office to include an additional line to highlight the ht Limited Use areas within Component Area B – H as *"each limitation within a component , if any, is to be stated separately."*

Furthermore the SSC have revised the example and in line with comments received have deleted contamination from this section but added a further example known as 'Example 1 – Area Difference from Internal Dominant Face'. This example will allow a number of existing European measurement standards to interface with IPMS.

Finally the SSC have created a new Section 2.4 called 'Interface Adjustment' which allows Users and Service Providers to interface with other measurement conventions.

Page 9. 3.1.1 Use

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *No comment.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *"No further comments."*
4. CLGE - Group Response, Europe: *Ok.*
5. PERSONAL RESPONSE - JENN MCARTHUR, UK: *May also include: "and by architects or developers during the creation of pro-forma or feasibility studies."*
6. PERSONAL RESPONSE - Paul Collins, UK: *8. P9 – inclusions/exclusions – what about mezzanines?*
7. RICS AUSTRIA - Group Response, Austria: *Yes, for project development in Austria as well.*
8. RICS CYPRUS - Jennifer Petridou/Kleanthis Tofarides/Yiannis Roussos, Cyprus: *"The approach of IPMS 1 is currently the one practiced in Cyprus, and is considered to be the normal practice for selling Offices."*

Response Summary: There were 8 general responses in relation to Section 3.1.1 on 'Use'.

SSC Rationale: In preparing IPMS: Office Buildings the SSC have considered these comments.

Page 9. 3.1.2 IPMS 1 Definition

Consultation Responses

1. APREA - Noel Neo, Singapore: *"“upper floors of an atrium”. To avoid confusion should the word “floor” be changed to “void”. The use of the word floor indicates that there is a usable level which if this were the case would be included in any floor area calculation. The use of the word “Void” makes it clear that these areas have no floor area utilization. There are multiple references to “upper floors of an atrium” throughout the document which would need to be changed if this reference is altered.*

Mechanical Floors and Fire Refuge Floors. Can you clarify whether mechanical floors (i.e. those that house building plant and machinery) are to be included in the various floor area measurement basis. How would refuge floors be taken into account? Refuge floors are typical for modern high rise buildings which are open sided and used as a fire break and safety floor for occupants of a building in case of a fire emergency."

2. BAM CONSTRUCT - John Burke, UK: *No comment.*
3. CASLE - Tony Westcott, UK: *Ok, but better to specifically mention in Exclusions that IPMS1 does not include projections for columns or decorative features.*
4. CAXTONS - Charles Oliver, UK: *Bad English – replace “is not to” with “shall not”.*
5. CBRE BRAZIL - Walter L M Cardoso, Brazil: *Under definitions there’s a question on how to measure parking spaces either located on basement/underground levels or above ground/mezzanine levels. Our understanding is parking spaces are included in both IPMS 1 and 2, but is not clear on IPMS 3. Also the extend of the measurement, whether it should include the entire extension of the basement level as portrayed on diagram 2 (page 11) or by the number of spaces as mentioned on page 16.*

6. CLGE - Group Response, Europe: *"In the last paragraph, which states what IPMS1 is not to include, the phrase "but may state separately" should be altered to "but should state separately."*

It should also be made explicit that the "other areas that are not fully enclosed, such as terraces, patios and decks" refers to terraces, patios and decks which are structurally disconnected from the building, i.e. not roof terraces or patios and decks which are support by the building and are an integral part of its construction."

7. GENSLER - Area Analysis Team, USA:

"Must IPMS 1 always be reported on a floor-by-floor basis?"

"Outer perimeter of external construction features" can be interpreted inconsistently. I think voids should."

8. GIF - Dr. Ira Hoerndler, Germany:

- a) *"Roof terraces should be included, to produce more consistency and resemble the rental value of this areas.*
- b) *The basement has to be calculated separately from the ground floor, based on plans, not by extending the ground floor."*

9. IPD - Christopher Hedley, UK: *I'm concerned that Standard Building Facilities will vary from one country to the next (p6).*

10. JLL INDIA LIMITED - Sachin Gulaty, India: *Here, a convergence check with approved-for-development drawings would be very helpful. Given that different countries and cities may have varying ways of representing approved-for-development drawings, a table indicating how area calculations in approved-for-development drawings match with IPMS 1 drawings would be extremely helpful.*

11. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"The use of the word 'Gallery' is not supported. In many jurisdictions, a gallery is seen as an internal balcony. For the external structure indicated in this document it would be better to use 'covered balcony'.*

The term 'trash/waste areas' is not supported. 'Refuse collection area' is better. "

12. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"The Standard should define how external dimensions of the buildings are determined (e.g. measurements are to be taken above foundations on the first floor level) and describe a case with different floor layers, also how to measure (determine) external dimensions of the building underground floors.*

It also should be defined what are minimal stick outs that are not measured. E.g. all the elements on the building exterior that stick out (architectural elements, such as pilasters, etc.) up to 10 cm are not measured."

13. MISSELWITZ & KADEN - Mathias Kaden, Germany: *The definition of a space measurement professional. There is no change in the new draft. Its better to call it a land surveying professional qualified by experience or training to measure buildings.*

14. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *I preferred GEA, GIA and NIA as more descriptive, could these not be retained? Otherwise, unless we are doing them daily, we will have to refer to documentation for definitions every time.*

15. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *We have concerns regarding to IPMS 1. We find it more logical to measure only area within the outer walls of a building. Any floor area outside these walls could perhaps be reported separately, but should not be part of the area of the building. So we think that the covered galleries and balconies should not be included. We also think that including balconies is not consistent with excluding for instance roof terraces. For the use of the building and for building costs a balcony is more comparable with a roof terrace than with the internal floor area of a building.*

16. PCA - Ken Morrison, Australia: *The definition of IPMS 1 includes balconies, which are to be measured to their outer face. However the definition specifically excludes terraces, patios and decks. In many*

jurisdictions, the technical distinction between a balcony and another external area such as a deck is unclear. In fact, these terms are often used interchangeably. Within IPMS Offices there is no clear definition of these terms. Therefore the Property Council recommends that all spaces that would be considered balconies, terraces, patios or decks be excluded from IPMS L to ensure the standard is applied consistently.

17. PERSONAL RESPONSE - Mark Griffin, UK: *"The concept of class of Building is introduced but has not been defined.*

In the UAE we do not differentiate between 'covered galleries' and 'balconies' – we call them all balconies. If this is used elsewhere then I guess it is acceptable but I don't see any reason to introduce it otherwise."

18. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"Some clarity perhaps about roof-top plant areas and when areas of plant are screened whether these would be included in IPMS1. Should the standard be clear that these areas should be enclosed?"*

In terms of the basement measurement of IPMS1 how can an estimation be made when it is understood that there is perimeter piling surrounding the property but it is unsure how thick or where this lies.

We question whether an external feature should be included in a measurement. A balcony or covered gallery is not included the measurement of RICS, BOMA or PCA so why introduce this into an international standard? If it is to remain then these areas should be stated separately so that different values can be attributed to them. If they are to remain included should balconies be measured to the outer construction/limit/extents?

We also think that there maybe confusion as to when does a balcony become a roof terrace or vice versa?

Should upper floors of an atrium read upper levels? As a void has no floor except the base.

Is the measurement of the void to the extents of the hole (i.e. the area of the fresh air) or should this be taken to the internal face of the atrium surround (i.e. the office side of the wall that surrounds the void)?"

19. RICS ASIA - Group Response, Hong Kong: *"Part 3, 3.1.2, Definition "upper floors of an atrium" To avoid confusion should the word "floor" be changed to "void". The use of the word floor indicates that there is a usable level, which if this were the case would be included in any floor area calculation. The use of the word "Void" makes it clear that these areas have no floor area utilization. There are multiple references to "upper floors of an atrium" throughout the document, which would need to be changed if this reference is altered.*

Part 3, 3.1.2 Exclusions Mechanical Floors.

Fire Refuge Floors Can you clarify whether mechanical floors (i.e. those that house building plant and machinery) are to be included in the various floor area measurement bases.

How would refuge floors be taken into account? Refuge floors are typical for modern high rise buildings which are open sided and used as a fire break and safety floor for occupants of a building in case of a fire emergency."

20. RICS AUSTRIA - Group Response, Austria: *In our country IPMS 1 like other measurement systems uses Gross Floor Area.*

21. RICS BELUX - Group Response, Belux

"Below 'Inclusions':

- a. Covered galleries: this includes 'inside balconies': we would mention this explicitly.*
- b. For basements the thickness of the wall is to be estimated: suggestion to take never less than 20 cm and never more than 40 cm in such an estimation.*
- c. Balconies (open) are now considered to include, but they have to be excluded (like roof terraces also)!"*

22.RICS GERMANY - Group Response, Germany:

- a) *"Roof terraces should be included, to produce more consistency and resemble the rental value of this areas."*
- b) *"The basement has to be calculated separately from the ground floor, based on plans, not by extending the ground floor."*

23.SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *IPMS 1 should not comprise Covered Galleries and Balconies.*

24.SVIT SWITZERLAND - Beat Ochsner, Switzerland: Consistent with "Geschossfläche" in SIA 416. No comment.

25.VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Exclusions add: void."*

26.ZIA- Sabine Georgi, Germany:

- a) *"Roof terraces should be included, to produce more consistency and resemble the rental value of this areas."*
- b) *"The basement has to be calculated separately from the ground floor, based on plans, not by extending the ground floor."*

Response Summary: There were 26 general responses in relation to Section 3.1.2 on 'Definition.' The majority of responses required further clarification in relation to both the language used and measurement of the balconies, covered galleries and roof terraces.

SSC Rationale: In preparing the IPMS: Office Buildings the SSC have considered these comments, clarified the text and terms used to avoid any misunderstanding or confusions. Moreover in relation to balconies, covered galleries and roof terraces the SSC have included an additional section titled 'Measurements included but stated separately'.

Page 10. Diagram 1 - IPMS 1: upper floor level

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *No comment.*
2. CASLE - Tony Westcott, UK: *Why include same upper floor plan in Diagram 1 & 2. Perhaps better to include ground floor plan with open entrance foyer?*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *No further comments.*
4. CLGE - Group Response, Europe: *"There are anomalies in this diagram regarding what constitutes the external face of a building. For instance, column projections are excluded (left uncoloured). In other forms of building construction these omission could constitute a considerable area. There needs to be far greater clarity in definition and drawing of what constitutes the external face of a building to which the measurement of IPMS1 should apply."*
5. GENSLER - Area Analysis Team, USA: *The projecting vertical building supports are cut through by the measurement line. There is nowhere in the definition that would lead someone to believe that to be the proper method of measurement. It seems to be up to the interpretation by the practitioner, which could be a source of inconsistency. Photo and drawing examples of the proper "outer perimeter of external construction features" would be helpful.*
6. JLL INDIA LIMITED - Sachin Gulaty, India: *Would the area of structural columns abutting the shaded area marked as (a) need to be included in area calculations?*
7. JLL VIETNAM LIMITED - Chris Murphy, Vietnam : *"(a) should be a 'covered balcony' as noted above. There are no doors providing access to areas (a) and (b). Is this intentional?"*

It is not clear why (d) has been excluded. Is it really not fixed to the Building? Presumably it is a fire escape staircase, many of which run alongside a building rather than at right angles to it. If it simply a USA style metal structure then it does not need to be shown. If it is a

purpose built external fire escape then it should not be excluded. More thought is needed on this."

8. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*
9. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *Comment on page 9 also influences this diagram.*
10. PERSONAL RESPONSE - JENN MCARTHUR, UK: *Clear and easy to follow.*
11. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"Should there be doors showing access to the covered gallery and balcony?"*
12. RICS AUSTRIA - Group Response, Austria: *Gross floor area.*
13. RICS BELUX - Group Response, Belux:

*"There is nothing on this Diagram 1 that can't be showed in Diagram 2: therefore suggestion not to show the floor plan twice...
External structural elements to include.
Open or external balconies to exclude.
Open balcony: To exclude
NB See Diagram included in actual response."*
14. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *IPMS 1 should not comprise Covered Galleries and Balconies.*
15. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Consistent with "Geschossfläche" in SIA 416. No comment.*
16. UNIVERSIDAD POLITECNICA DE VALENCIA - Natividad Guadalajara and María José Ruá, Spain: *"It is not clear what happen if one of the external walls is a common wall with an adjacent building. Should it be measured from its centre-line?"*
17. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Page 10: c is a void."*

Response Summary: There were 17 general responses in relation to 'Diagram 1 - IPMS 1: upper floor level.' The majority of responses required further clarification in relation to both the language used and measurement of the balconies, covered galleries and roof terraces.

SSC Rationale: In preparing the IPMS: Office Buildings the SSC have considered these comments and has revised the Diagrams within 'Diagram 1 - IPMS 1'. Moreover in relation to comments received the SSC have now included external columns within the perimeter of IPMS.

Page 11. Diagram 2 - IPMS 1: plan and section

Response Summary:

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *No comment.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *Same as the previous question related to the definition on page 9 3.1.2.*
4. CLGE - Group Response, Europe: *"We have recommended that a separate component be created for External Building Areas, to include balconies, galleries, roof terraces, etc. We would see a roof terrace as no different from a balcony in term of construction or use and therefore see no reason why it should be excluded from IPMS1. It should be indicated by the coloured tint on the section."*
5. GIF - Dr. Ira Hoerndler, Germany: *"The section does not explain the definition and measurement of 'open light well'."*
6. JLL INDIA LIMITED - Sachin Gulaty, India: *Indication of Section Line in the plan that correlates with the section below would be helpful. While this is implied, this communication may accord more clarity.*
7. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"(a) should be a 'covered balcony' as noted above. There are no doors providing access to areas (a) and (b)."*
8. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"It is not clear why the area of roof terrace is not calculated as the area of balcony (both are not covered with roof). We consider it as a possible mistake and suggest correcting it."*
9. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*

10. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *Comment on page 9 also influences this diagram.*
11. PERSONAL RESPONSE - JENN MCARTHUR, UK: *Clear and easy to follow.*
12. PERSONAL RESPONSE - Mark Griffin, UK: *It may be useful to label the basement.*
13. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"Perhaps add in (i) external parking as this is shown in the diagram."*
14. RICS AUSTRIA - Group Response, Austria: *Yes, we agree.*
15. RICS BELUX - Group Response, Belux: *"There is nothing on this Diagram 2 floor plan (not talking about the section here) that can't be showed in Diagram 1: therefore suggestion not to show the floor plan twice...*

External structural elements to include.
Open or external balconies to exclude.
To exclude to include NB See Diagram included in actual response."
16. RICS GERMANY - Group Response, Germany: *"The section does not explain the definition and measurement of 'open light well.'"*
17. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *IPMS 1 should not comprise Covered Galleries and Balconies.*
18. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Consistent with "Geschossfläche" in SIA 416. No comment. a) and b) should be market differently (striped for example).*
19. VALAD EUROPE - Per Nordström, Europe: *Space for HVAC and heat recovery installations to be added.*

20.VERENEGING DE VIERKANTE METER - A.P.J Timmerman,
Netherlands: *"Page 11: c is a void.*

21.ZIA- Sabine Georgi, Germany: *The section does not explain the definition and measurement of "open light well."*

Response Summary: There were 21 general responses in relation to 'Diagram 2 - IPMS 1: plan and section'. The majority of comments asked for greater clarity in respect of the diagrams for 'Diagram 2 - IPMS 1: plan and section'

SSC Rationale: The SSC has considered these comments and has revised the Diagrams within 'Diagram 2 - IPMS 1: plan and section' in order to provide greater clarity, particularly in relation the measurement of balconies and roof terraces.

Page 12. IPMS 2 – Office: 3.2.1 Use

Consultation Responses

1. CBRE BRAZIL - Walter L M Cardoso, Brazil: *There's a question above related to the inclusion of areas of no commercial value such as vertical penetrations, structural elements and technical services to be addressed when relates to tenant's use of IPMS 2.*
2. CLGE - Group Response, Europe: *"We recommend that the breakdown of internal areas be removed from IPMS2 and made into a new separate standard."*
3. IPD - Christopher Hedley, UK: *I don't see why building owners are not stakeholders for IPMS 2 and 3.*
4. PERSONAL RESPONSE - DAVID PARK, UK: *Page 12: Under 3.21, second paragraph, second line, would it be worth adding the words "the results from" after "floor space comparisons between"?*
5. PERSONAL RESPONSE - JENN MCARTHUR, UK: *Clear and easy to follow.*
6. RICS AUSTRIA - Group Response, Austria: *Not used in Austria.*
7. VALAD EUROPE - Per Nordström, Europe: *At this stage, no further comments required.*

Response Summary: There were 9 general responses in relation to 'IPMS 2 – Office: 3.2.1 Use'.

SSC Rationale: In preparing IPMS: Office Buildings the SSC have considered these comments.

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *Market is used to columns and partitions being deducted therefore there needs to be an understanding that these areas are included and presumably rentalised. Landlords gain tenants loss.*
2. CASLE - Tony Westcott, UK: *Better to refer to 'Functional Areas', instead of 'Component Areas'.*
3. CAXTONS - Charles Oliver, UK: *Bad English – replace "is not to" with "shall not".*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *No further comments.*
5. CLGE - Group Response, Europe: *"It is suggested that IPMS2 should include the sum of the floor areas at each level, accurately measured. The concept of Dominant Face introduces serious anomalies and serious inconsistencies, depending on building design and construction method, that would render the standard useless as a comparison tool (see the CLGE position for a full elucidation).*

We would recommend that the sub-division of the building areas into components should be made the subject of a separate IPMS and should not be included as part of IPMS2.

We would also recommend that the external building areas such as, balconies, galleries, terraces, patios and decks, which are an integral part of the building, should be included as a component in the new standard (IPMS3), though not reported as part of IPMS2. These integral external building areas should be differentiated from external car parking areas, equipment yards and trash storage areas, which are separate from the building and located directly on the ground surface."

6. GENSLER - Area Analysis Team, USA: *Is there a reason that upper floors of an atrium are not included at least in the areas that one*

may “state separately”? Significant amounts of enclosed area in the building may be this type of space and it may be useful to determine the amount of enclosed space in the building.

7. GIF - Dr. Ira Hoerndler, Germany: *Balconies and Galleries are included in IPMS 1, but not in IPMS 2. This makes the relation between these two inconsistent.*
8. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"The example of a floor area being extended to the surface of a window instead of the surface of the structural wall where the area of glass exceeds 50% of the area of the wall in question is plainly daft. Based on this definition a window that runs from 1 metre above the floor to the ceiling in a 2.5 metre room would qualify for the measurement to be taken to the surface of the glass not the wall, when clearly the surface of the wall defines the limit of the useable floor area."*
9. JAPAN BOMA - Shigeru Takagi, Japan: *"It would be appreciated if you change the IPMS2-Office definition as follows. "IPMS 2 - Office: The sum of the areas of each floor level of an office Building measured to the Dominant Face or the centre line of the wall and reported on a Component-by-Component basis for each floor of a Building."*
10. JLL INDIA LIMITED - Sachin Gulaty, India: *Same as my comment under "Page 9. 3.1.2 Definition" in the previous page of this Feedback Form.*
11. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"The use of the word 'Gallery' is not supported. In many jurisdictions, a gallery is seen as an internal balcony. For the external structure indicated in this document it would be better to use 'covered balcony'. The term 'trash/waste areas' is not supported. 'Refuse collection area' is better."*
12. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *I preferred GEA, GIA and NIA as more descriptive, could these not be retained? Otherwise, unless we are doing them daily, we will have to refer to documentation for definitions every time.*

13.PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"Inclusions para remove repetition of word – "...Office includes all areas including (of) internal walls"*

Also amend the last line to say base rather than lowest for consistency

Question around whether walkways and passages should be stated differently?"

14.RICS AUSTRIA - Group Response, Austria: *Not used in Austria.*

15.RICS GERMANY - Group Response, Germany: *"Balconies and Galleries are included in IPMS 1, but not in IPMS 2. This makes the relation between these two inconsistent."*

16.RICS PORTUGAL- Group Response, Portugal: *Our main concern is related with the fact that in the Portuguese market, the external walls are included in the area considered by asset managers, brokers, cost consultants, facility managers, occupiers, property managers, researchers and valuers.*

17.SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *IPMS 2 is not really usable for Facility Manger. They need more detailed space information to cover their operational and strategic responsibilities.*

18.SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Conflict with "Nettogeschossfläche" of SIA 416 (non-structural walls are not part of the measurement).*

19.VALAD EUROPE - Per Nordström, Europe: *As suggested. Note. Structural elements located in lower floor levels in most buildings may account for a considerable floor space and may in some markets be exempt from measured area as compared to upper floor levels.*

20.VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"Exclusions add: void."*

21.ZIA- Sabine Georgi, Germany: *Balconies and Galleries are included in IPMS 1, but not in IPMS 2. This makes the relation between these two inconsistent.*

Response Summary: There were 21 general responses in relation to IPMS 2 – Office: 3.2.2 Definition on ‘Definition.’ The majority of responses required further clarification in relation to both the language used and measurement of the balconies, covered galleries and roof terraces. Moreover further comments asked for more guidance in relation to the definition of Dominant Face and vertical section.

SSC Rationale: In preparing the IPMS: Office Buildings the SSC have considered these comments, clarified the text and terms used to avoid any misunderstanding or confusions. Moreover in relation to balconies, covered galleries and roof terraces the SSC have included an additional section titled ‘Measurements included but stated separately’. This section is similar to IPMS 1 so there is consistency across the standard. Finally the SSC have added a further Section 3.2.3 on the Internal Dominant Face to provide further definition and explanation.

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *Measuring to the glazing will therefore include non-load bearing curtain walling frames which contradicts Floor Area definition Page 5 1.1 and investor gains but tenant pays.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *Shouldn't the lower wall that leads to the balcony be painted in beige similar to the right wall in the middle?*
4. CLGE - Group Response, Europe: *"The anomalies cause by the use of the Dominant Face concept are clearly visible in this diagram. Dominant Face should be abandoned and accurate actual floor measurement substituted."*
5. GENSLER - Area Analysis Team, USA: *For the building illustrated in the diagram, it appears that a "wall section" was determined to be a span of wall between the column gridlines, however, there is no definition or guidance anywhere else on this concept. A practitioner could just as easily determine that a "wall section" is the span of wall between windows, then the span of the windows themselves, then the span of a column projection is also its own "wall section". Or, they could determine that wall section is the span of the entire side of the rectangular building. It seems there could be infinite decisions for various building conditions on what is determined to be a wall section. For buildings that do not even have a column grid at the exterior enclosure, it would be necessary to use a different determination of a "wall section". Buildings that are complex in shape and have complicated enclosure could produce significant inconsistencies in interpretation.*
6. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"The example of a floor area being extended to the surface of a window instead of the surface of the structural wall where the area of glass exceeds 50% of the area of the wall in question is plainly daft. Based on this*

definition a window that runs from 1 metre above the floor to the ceiling in a 2.5 metre room would qualify for the measurement to be taken to the surface of the glass not the wall, when clearly the surface of the wall defines the limit of the useable floor area."

7. JLL VIETNAM LIMITED - Chris Murphy , Vietnam: "*[(a) should be a 'covered balcony' as noted above. There are no doors providing access to areas (a) and (b)."*
8. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: "*Suggestion is to allocate numbers to all premises and show their areas on the layout. This would be very useful additional information to clients. We would like to emphasize that no additional measurements is needed for this. It is just a question of a more comprehensive representation of measurements results."*
9. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*
10. PERSONAL RESPONSE - Mark Griffin, UK: *The note regarding Dominant Face is pointing at two sections of predominantly glazed areas whereas the detail on page 14 refers to one section greater than 50% glazed and one section less than 50% glazed. The note is not clear.*
11. RICS AUSTRIA - Group Response, Austria: *No correlation in Austria.*
12. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Conflict with "Nettogeschossfläche" of SIA 416 (non-structural walls are not part of the measurement).*
13. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"C is a void."*

Response Summary: There were 13 general responses in relation to Diagram 3 - IPMS 2 - Office: upper floor level.

SSC Rationale: Further to discussions the SSC have removed this diagram as they felt it repeated Diagram 5 – IPMS 2 Component Areas and added nothing further to the standard.

Page 14. Diagram 4 – Dominant Face

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *Measuring to the glazing will therefore include non-load bearing curtain walling frames which contradicts Floor Area definition Page 5 1.1 and investor gains but tenant pays.*
2. CASLE - Tony Westcott, UK: *Ok, but bottom row of diagrams should be labelled 'Vertical Section' and distinguish 'Section of Finished Surface' by describing it as 'Extent of Finished Surface bounded by Structure'.*
3. CAXTONS - Charles Oliver, UK: *See Page 5 1.1.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *There's a question above related to the inclusion/exclusion of the internal wall in case of a balcony in a dominant face.*
5. CLGE - Group Response, Europe: *"The concept of Dominant Face produces inconsistent area values. These inconsistencies will vary depending on the particular construction on any given building and the interpretation by the surveyor. The extent of these inconsistencies renders the purpose of the standard null and void. The concept of Dominant Face should be set aside and a more consistent form of floor area definition and measurement substituted. See the CLGE position paper for a fuller analysis of this issue."*
6. FISHER I ASSOCIATS - J M Anthony Fisher, Spain: *Measurement to the Dominant Face, IPMS 2 Office and IPMS 3 Office. This should always be at just above the skirting board height. Furthermore, the decision to measure to the glazing or other part of the wall should depend upon which constitutes more than half of the horizontal dimension of the Dominant Face just above the skirting board.*
7. GIF - Dr. Ira Hoerndler, Germany: *See comment page 5 (Definitions).*

8. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *"The example of a floor area being extended to the surface of a window instead of the surface of the structural wall where the area of glass exceeds 50% of the area of the wall in question is plainly daft. Based on this definition a window that runs from 1 metre above the floor to the ceiling in a 2.5 metre room would qualify for the measurement to be taken to the surface of the glass not the wall, when clearly the surface of the wall defines the limit of the useable floor area."*
9. IPD - Christopher Hedley, UK: *We don't really like the use of Dominant Face as space to the inside of the glazing may not be available for use by the occupier, the customer. Only space available for use by the occupier should be included within IPMS3.*
10. JLL INDIA LIMITED - Sachin Gulaty, India: *Could this be shifted to/included with the definition of "Dominant Face" provided on Page 5 of this Exposure Draft. This shift may accord clarity immediately when the definition is read.*
11. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"This is a major problem. The need for simplicity is understood. However, if we look at an example where glazing covers the upper 55% of a wall, then the definition requires that the glazing is the dominant face, although the actual useable floor area, as measured to the wall below, may be substantially smaller. This problem must be tackled. SEE ACTUAL RESPONSE FOR DIAGRAM."*
12. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"See 1.1. Definitions comment."*
13. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*
14. PERSONAL RESPONSE - DAVID PARK, UK: *Page 14: Diagram 4 is very clear, but I wonder if there is also a subsidiary issue around whether glazing is full height (as it often is in more recent buildings) or not. You would expect to measure to the inside face of the inner skin if it was full length. But would you still do so if, despite accounting for more than 50% of the total surface area, no part of the glazing actually extended to floor level?*

15. PERSONAL RESPONSE - JENN MCARTHUR, UK: *Clear.*

16. PERSONAL RESPONSE - John Nijsten, Netherlands: *"As a consultant in real estate my general opinion is that there is not enough attention for the interests of the occupier/tenant/user. As a consultant in real estate my general opinion is that there is not enough attention for the interests of the occupier/tenant/user."*

A. IPMS 2 and IPMS 3 include internal walls. Comment: For the user/tenant the internal wall is of no importance.

B. In IPMS 3, (also IPMS 2?) the Floor Area is taken to the Dominant Face and, where there is a common wall with an adjacent tenant, to the centre-line of the common wall.

Comment: for the occupier/tenant/user there is no difference between a common wall and a not-common wall. From his point of view all the areas should be measured to the Dominant Face.

C. An IPMS 4, rental floor area, could be taken to the dominant Face and exclude: Vertical Penetrations, All structural walls and columns, Technical Services.

In the Introduction is said that IPMS principles, methodology and measurement practices used in this Standard will be applied when future IPMS Standards for other Buildings, for example residential, industrial and retail, are drafted by the SSC.

When the interests of the occupier/tenant/user are not taken in account, they will not accept these measurement standards. The consequence is that still different measurement practices remain."

17. PERSONAL RESPONSE - Paul Collins, UK: *P14 – the reasoning for measuring to the glazing as the ‘dominant face’ is not stated/made clear and is arguably questionable. ‘Carpet’ (floor cover) area (ie useable space) might better define internal measurement, rather than just because the windows happen to be more than 50% of the wall run. Measuring the 50% +/- is to some extent an issue in itself. Do the current assumptions on dominant need a rethink?*

18. RICS AUSTRIA - Group Response, Austria: *Used for international measurement; no correlation in Austria.*
19. RICS BELUX - Group Response, Belux: *We would suggest to measure only to the glazing if glazing greater than 50% and starting from the finished floor. It is only possible to use the floor if it runs up to the glazing. So if glazing is not starting from finished floor, even if the glazing is more than 50%, OR if starting from finished floor but less than 50%, then measure to the wall. NB See Diagram included in actual response.*
20. RICS GERMANY - Group Response, Germany:
- "b) dominant face : definition of "50% surface area of each section" not clear, it is preferable to measure only the height, not the surface. The interpretation of "section" may vary otherwise."*
21. RICS ITALY - Group Response, Italy: *SUGGEST TO MAKE IT MORE CLEAR.*
22. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Using the proportion of the glazing surface as criteria is problematic, as it cannot be exactly be determined out of a 2d CAD drawing.*
23. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Conflict with "Nettogeschossfläche" of SIA 416 (non-structural walls are not part of the measurement).*
24. VALAD EUROPE - Per Nordström, Europe: *Note. (b) Pg.1.*
25. VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"See definition: It is unclear what area to count as dominant face. Take into account per section, on the entire wall side of the room or on the total facade on this floor level?"*

26.ZIA- Sabine Georgi, Germany: *b) dominant face : definition of “50% surface area of each section” not clear, it is preferable to measure only the height, not the surface. The interpretation of “section” may vary otherwise.*

Response Summary: There were 26 general responses in relation to ‘Diagram 4 – Dominant Face’. The majority of comments asked for greater clarity in respect of the diagrams.

SSC Rationale: The SSC has considered these comments and revised the diagrams considerably to provide greater clarity.

Consultation Responses

1. APREA - Noel Neo, Singapore: *"Component Area E – Circulation Areas. If the only use of physical corridor space is as a circulation area, it should be excluded from the leasable area even if it is under exclusive occupation."*
2. BAM CONSTRUCT - John Burke, UK: *Please clarify - are columns therefore netted out?*
3. CASLE - Tony Westcott, UK: *No key and confusing use of capital letters to refer to 'Component Areas' without reference to original key using lower case (as Diagram 1). Better to use Roman numerals for building features and refer to 'Functional Areas' instead of 'Component Areas'.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *No further comments.*
5. CLGE - Group Response, Europe: *"The addition of two new components – permanent partitions and external building areas, has been recommended. The re-evaluation of the definitions of Amenity Areas and Hygiene Areas has also been recommended to remove the anomaly of space being potentially usable as Workspace, Hygiene Area or Amenity area without physical alteration of the space. See attached document for a full description of this issue."*
6. GENSLER - Area Analysis Team, USA: *"From this diagram, I can determine which component areas take that wall when adjacent to other component areas, however, this is the only piece of the document where someone could obtain that information. It is not stated anywhere else what the appropriate method for measuring these areas would be.*

Are the walls between and around the elevator cars (including at the elevator doors) really structural walls? There are no corresponding walls in the lower core area of the plan. The wall that separates the stair and the air shaft are structural? They are

not as thick as the other structural walls. In my experience, there is often not enough source information to make this determination, and there is really no way to verify what is structural when taking field measurements at the building. If extra measures need to be taken to obtain structural information, owners will often not be willing to pay additional fees. I think there is too much judgement involved in attempting to determine which walls are structural. This will likely be another source of inconsistencies in measurement when put into practice."

7. FISHER I ASSOCIATS - J M Anthony Fisher, Spain: *"Common parts (Component Areas). The computation of the service charge proportion to be paid by a tenant in a multi-let office building is in many countries based upon floor area. When a floor is subdivided, the common areas may increase in area, which might suggest a variation in the apportionment of service charge.*

This aspect being of practical importance, it should be taken into account in the standards, either in the original standards or else as an annex or additional document relating to the measurement and computation of common areas.

For unity of practice, it would be preferable to have every building measured as though it were in one occupation, not multi-let, with the common parts measured correspondingly. Any subdivision would be the object of separately stated common part areas, relevant to the partial lettings and recorded as such."

8. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *Prefer RICS Code.*
9. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"There are no doors providing access to the balcony and covered balcony."*
10. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"See Q2 comment."*
11. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*
12. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *From the diagram we can deduct that the*

area of the internal walls dividing the different components is added to the component named with a letter prior in the alphabet. For example the shared wall between a component C area and a Component D area is added to the Component C area. We think this system, if indeed intended, should be explained in the standard. Otherwise it could also be possible to choose for a method in which the area of separating walls is divided between both Component areas (in fact measuring to the midst of the wall).

13.PCA - Ken Morrison, Australia: *"IPMS 2 Component Area B requires structural elements (such as columns and structural walls) to be measured and accounted for separately. We consider this an unnecessary step as it is unlikely that this information would ever be requested or required when transacting in property. Individually measuring the width of structural walls and columns is detailed and time consuming. Undertaking these measurements would therefore add significant cost to the use of IPMS: Offices for minimal or no benefit. To simply resolve this issue, the Property Council recommends that the individual measurement of columns be removed from the standard and that structural walls be attributed to the space in which they enclose. This would allow IPMS 2 Component Area I to be removed from the standard."*

14.PERSONAL RESPONSE - JENN MCARTHUR, UK: *"Needs a legend on this sheet (e.g. "Legend (Refer to following page for descriptions) A– Vertical Penetrations; B – Structural."*

15.RICS ASIA - Group Response, Hong Kong: *Definitions Standard Building Facilities Reference is made to buildings in multiple occupations. Can you clarify whether it is intended that each floor is assumed to be used by a single occupier that is a different entity to the other floors occupiers or multiple occupiers on each floor. I ask this as a single floor occupier would have exclusive use of areas marked E "circulation areas" including lift lobbies shown in the IPMS 2 plan shown on page 15, particularly where the corridors have been removed and therefore these may be included in the IMPS 3 area when in reality areas such as the lift lobby would have limited separate value.*

Equally Hygiene areas such as toilets / pantries may also be in exclusive use but again would have very limited additional value to the shared use value. Should it be assumed that each floor is in multiple occupation? If this is the case where there is a single occupier then it ought to be stated that a notional corridor / lift lobby is created so that these areas are not included. Alternatively if these areas are to be included then clarify this in the statement. There is a very helpful plan showing what is to be measured in the multiple occupied floor, can an example for a single floor occupier be given too."

16.RICS AUSTRIA - Group Response, Austria: *G ,partition walls: no correlation in Austria.*

17.RICS GERMANY - Group Response, Germany: *"a) It is recommended that component E, F and G are separated in restricted or non restricted.*

If car parking in the basement is counted by numbers, again there is a inconsistency between IPMS 1 and IPMS 2. Therefore it is important, that it is clearly stated whenever areas are not calculated in IPMS 2, the qualify for IPMS 1."

18.SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *"Example is too much simplified to cover also more complex cases of floor plans.*

Occupiers and Facility Mangers net a more detailed view to use and operate the different kind of space components."

19.SVIT SWITZERLAND - Beat Ochsner, Switzerland: *Covered Gallery and Balcony are not mentioned in components on page 16. Component H is missing on plan page 15.*

20.VALAD EUROPE - Per Nordström, Europe: *Specific areas to be designed in accordance with local legislations.*

21.VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"The circulation area seems to be including non-construction walls. In diagram 6 between tenants is measured to*

the middle of the non-construction walls. Why is linen between workspace and circulation area not to the middle of the wall in diagram 5? "

Response Summary: There were 21 general responses in relation to 'Diagram 5 - IPMS 2 - Office: Component Areas.'

SSC Rationale: The SSC have analysed these responses and made revisions to the diagrams where appropriate.

Page 16. IPMS 2 - Office: Component Areas

Consultation Responses

1. APREA - Noel Neo, Singapore: *"Component Area F - Amenities. Presumably this category relates to communal facilities not those that are occupied exclusively by 3rd parties. For example large space office occupiers will construct within the office leased areas cafeterias for their staff, or their may be commercial fitness clubs available to members or Children's day care facilities operated privately. These would readily be converted to office space once that occupier has moved out of the premises. Presumably these areas would be included in the main "work space" component. Therefore should only those Amenity areas provided by a landlord at nil cost (this might not be the right benchmark) be included in Component F."*
2. BAM CONSTRUCT - John Burke, UK: *None.*
3. CASLE - Tony Westcott, UK: *Better to refer to 'Functional Areas' instead of 'Component Areas'.*
4. CAXTONS - Charles Oliver, UK: *This is clear but requires unnecessary measurement. If a tenant only pays rent on the workspace and possibly Other Internal Areas (shown as H), why bother measuring the rest?*
5. CBRE BRAZIL - Walter L M Cardoso, Brazil: *Regarding component area C, according to Brazilian standards lift/elevator motor room or technical services that are not considered as of exclusive use are not included in the measurement. Concerning component area H (other internal areas) if the building management area is located in the underground floor or there are generators in the basement car parking area or even any other area of building management use or technical use located in the ground level or the underground level are also included in the building measurement.*

6. CLGE - Group Response, Europe: *"The internal projections of the external structure and weather proofing envelope are an integral part of that component and should be delineated as such.*

Component (A) Vertical Penetrations is OK as shown.

The internal structure (B) is OK as shown.

We recommend the creation of a new component – Permanent partition. The partitions between Technical Service Area (C) and Hygiene Area (D) cannot be removed, as the two areas are incompatible. Similarly, the partitions between areas (C) and (D) and the Circulation Area (E) may not be removed (toilets cannot be left open to a corridor). The same applies to partitions between a Circulation Area (corridor) in common use, i.e. providing access to Workspace owned or rented by different legal entities. These permanent, non-removable partitions should constitute a new Component."

7. GENSLER - Area Analysis Team, USA: *"Component Area A – Would it be useful to separate elevators and stairs from penetrations that accommodate ductwork, plumbing, electrical, and other technical services? They are much different types of space, similar to the hygiene areas vs technical services components.*

Component Area B – See the comments for Diagram 5 above. This component may be a source of great inconsistency in measurements. When measuring from floor plans it is a judgement calls on the practitioner's part on which walls are structural as often there is not explicit information to determine this. Also, a column or structural wall can often be enclosed in a much larger, built-out wall area. Is the entire area to be measured as "Structural Elements" in these cases or only the area necessary for the structural element?

Component area E – Does "all horizontal circulation areas" include those areas, which are not designed corridors or lobbies that are enclosed by walls? Buildings have significant amounts of open circulation areas, which could be measured, as part of this component area. Diagram 5 clearly shows circulation areas, but

building conditions could make circulation much more complex to identify and could be done inconsistently when put into practice. Single tenant buildings (especially large campus headquarters) often have a more complex system of corridors and open circulation that will challenge any two practitioners to measure consistently."

8. GIF - Dr. Ira Hoerndler, Germany: *"a) It is recommended that component E, F and G are separated in restricted or non restricted.If car parking in the basement is counted by numbers, again there is a inconsistency between IPMS 1 and IPMS 2. Therefore it is important, that it is clearly stated whenever areas are not calculated in IPMS 2, the qualify for IPMS 1."*

9. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *Prefer RICS Code.*

10. IPD - Christopher Hedley, UK: *"The definition of component areas should include a strong statement to emphasise that this space is measured in accordance with the current use of the office.*

The horizontal circulation areas (Component E) need more definition. You need to distinguish between primary circulation (including fire corridors and escape routes) and secondary/tertiary circulation. We suspect you are just referring to primary circulation.

How does a specialised building without Workspace (Component G) on a site which is predominantly used for offices get treated? If the use is for an area that would be excluded from IPMS 3 – Offices, can the IPMS 2 – Offices figure be non-zero?"

11. JLL VIETNAM LIMITED - Chris Murphy , Vietnam: *"The disregard of vertical penetrations of less than 0.25 sqm is not supported. This is inconsistent with Area B where columns of less than 0.25 sqm will not be disregarded."*

12. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *"See Q2 and Q5 comment."*

13. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *For most of the components it is clear why the component should be measured separately. But in present-day offices the distinction between components such as component E: Circulation area and G: workspace area or F: amenities areas and G: workspace area are not always easy to make and may often vary over time. For instance circulation area and workspace are joined to create a more flexible floor or there are flexible working spaces in the "cafeteria" because people want to work near to a good cup of coffee. Therefore we think it is better to combine these three components into one (Office area). Regarding to Component A: The Vertical Penetrations we think the 0.25 m² limit will lead to very detailed measurements. This will lead to an unnecessary high accuracy and too much work measuring according to this standard. We suggest a limit of 0.5 m². We suggest applying such a limit 0.5 m² or 0.25 m² also for Component Area B: Structural Elements. There is no use for measuring all kinds of small structural pillars within the building.*

14. PERSONAL RESPONSE - JENN MCARTHUR, UK: *"Technical services should be expanded to include server rooms, communications closets, etc., as these are taking up increasing footprint within new office buildings."*

15. PERSONAL RESPONSE - Mark Griffin, UK: *A recommendation would be more useful than leaving it to local market practice.*

16. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"In component A, what is the reasoning behind disregarding any penetration less than 0.25 sq. m.? This is the only specific measurement in the whole document; it would be good to understand the reasoning behind this.*

For Component B perhaps add in that these are 'internal structural walls' for clarity.

Component E – When is a corridor a corridor? How wide does the corridor need to be before it can be used as workspace?

2nd para following components – Be wary of the use of Floor Level as this has a meaning in surveying that could be misconstrued. A ‘level’ is a height above a certain datum, whereas you mean a storey or level of a building."

17. RICS ASIA - Group Response, Hong Kong: "3.2, IPMS 2, Component Areas Component Area F - Amenities Presumably this category relates to communal facilities not those that are occupied exclusively by 3rd parties. For example large space office occupiers will construct within the office leased areas cafeterias for their staff, or their may be commercial fitness clubs available to members or Children’s day care facilities operated privately. These would readily be converted to office space once that occupier has moved out of the premises. Presumably these areas would be included in the main “work space” component. Therefore should only those Amenity areas provided by a landlord at nil cost (this might not be the right benchmark) be included in Component F."

18. RICS AUSTRIA - Group Response, Austria: No correlation in Austria.

19. RICS BELUX - Group Response, Belux: "Component Area A: ‘less than 0,25m² is disregarded’: if disregarded as vertical penetration, then it is to include where? Suggestion to include in the ‘biggest’ surrounding other component area.

Component Area C: to mention that we talk about technical rooms for the building (HVAC, elevators, ...) and not the tenant specific technical rooms (IT etc.) which should remain included in the Component Area G probably. Component Area F: We would like to be the component areas independent from the specific use by a certain tenant, so cafeteria, fitness and other areas that are on locations that also can be workspace, should be measured as Workspace (Component Area G). On the other hand, often we find in the core a fixed ‘kitchenette’ already pre-installed: those can be indicated as a separate component or be included in the Component Area D. We think, to avoid misunderstanding or questions, that the paragraph that writes ‘Floor levels are to be recorded in accordance with local market practice, with the main entrance stated and other floor levels scheduled accordingly.’ should be further explained."

20. RICS CYPRUS - Jennifer Petridou/Kleanthis Tofarides/Yiannis Roussos, Cyprus: *"The breakdown of the 8 areas is considered to be good practice, which will provide the necessary transparency. Local practice and legislation include the external wall. Further, areas such as restrooms and kitchens should not be excluded, as they are important areas as well."*
21. RICS GERMANY - Group Response, Germany: *"a) It is recommended that component E, F and G are separated in restricted or non restricted. If car parking in the basement is counted by numbers, again there is a inconsistency between IPMS 1 and IPMS 2. Therefore it is important, that it is clearly stated whenever areas are not calculated in IPMS 2, the qualify for IPMS 1."*
22. RICS ITALY - Group Response, Italy: *COMPONENT DEFINITION SHOULD BE MADE CLEAR HERE (IE THOSE REPORTED ON PAGE 16).*
23. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Users renting Workspace units will transform this space to their proper use. They bring in office space, meeting rooms, storage rooms, internals corridors. This perspective is completely missed.*
24. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *IPMS 2 Pages 15/16: Covered Gallery and Balcony are not mentioned in components on page 16. Component H is missing on plan page 15.*
25. ZIA- Sabine Georgi, Germany: *"a) It is recommended that component E, F and G are separated in restricted or non restricted. If car parking in the basement is counted by numbers, again there is a inconsistency between IPMS 1 and IPMS 2. Therefore it is important, that it is clearly stated whenever areas are not calculated in IPMS 2, the qualify for IPMS 1."*

Response Summary: There were 25 general responses in relation to 'IPMS 2 - Office: Component Areas' The majority of comments were asking for further clarity in relation to the Component Areas and the Sample Spreadsheet for IPMS Office 2.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments and made revisions to the Component Areas where applicable. Moreover the SSC have added the following comment in relation to Limited Use Areas in order to provide greater clarity and flexibility within the Component Areas; *“Limited use areas as defined in Section 2.3 are included in the overall IPMS 2 - Office total floor area, but must also be identified, measured and stated separately within IPMS reported areas.”*

Page 17. Sample spreadsheet for IPMS 2 – Office

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *Separating out the shafts and the structure seems a bit excessive.*
2. CASLE - Tony Westcott, UK: *Colour shading doesn't work when printed in B&W. Darkest shade obliterates heading.*
3. CBRE BRAZIL - Walter L M Cardoso, Brazil: *No further comments.*
4. CLGE - Group Response, Europe: *"The spreadsheet needs to be extensively amended to take cognizance of the changes required to the building components.*
5. GIF - Dr. Ira Hoerndler, Germany: *There is no information on "accuracy/tolerance" and "the tools used" in the spreadsheet, not even the measurement used. The calculation of the single figures in the spreadsheet is not transparent and verifiable. It should be stated that this is not the standard for the calculation, but only an diagram to explain the intended systematic of the figures.*
6. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *Prefer RICS Code.*
7. JLL INDIA LIMITED - Sachin Gulaty, India: *A few more columns may be added that allow for convergence checks with areas indicated on various floors in approved-for-development drawings. It is at this table where a lot of development compliance aspects may be covered, and allow for risk mitigation for investors.*
8. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *Areas of the building fixtures have to be excluded, or the object of measurement has to be described more exactly (see Q1(C)).*
9. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*
10. PERSONAL RESPONSE - Mark Griffin, UK: *I think 'Unenclosed areas' would also be scheduled by floor.*

11. RICS AUSTRIA - Group Response, Austria External: *additional information referring working space and partition walls: No correlation in Austria.*
12. RICS GERMANY - Group Response, Germany: *"There is no information on "accuracy/tolerance" and "the tools used" in the spreadsheet, not even the measurement used. The calculation of the single figures in the spreadsheet is not transparent and verifiable. It should be stated that this is not the standard for the calculation, but only a diagram to explain the intended systematic of the figures.*
13. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *Basement Areas: Parking spaces are generally measured in quantities and not in sqm.*
14. VALAD EUROPE - Per Nordström, Europe: *A good illustration of a tool that can be used to record a building.*
15. ZIA- Sabine Georgi, Germany: *There is no information on "accuracy/tolerance" and "the tools used" in the spreadsheet, not even the measurement used. The calculation of the single figures in the spreadsheet is not transparent and verifiable. It should be stated that this is not the standard for the calculation, but only a diagram to explain the intended systematic of the figures.*

Response Summary: There were 15 general responses in relation to Sample spreadsheet for IPMS 2 – Office. The majority of comments were asking for further clarity in relation to the Categorisations.

SSC Rationale: Further to the comments received the SSC have revised the sample spreadsheet and included an additional row for Limited Use Areas within Component Area B to Component Area H and *"each limitation within a component, if any, is to be stated separately."* Finally subject to some of the comments received the SSC have also revised the additional Areas outside IPMS 2.

Page 18. IPMS 3 – Office: 3.3.1 Use

Consultation Responses

1. BAM CONSTRUCT - John Burke , UK: *None.*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CAXTONS - Charles Oliver, UK: *I cannot see the point of IPMS 3 as proposed. Exclusive use implies that the occupier can use the space, so half of a wall should not be included. Internal walls should only be included if they are partitions that the occupier could remove if he wished to create more floor area.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *No further comments.*
5. CLGE - Group Response, Europe: *"IPMS3, as currently set out, is merely an application or example of the standard definitions and delineations set out in IPMS1, IPMS2, and the component definition, which we recommend should constitute a new standard. We recommend that IPMS3, as currently defined, should be deleted altogether, and the definition of the separate building components be designated as IPMS3 instead. The inclusion of the new component – Permanent Partitions, would facilitate the delineation and accurate measurement of floor area held by each separate occupier.*
6. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *Prefer RICS Code.*
7. IPD - Christopher Hedley, UK: *Add in building owners as users of IPMS 3 – Offices. IPMS 3 – Offices is likely to be used as a basis of valuation.*
8. LITHUANIAN ASSOCIATION OF SURVEYORS - Group Response, Lithuania: *We think that IPMS3 could be the section of the IPMS2 and would represent results of measurements when office building belongs (is used) by multiple owners (occupiers). Separate sample spreadsheet should be prepared for IPMS3 areas.*
9. RICS AUSTRIA - Group Response, Austria: *Lettable area, used in Austria as well.*

10. RICS BELUX - Group Response, Belux: *No specific remarks besides the general one that the previous IPMS Office Area 3 (including the given remarks at that time) was much richer and could have a larger application.*

11. SVIT SWITZERLAND - Beat Ochsner, Switzerland: *IPMS 3 should correspond with IPMS 2.*

Response Summary: There were 10 responses in relation to 'IPMS 3 – Office: 3.3.1 Use.'

SSC Rationale: The SSC have considered these comments and made revisions where appropriate.

Page 18. IPMS 3 – Office: 3.3.2 Definition

Consultation Responses

1. BAM CONSTRUCT - John Burke , UK: *Here columns and half partition widths are 'included' but these will be viewed by occupiers as unusable and indeed are a measure of a building's efficiency. So why pay for this will be the question?*
2. CASLE - Tony Westcott, UK: *Ok.*
3. CAXTONS - Charles Oliver, UK: *This should be the Net Internal Area that is available to the occupant for profitable use.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil: *Considering the floor with a single tenant, would it be right to assume IPMS 2 and 3 to be the same? In that case does the floor area on IPMS 3 change according to the space being occupied by one or multiple tenants?*
5. CLGE - Group Response, Europe: *"We recommend the deletion of the current IPMS3."*
6. EXPERT INVEST - Petar Andonov, Bulgaria: *Inclusions: All internal walls and columns within an occupant's exclusive area are included within IPMS 3 - Office. The Floor Area is taken to the Dominant Face and, where there is a common wall with an adjacent tenant or premise, to the centre-line of the common wall.*
7. GENSLER - Area Analysis Team, USA: *As stated earlier in the comments, the "standard building facilities" will be decided by the judgement of a practitioner and it would be difficult to achieve consistent results between two separately performed analyses on the same floor or building. Single occupant buildings are designed differently and functions which may be shared in a multi-occupant building are integrated into the office use areas of a single tenant building, making them difficult to separate spatially.*
8. GIF - Dr. Ira Hoerndler, Germany

- a. *It should be made clear, that not shared standard building facilities are to be included*
- b. *Balconies and Galleries are included in IPMS 1, but not in IPMS 2. This makes the relation between these two and IPMS 3 inconsistent.*
- c. *It is important to calculate the common area.*

9. GRILLO EUROPE LIMITED - Dick Grillo, Europe: Prefer RICS Code.

10. JLL VIETNAM LIMITED - Chris Murphy, Vietnam: *"Standard Building Facilities is already defined in Part 1; repetition is not needed."*

11. IPD - Christopher Hedley, UK: *"Further explanation of this very important part of the Standard is required."*

Standard) Building Facilities need to be defined more carefully as these are likely to be interpreted differently in different countries. (IPD would be happy to help with the drafting if required.) The effect of the definition should be to exclude Components A to E (except the internal walls and the structural columns) and H from the definition of IPMS3.

State here (or elsewhere) that IPMS1 is greater than IPMS2, which in turn is greater than IPMS3.

Emphasise that unit rental values will inevitably be different for IPMS3 measured for multiple occupation compared with IPMS3 measured for single occupancy because of the effect of including horizontal circulation space (and perhaps other types of space) within the latter and not the former."

12. JAPAN BOMA - Shigeru Takagi, Japan: *"It would be appreciated if you change the IPMS3-Office definition as follows. "The floor Area is taken to the Dominant Face or the centre line of the wall."*

13. JLL INDIA LIMITED - Sachin Gulaty, India: *Same as my comment under "Page 5. 1.1. Definitions" sub-point "a." on page 2 of this Feedback Form.*

14. JONES LANG WOOTTON - Padman Arulampalam, India: *"Please consider the adoption of a definition similar to Net Lettable Area akin to Net Internal Area (RICS code of Measuring Practice)."*
15. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *I preferred GEA, GIA and NIA as more descriptive, could these not be retained? Otherwise, unless we are doing them daily, we will have to refer to documentation for definitions every time.*
16. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *The last sentence on page 18 says that Standard Building Facilities are excluded from the IPMS 3 area . It needs to be clarified which facilities are meant. For example, does this include amenities areas or only hygiene areas and technical areas? And are circulation areas considered as building facilities/ We also think it is better to exclude the structural elements from IPMS-3 so the IPMS-3 areas are more consistent with the workspace area according to IPMS 2.*
17. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"One of the key aspects of IPMS is that the measurements must be measurable, objectively verified. Taking the measurement to the centre line of a party wall between 2 tenants, we feel does not agree with these statements. The space of half the thickness of a party wall cannot be used for a sensible purpose , it can only be verified by measuring both sides of the wall which pay prove difficult due to access etc. We suggest that the coalition change this so that the measurement is taken up to the face of the party wall as the inclusion of the party wall thickness appears to favour the landlord over the tenant, and it is our feeling that the standard should not provide bias to any party but an independent report of the building area.*
- There needs to be better clarity around standard building facilities. Perhaps an addition of 'Examples of Standard Building Facilities, but not limited to, are Toilets, Staircases, Lifts Common Corridors..... etc.' or even 'Those building elements falling into IPMS 2 components D.'*
18. RICS AUSTRIA - Group Response, Austria: *Lettable area, used in Austria as well.*

19. RICS BELUX - Group Response, Belux: *Be sure that the measurement of the surface is independent from the specific use or fit out or occupation by a certain tenant.*

20. RICS CYPRUS - Jennifer Petridou/Kleanthis Tofarides/Yiannis Roussos, Cyprus: *"This could be a bit misleading to apply, as tenants pay rent for an office area that includes hygiene areas and are also charged a lump-sum charge ("common expenses") to cover all areas that are within the other eight components of IPMS2. Additionally, relevant legislature dictates that the area of a unit (component) comprises the area of the component including the external walls, covered and uncovered verandas. In the case of common walls, the width of the common wall is divided amongst the two abutting properties or between the unit and the common area whatever the case may be. The areas are stated on the title deed of each unit, showing separately the verandas and the unit areas. Further to the above, it could appear tricky to the potential owner/tenant to express the floor area excluding vital parts of the office area (e.g. what would happen if there were no toilets? Or stairs?). The issue of stairs being excluded in IPMS 3 was shared with all in the group. Current practice of the District Lands Office express on all title deeds a percentage share of common areas, including staircases – this is something valuers are taking in consideration, whereas IPMS3 (that valuers are to be using) does not."*

21. RICS GERMANY - Group Response, Germany:

- a. It should be made clear, that not shared standard building facilities are to be included*
- b. Balconies and Galleries are included in IPMS 1, but not in IPMS 2. This makes the relation between these two and IPMS 3 inconsistent.*
- c. It is important to calculate the common area.*

22. RICS HUNGARY- Group Response, Hungary: *"Columns should not be included."*

23. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *"Not only exclusive use, but also nonexclusive use such as*

restrooms and corridors should be considered as rentable area. Structural walls and columns should be excluded."

24.SVIT SWITZERLAND - Beat Ochsner, Switzerland: *IPMS 3 should correspond with IPMS 2.*

25.ZIA- Sabine Georgi, Germany:

- a. It should be made clear, that not shared standard building facilities are to be included
- b. Balconies and Galleries are included in IPMS 1, but not in IPMS 2. This makes the relation between these two and IPMS 3 inconsistent.
- c. It is important to calculated the common area.

Response Summary: There were 25 general responses in relation to IPMS 3 – Office: 3.3.2 Definition. The comments asked for greater clarity in relation to balconies, covered galleries, rooftop terraces and Standard Building Facilities.

SSC Rationale: The SSC has considered these comments and has revised the IPMS 3 definition and included a section on 'Measurements Included but stated separately', which states that: *"Balconies, covered galleries, and roof top terraces in exclusive use are to be measured to their inner face and their areas stated separately."* Moreover the SSC has changed the nomenclature to 'Standard Facilities' and revised the definition as follows; *"Standard Facilities being those parts of a Building providing shared or common facilities that typically do not change over time, including, for example, stairs, escalators, lifts/elevators and motor rooms, toilets, cleaners' cupboards, plant rooms, fire refuge areas and maintenance rooms."*

Consultation Responses

1. BAM CONSTRUCT - John Burke, UK: *None.*
2. CASLE - Tony Westcott, UK: *Clarify significance of shading, especially when printed in B&W. Improve annotation to clarify meaning and significance of CL.*
3. CAXTONS - Charles Oliver, UK: *The coloured areas on diagram 6 should be the same as the beige and green areas on diagram 5. It should not include yellow or red areas because the occupant cannot make use of those areas.*
4. CBRE BRAZIL - Walter L M Cardoso, Brazil : *There's a question above related to standard building facilities and the possible inclusion of an area of shared use in a new lease in case of no interference with circulation of multiple occupations. The question relates to the areas treated as circulation in diagram 5 and changed to workspace in diagram 6.*
5. CLGE - Group Response, Europe: *"We recommend the deletion of the current IPMS3. "*
6. GRILLO EUROPE LIMITED - Dick Grillo, Europe: *Prefer RICS Code.*
7. IPD - Christopher Hedley, UK: *"Another diagram is required for single occupancy."*
8. JLL INDIA LIMITED - Sachin Gulaty, India: *No comments on the diagram. However, a comparative table here would be very useful where areas under occupancy by each tenant/occupier are compared with the areas indicated under Rent Rolls or Customer Sales Rolls (for strata sales within buildings) for each tenant/occupier. An additional column where convergence is established with areas indicated in approved-for-development drawings would provide a high degree of clarity and transparency for all Users.*

9. JLL VIETNAM LIMITED - Chris Murphy , Vietnam: *"(a) should be a 'covered balcony' as noted above. There are no doors providing access to areas (a) and (b).*

Centre Line – it should be made clear that the centre line is also used between the blue and buff areas and the green and buff areas. Is the CL symbol internationally understood? Or would it be better to use words?"

10. MOSTYN ESTATES LTD - Michael Alan Bird, UK: *Good.*

11. NETHERLANDS COUNCIL FOR REAL ESTATE ASSESSMENT - Ruud M. Kathmann, Netherlands: *Regarding to the IPMS 3, we do not understand the method used to distinct between IPMS-3 areas and the area of the shared facilities. For instance in the diagram on page 19. There are two small hallways near the elevators that are identical in size. It is unclear why the one on the left is considered IPMS-3 area and the one on the right is not. Both areas are, in our opinion circulation area that would be considered to be shared if the building were to be in multiple occupations.*

12. PERSONAL RESPONSE - JENN MCARTHUR, UK: *"Label and distinguish between shared and exclusive circulation spaces in the legend as well."*

13. PLOWMAN CRAVEN LIMITED - Tom Pugh, UK: *"It is our opinion that a floor that shows single occupancy is required to show that a fully let floor would be."*

14. RICS AUSTRIA - Group Response, Austria: *We agree.*

15. RICS HUNGARY- Group Response, Hungary: *"On the left hand side the two corridors shall not be coloured."*

16. SVIT FACILITY MANAGEMENT SWITZERLAND - Dr. Andreas Meister, Switzerland: *"Not only exclusive use, but also nonexclusive use such as restrooms and corridors should be considered as rentable area. Structural walls and columns should be excluded."*

17.SVIT SWITZERLAND - Beat Ochsner, Switzerland: *IPMS 3 should correspond with IPMS 2.*

18.VALAD EUROPE - Per Nordström, Europe: *May need revised lay out from office areas to fire exits.*

19.VERENEGING DE VIERKANTE METER - A.P.J Timmerman, Netherlands: *"The colour green is not well chosen, because it is explained on page 17 as Amenities. It is the question if this is the case;*

The borderline between the coloured area is the middle of the non-construction walls, but the borderline of workspace is not in the middle of the non-construction walls. It is obvious that corridors area circulation area and not workspace area, so these 'rooms' seems to be interpretation. It is not clear why.

By measure in the middle of non-construction walls as a general rule changes in the lay-out of a part of the building will not have an effect on adjoining space."

Response Summary: There were 19 general responses in relation to 'Diagram 6 - IPMS 3 - Office: upper floor, multiple occupancy' The majority of comments asked for greater clarity in respect of the diagram and for an additional diagram to be added in relation to sole occupancy.

SSC Rationale: The SSC has considered these comments and has revised the diagram within the IPMS: Office Buildings to provide greater clarity and added an additional diagram in relation to sole occupancy.