

IPMS for Offices

SSC Response to Feedback

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Introduction

The International Property Measurement Standards for Offices Document was in consultation between 13 January and 4 April 2014. During this period there were over a thousand downloads of the Consultation Document and the responses were received from the 56 organisations or individuals listed below. The IPMS Standards Setting Committee has considered all the comments received before completing the IPMS – Offices, Exposure Draft.

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.

Appraisal Institute

APREA

Australian Property Institute

BAM Construct

BCIS

CEM

CEN TEC

CBRE

CIREA

CLGE

CW

CoreNet

Dubai Land

Dutch Association DVM

Expert Invest

Gensler

GIF

Hypzert

IAAO

IPD

IVBN

JAREA

JIQS

JLL

Lithuanian Association of Surveyors

MITIE

Mostyn Estates Ltd

NEN

Netherlands Council for Real Estate

Oxford Brookes

Paul Collins

Paul Varty

PCA

PCNZ

Personal Response

Plowman Craven

RICS Benelux

RICS Corporate Occupiers Group

RICS Czech republic

RICS Facilities Management

RICS Finland

RICS France

RICS Germany

RICS Greece

RICS Hungary

RICS Netherlands

RICS Portugal

RICS Romania

RICS Russia

RICS Sweden

RICS Switzerland

RISM CASLE

Scottish Government

Tony Westcott

Whitmarsh Lockhart

A number of responses were received from various RICS country groups, such as RICS Germany, and RICS specialist Groups, such as RICS Facilities Management. 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, Australian Property Institute, CEN TEC, Dutch Association DVM, GIF and Hypzert, IAAO, IPD, JAREA, JIQS, Lithuanian Association of Surveyors, NEN, Netherlands Council for Real Estate, PCA, Plowman Craven, RISM CASLE and the Scottish Government 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 for transition or bridging to the IPMS Standard.

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

General

In respect to the consultation process a consultation response form was issued and respondents were asked the following six questions in relation to the Consultation Document;

1 Do you support the concept of IPMS for Offices?

2 Is the Draft fit for purpose as it stands? If not, what issues need to be addressed in the Standard or in supporting Guidance Notes?

3 Does the Standard need to enable areas in exclusive occupation and those in shared use to be separately identified?

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

5 In relation to IPMS Office Area 2 should 'the predominant face' be defined in more detail?

6 In IPMS Office Area 3 should Sub-category E(i) separately identify areas with a restricted floor-to-ceiling height? If so, should that be below 1.5m, or what alternative height?

In addition the respondents were given the option to respond to the Consultation Document on a section by section basis. The following Consultation 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 respondents have been listed in alphabetical order, the responses are shown in the order, and as received; the order gives no indication of the weight given to each submission.

This document is laid out in two sections. The first provides a top-line feedback summary and the SSC rationale for implementation or otherwise. The second section also includes detailed responses from all participants.

Feedback (Summary)

Q1. Do you support the concept of IPMS for Offices?

Response Summary

There were 42 responses to this question and a range of different opinions. A number of respondents stated the benefits of their own existing standards and could not understand why these principles were not adopted. However on the whole the respondents were overwhelmingly in favour of the concept and need for IPMS for Offices.

Some of the responses suggested that there should not be separate standards for different classes of buildings.

SSC Rationale

Based on the responses and due to the inherent complexities and potential differences in various classes of building the SSC felt it was critical to consider the measurement of each class of building individually.

IPMS principles, methodology and measurement practices used in the standard about office buildings will be applied when future IPMS standards for other building classes, for example, residential, industrial and retail, are drafted by the SSC. These will need to be consistent as another class of building is mixed use, which would incorporate several IPMS Standards. There will be consistency between these standards with IPMS 1 being the same for all classes of buildings in the absence of physical modifications.

Q2. Is the Draft fit for purpose as it stands? If not, what issues need to be addressed in the Standard or in supporting Guidance Notes?

Response Summary

There were 37 responses in relation to this question and the respondents stated a number of different opinions. Some respondents felt the standard was too complicated, whereas others felt the draft standard wasn't sufficiently detailed. The majority of respondents felt that IPMS Office Area 1 and 2 required further clarification.

Some respondents also felt that the Categories contained in IPMS Office Area 3 were too complicated and would add further confusion to the market and did not constitute a separate international office area standard, but were part of IPMS office Area 2.

Part 4 was also criticised for comprising four International Floor Area applications and therefore potential adding further confusion to the market through a lack of consistency.

A typical response in relation to this was as follows; *“...is disappointed that the Consultation Draft rather than creating a single Method of Measurement for offices attempts to legitimise the range of existing Methods of Measurement bringing them all under one Standard.”*

Other common responses included

- *an opinion that the same principles for measurement should apply for all purposes of use of a building and a single Standard should be prepared.*
- *IPMS does not address the issue of a single measurement that allows comparison between countries Rather produces 4 other standards.*
- *to convince all parties to leave their own standard and adopt another it is necessary that is a very high quality and all experiences of existing standards are used to optimise the international standard.*
- *Creation of a new standard will then necessitate re-measurement of all properties, with high costs involved. We prefer an approach in which, on the basis of a study of the different national measurement standards (and thus not only using as a starting point the CLGE Measurement Code), the Coalition focusses on the most needed international general parameters and the necessary alignment of these main parameters, looking for more general definitions and working on an aggregate level and by doing so, leaving the much more detailed national standards as much as possible, unchanged.*

The diagrams contained within the Appendices were also criticised in some responses for being insufficiently detailed or for including elements of double counting between Appendix 5 and 6.

SSC Rationale

The SSC realised that a radical change needed to be made to the structure of the initial Consultation Draft.

On particular issues the SSC panel of technical experts are of the opinion:

- The concepts between the various uses of property are such that there will be separate IPMS standards documents for each class of building with consistency between the principles, methodologies and measurement practices adopted for various uses.
- Accepts the comments that the Applications process was too complicated.
- The benefits and detriments of existing standards were robustly debated.
- Finally the SSC have revised all the diagrams contained within both the document and Appendices in order to provide further clarity. Further details on all these matters are contained within the appropriate section of this consultation response.

Q3. Does the Standard need to enable areas in exclusive occupation and those in shared use to be separately identified?

Response Summary

There were 38 responses in relation to this question and the vast majority felt that the Standard should enable those areas in exclusive occupation and those in shared use to be separately identified. However a small minority felt the Standard should only deal with measurement and therefore this was unnecessary. A number of comments also referred to a multi-occupant scenario and noted that the Consultation Draft only dealt with a single-occupant scenario.

SSC Rationale

Further to the consultation the SSC felt that the responses were overwhelmingly in favour of a standard, which would allow users to separately identify those parts in exclusive occupation. The SSC therefore revised the Components (previously Categories) in IPMS 2 to facilitate this separate identification when needed.

Moreover the SSC created a new IPMS Office Area 3 to deal with those areas that are exclusively occupied. IPMS Office Area 3 is now defined as *“The sum of the areas of each floor level of a Property available on an exclusive basis to an occupier, but excluding Standard Building Facilities, and reported on a floor-by-floor basis for each Building.”*

Q4. Does the Standard need to define more explicitly whether a floor is above or below ground level?

Response Summary

There were 38 responses in relation to this question. However there was no consistency in response. A number of respondents felt that this was integral whereas other respondents felt that this was unnecessary. Further respondents misunderstood the question and believed it was referring to basements or defining the floor levels of the building.

SSC Rationale

The SSC discussed the responses and the issues contained within and felt that the inclusion of a schedule defining components and floors would deal with a number of these issues. The SSC further felt that the definition of above and below ground varied on a national basis and was often defined in statute law.

This issue is further addressed in the Exposure Draft and there is a new Section 2.7, which deals with legal restrictions and provides examples such as;

- Above and below ground,

- Areas with limited height,
- Areas with limited natural light.

Q5. In relation to IPMS Office Area 2 should 'the predominant face' be defined in more detail?

Response Summary

There were 39 responses to this question and for those respondents who live in an environment where the concept is adopted there was little concern.

On the other hand it was obvious there was a significant body of respondents that required further clarification. Responses ranged from *"Please note that on high streets or in general commercial areas, the predominant face is obviously the one facing the ""main street"" but normally the main entrance is located on the side,.... A definition of 'the predominant face' could be "the face along the only or the most visible/prominent public area/street frontage of the building/plot". To "This is clearly understood in my opinion and would not require greater definition..... 'predominant' is a well-defined term being 'present as the strongest or main."*

The latter two recognised that the reference is to each face and not to a particular façade.

SSC Rationale

SSC has modified the description of Predominant External Wall Face and Dominant Face to help clarify this matter. Further modifications and insertion of plans is proposed.

This issue is further addressed in the Exposure draft.

Q6. In IPMS Office Area 3 should Sub-category E(i) separately identify areas with a restricted floor-to-ceiling height? If so, should that be below 1.5m, or what alternative height?

Response Summary

There were 41 responses in relation to this question. However there was no consistency in response. A number of respondents felt that restricted height should be identified and restricted heights were identified at between 1.2 metres (3.94 feet) and 2.3 metres (7.55 feet). Others believed that minimum heights should refer to all areas not just those contained within Sub-category E(i).

SSC Rationale

The SSC robustly discussed the extensive range of responses and the issues contained within. The SSC concluded that many restricted heights varied according to local national standards. SSC agreed that restricted (limited) height was more of a valuation issue and the IPMS for Offices should provide the horizontal two-dimensional areas that aggregate to the total IPMS 2.

This issue is further addressed in the Exposure Draft and there is a new Section 2.7, which deals with legal restrictions and provides examples such as;

- Above and below ground,
- Areas with limited height,
- Areas with limited natural light.

The restricted height areas should be addressed in the bridging guideline adopted in each jurisdiction.

General comments related to IPMS for Offices

Response Summary

There were 28 general responses in relation to IPMS for Offices, which covered a wide range of issues. The majority of responses were favourable to the standard though requested areas of further detail and clarification or details

SSC Rationale

The SSC direct you to the rationale detailed in respect of Q2.

Page 8. IPMS Standards Setting Committee

Response Summary

There were 3 general responses in relation to the Standard Setting Committee and definitions.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these responses. Whilst we understand the concerns in regard to the definitions to approach the issues in the manner discussed would be to introduce more complexity whereas our aim is the reverse.

Any further representation on the SSC by someone from other countries in Continental Africa provided that have the necessary level of expertise would be welcome.

Page 10. 1.2 Aim of the Standards

Response Summary

There were 3 general responses in relation to the Standard Setting Committee and definitions.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these responses. Definitions have been re-considered and where the SSC believed beneficial, amended.

Page 10. 1.3 Use of the Standards

Response Summary

There were 4 general responses in relation to the 'Use of the Standards' with the majority feeling that clarification was needed where there was a conflict between IPMS and local standards.

SSC Rationale

In preparing the Exposure Draft the SSC have considered the conflict between IPMS and local standards.

Page 10. 1.4 Purpose of IPMS

Response Summary

There were 4 general responses in relation to the 'Purpose of IPMS' with the majority feeling that this paragraph did not adequately describe the purpose of IPMS.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments and redrafted the Purpose of IPMS.

Page 11. 2.1 Principles of Measurement

Response Summary

There were 3 general responses in relation to the 'Principles of Measurement'.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments.

Page 12. 2.2 General Principles of IPMS

Response Summary

There were 8 general responses in relation to the 'General Principles of IPMS'. However there was no consistency in response in relation to this section.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments.

Page 12. 2.2.3 Measurement Reporting

Response Summary

There was 1 general response in relation to Section 2.2.3 on 'Measurement Reporting'.

SSC Rationale

In preparing the Exposure Draft the SSC have considered this comment.

Page 12. 2.2.4 Unit of Measurement

Response Summary

There was 5 general responses in relation to Section 2.2.4 on 'Unit of Measurement. All the responses requested for IPMS for Offices to provide a conversion factor

SSC Rationale

In preparing the Exposure Draft the SSC have considered this comments and suggested that where a conversion factor is used it should be stated explicitly.

Page 13. Part 3 IPMS Standards

Response Summary

There was 1 general response in relation to Part 3 on 'IPMS Standards' requesting the standards to also be defined according to existing measurement definitions.

SSC Rationale

The SSC had initially considered these existing measurement definitions but realised that these definitions were inconsistent and subject to variance in interpretation across different markets.

The SSC therefore agreed new terms and definitions in IPMS Office Area 1, 2 and 3, which though similar to the existing terms were not subject to regional variation.

Page 13. 3.1.1 Definition

Response Summary

There was 1 general response in relation to Section 3.1.1 on 'Definition'.

SSC Rationale

In preparing the Exposure Draft the SSC have considered this comment.

Page 13. 3.1.2 Use

Response Summary

There were 3 general responses in relation to Section 3.1.2 on 'Use.'

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments.

Page 13. 3.1.3 Measuring IPMS Office Area 1

Response Summary

There were 16 general responses in relation to Section 3.1.3 on 'Measuring IPMS Office Area 1'. The majority of comments asked for greater clarity in respect of inclusions and exclusion within IPMS Office Area 1.

SSC Rationale

The SSC has considered these comments and have revised the name of 'IPMS Office Area 1' to 'IPMS 1'. Moreover IPMS has been rewritten clearly state the 'Extent', 'Inclusions' and 'Exclusions'. Moreover there will be consistency between these standards with 'IPMS 1' being the same for all classes of Building in the absence of physical modifications.

Page14. Diagram 1 IPMS - Office Area 1 and Text

Response Summary

There were 4 general responses in relation to 'Diagram 1 IPMS - Office Area 1 and Text'. The majority of comments asked for greater clarity in respect of the diagrams for IPMS Office Area 1.

SSC Rationale

The SSC has considered these comments and has revised the Diagrams within 'IPMS 1' in order to provide greater clarity.

Page14. Diagram 2 IPMS - Office Area 1 and IPMS Office Area 2 and Text

Response Summary

There were 3 general responses in relation to 'Diagram 2 IPMS - Office Area 1 and IPMS Office Area 2 and Text'. The majority of comments asked for greater clarity in respect of the diagrams for IPMS Office Area 1 and 2.

SSC Rationale

The SSC has considered these comments and has revised the text and Diagrams within 'IPMS 1' and 'IPMS 2 – office', in order to provide greater clarity.

Page15. IPMS Office Area 2 - 3.2.1 Definition

Response Summary

There were 3 general responses in relation to Section 3.2.1 on 'Definition.'

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments.

Page15. IPMS Office Area 2 - 3.2.2 Use

Response Summary

There were 3 general responses in relation to Section 3.2.2 on 'Use.'

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments.

Page15. 3.2.3 IPMS Office Area 2 - Measuring IPMS Office Area 2

Response Summary

There were 4 general responses in relation to Section 3.2.3 on 'Measuring IPMS Office Area 2'. The majority of comments asked for greater clarity in respect of inclusions and exclusion within IPMS Office Area 2.

SSC Rationale

The SSC has considered these comments and have rewritten 'IPMS 2 – office', to clearly state the 'Extent', 'Inclusions' and 'Exclusions'.

Page16. IPMS Office Area 3 - 3.3.1 Definition

Response Summary

There were 3 general responses in relation to Section 3.3.1 on 'IPMS Office Area 3 - Definitions.' The majority of comments were asking for further clarity in relation to the Categorisations and the existing Categories.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments. Further to the consultation the SSC felt that IPMS Office Area 3 did not constitute a separate international measurement standard, but formed part of IPMS Office Area 2. The SSC therefore revised the Components (previously Categories) in 'IPMS 2 – office' to provide greater clarity.

Page16. IPMS Office Area 3 - 3.3.3 Measuring IPMS Office Area 3

Response Summary

There were 10 general responses in relation to Section 3.3.3 on 'Measuring IPMS Office Area 3.' The majority of comments were asking for further clarity in relation to the Categorisations and the existing Categories and diagrams in relation to this.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments. Further to the consultation the SSC felt that IPMS Office Area 3 did not constitute a separate international measurement standard, but formed part of IPMS Office Area 2. The SSC therefore revised the Components (previously Categories) in 'IPMS 2 – office' and diagrams to provide greater clarity.

Page17. IPMS Office Area 3

Response Summary

There were 10 general responses in relation to IPMS Office Area 3. The majority of comments were asking for further clarity in relation to the Categorisations and the existing Categories and diagrams in relation to this.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments. Further to the consultation the SSC felt that IPMS Office Area 3 did not constitute a separate international measurement standard, but formed part of IPMS Office Area 2. The SSC therefore revised the Components (previously Categories) in 'IPMS 2 – office' and diagrams to provide greater clarity.

Page17. IPMS Office Area 3

Response Summary

There were 10 general responses in relation to IPMS Office Area 3. The majority of comments were asking for further clarity in relation to the Categorisations and the existing Categories and diagrams in relation to this.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments. Further to the consultation the SSC felt that IPMS Office Area 3 did not constitute a separate international measurement standard, but formed part of IPMS Office Area 2. The SSC therefore revised the Components (previously Categories) in 'IPMS 2 – office' and diagrams to provide greater clarity.

Page18. Applications

Response Summary

There were 10 responses in relation to Part 4 on 'Applications'. Part 4 was criticised for comprising four International Floor Area applications and therefore potential adding further confusion to the market through a lack of consistency. A typical response in relation to this was as follows; *"...is disappointed that the Consultation Draft rather than creating a single Method of Measurement for offices attempts to legitimise the range of existing Methods of Measurement bringing them all under one Standard."*

SSC Rationale

Further to the consultation the SSC felt that the responses were overwhelmingly in favour of a standard, which would allow users to separately identify those parts in exclusive occupation. The SSC therefore removed Part 4 on 'Applications' section and created a new 'IPMS 3 – office' to deal with those areas that are exclusively occupied. 'IPMS 3 – office' is now defined as "The 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."

Page19. Category A Vertical Penetrations - Diagram 4 Upper Floor Illustration

Response Summary

There were 3 general responses in relation to 'Category A Vertical Penetrations - Diagram 4 Upper Floor Illustration'. The comments asked for greater clarity in respect of the diagram.

SSC Rationale

The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page20. Category B Technical Services- Diagram 5 Ground Floor Illustration

Response Summary

There were 2 general responses in relation to 'Category B Technical Services- Diagram 5 Ground Floor Illustration'. The comments asked for greater clarity in respect of the diagram. The diagram was criticised for being insufficiently detailed and for including elements of double counting between Diagram 5 and 6.

SSC Rationale

The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page21. Category C Hygiene Areas- Diagram 6 Upper Floor Illustration

Response Summary

There were 2 general responses in relation to 'Category C Hygiene Areas- Diagram 6 Upper Floor Illustration'. The comments asked for greater clarity in respect of the diagram. The diagram was criticised for being insufficiently detailed and for including elements of double counting between Diagram 5 and 6.

SSC Rationale

The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page 22. Category D Circulation Areas- Diagram 7 Ground Floor Illustration

Response Summary

There were 3 general responses in relation to 'Category D Circulation Areas- Diagram 7 Ground Floor Illustration'. The comments asked for greater clarity in respect of the diagram.

SSC Rationale

The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page23. Category D Circulation Areas- Diagram 8 Upper Floor Illustration

Response Summary

There was 1 general response in relation to 'Category D Circulation Areas- Diagram 8 Upper Floor Illustration'. The comment asked for greater clarity in respect of the diagram.

SSC Rationale

The SSC has considered this comment and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page24. Category E Workspace/Amenities- Diagram 9 Ground Floor Illustration

Response Summary

There were 3 general responses in relation to 'Category E Workspace/Amenities- Diagram 9 Ground Floor Illustration'. The comments asked for greater clarity in respect of the diagram.

SSC Rationale

The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page25. Category E Workspace/Amenities- Diagram 10 Upper Floor Illustration

Response Summary

There were 2 general responses in relation to 'Category E Workspace/Amenities- Diagram 10 Upper Floor Illustration'. The comments asked for greater clarity in respect of the diagram.

SSC Rationale

The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page26. Appendix 2 – Tolerances

Response Summary

There were 5 general responses in relation to 'Appendix 2 – Tolerances'.

SSC Rationale

In preparing the Exposure Draft the SSC have considered these comments.

Feedback (Comprehensive)

Q1. Do you support the concept of IPMS for Offices?

Consultation Responses:

1. CORE IPMS - Jim Drysdale, MENE: Yes.
2. EXPERT INVEST - Petar Andonov, Bulgaria: Yes.
3. LITHUANIAN ASSOCIATION OF SURVEYORS - Rimantas Ramanaushas, Lithuania: *Firstly, we would like to express our doubts regarding the idea (or need) to prepare separate international standards for the measurement of offices, residential, industrial and retail property. The purpose of use of buildings can be changed, e.g. a former industrial building can be turned into a residential one (e.g. lofts may be formed that are popular among the youth). In such a case there will be a need to apply different standards for measurement of the same building and possibly different areas would be calculated. We think that the same principles for measurement should apply for all purposes of use of a building and a single Standard should be prepared.*

We would like to suggest preparing some examples of reports for presentation of measured building areas and probably point out common requirements for preparation of the as-built plans. It is also necessary to determine how a building itself has to be identified on it (address and X/Y coordinates in the worldwide WGS coordinate system could be used).

4. PERSONAL RESPONSE - MARK GRIFFIN: *I am submitting this response to the consultation as an independent 'Space Measurement Professional' not currently actively engaged in the field of office space measurement but with much recent relevant experience relating to the calculation of service charges and to the concepts of strata sub-division of large complex multi-use properties. The concept of IPMS for offices is most welcome and the draft appears to be a good start. It will have to be a dynamic document that benefits from use. I think areas in exclusive occupation should be separately identified to those in shared use. For the purpose of the standard it is probably unnecessary to define more explicitly whether a floor is above or below ground level but for wider applicability it is desirable. The predominant face in IPMS Office Area 2 is adequately defined and for the sake of completion I think that areas with a restricted floor-to-ceiling height should be separately identified but I have no view on the height that should be specified.*
5. SCOTTISH GOVERNMENT - Anthony Andrew, Scotland: *Yes. It will help not just the markets, but also public sector asset management of office space, and town planners*

by introducing uniformity, and helping make international benchmarks of building performance more meaningful.

6. CIREA - Coco, China: *Yes, definitely.*
7. PAUL VARTY - Paul Varty, Hong Kong: *Yes.*
8. OXFORD BROOKES - David Sheirs, UK: *Yes.*
9. RICS GERMANY - Group Response, Germany: *Yes.*
10. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia: *Yes. API as a Founding Member of the Coalition is well aware of the current inconsistencies in the Methods of Measurement across jurisdictions and the importance for consistency to be achieved.*
11. IPD - Christopher Hedley, UK: *Occupiers and owners of real estate – and their suppliers – would clearly benefit from consistent measurement of office space around the globe. We therefore strongly welcome the concept of IPMS for Offices.*
12. DUTCH ASSOCIATION DVM - A.P.J. Timmerman, Holland: *Although our Dutch measurement standard NEN 2580 is a much more detailed and well rooted local standard and practice for area and space measurement, we understand the need for an international measurement standard.*
13. MOSTYN ESTATES LTD - Mike Bird, UK: *Yes.*
14. RICS GREECE- Group Response, Greece: *Yes, we strongly support it.*
15. GIF- Axel v. Goldbeck, Germany: *We warmly welcome the initiative of the International Property Measurement Standards Coalition (IPMSC) to develop and implement of an international standard for property measurement. Representing the real estate industry with many members with cross-border-activities ZIA supports all activities to create more transparent markets. We are convinced that an international Property Measurement Standard (IPMS) will ensure that property assets are measured in a consistent way, and will create therefore greater public trust, stronger investor confidence and increased market stability.*

Firstly, we underline the need to create an international standard. Nonetheless, the standard should try to anticipate the well-established national standards and should reflect the experiences from valuers and other groups of the real estate industry.

16. RICS RUSSIA - Group Response, Germany: *Office buildings in multifunctional business centers of Russia are used by Russian and foreign citizens and organizations. In this connection IPMS concept (International Property Measuring Standard) proposed by the coalition for offices is actual in Russia as well.*

17. CLGE- Jean-Yves Pirlot, Belgium: *CLGE supports the concept of IPMS for Offices, but we would like to express our doubts regarding the idea or need to prepare separate international standards for the measurement of offices, residential, industrial and retail property and mixed use. One of the founding ideas, heralded as a visionary approach, was the quest for simplicity and transparency. By introducing several different codes, one creates artificial complexity and again a lack of transparency. Moreover, during the lifespan of a building its purpose can be changed, e.g. a former industrial building can be turned into a residential one. In such a case there will be a need to apply different standards for measurement of the same building and possibly different areas would be calculated.*

For CLGE it's clear that the same principles for measurement have to apply for all purposes of use of a building and one single standard should be prepared (at least one single classification in categories usable for all buildings). One single standard would enable better understanding of property areas and values. A single measuring standard is necessary not just for the protection of European consumers, but as a safeguard for professionals too. The use of a single measuring standard by all professionals will provide the consumer with better protection by guaranteeing a surface area within these boundaries. For the consumer, business or investor, use of the single standard will help to establish a standardized product to assist in the valuation (market values, rental values, etc.) and management of buildings, and the preparation of reliable statistics. This will strengthen both market transparency and economic guarantees. Many of our members see the production of several standards as an unacceptable threat to the whole endeavour. Keep also in mind that the SSC of IPMS is working on a measurement standard and not on a valuation standard, a facility management standard or a property finance standard.

18. APREA - Peter Mitchell, Singapore: *Yes – I believe it is an important step into bringing uniformity to the measurements of office accommodation.*

19. CBRE - Simon Lewsey, UK: *In general there is support for the principle of an international standard.*

20. CEM - Sylvia Osborn, UK: *Yes.*

21. JLL VIETNAM - Chris Murphy, Vietnam: *Yes.*

22. CEM - Sylvia Osborn, UK: Yes, certainly. *In general the document is very clear and well structured. It is general enough as not to be completely in contradiction with and can be complementary to what is in place in our countries. It has an important added value, not only for international organisations but also locally, where misinterpretations may exist regarding local guidelines. Quite convinced of the importance of having a standard which will work for every business line and country.*
23. APPRAISAL INSTITUTE - Ken Wilson, USA: Yes.
24. RICS CORPORATE OCCUPIERS GROUP - Julian Lyon, UK: *RICS COG are keen supporters of the initiative and the progress made to date. The initial document for Offices is a good start but RICS COG represents operators of properties beyond offices and will be keen to understand how the various different sector standards will be implemented so that hybrid properties (mixed office and industrial or laboratories and research establishments for example) will be handled. It is not clear from the draft Offices standard whether this will be a comfortable fit. When one looks at office leases in the outskirts of Paris, for example, it is not unusual to have a floor of "activités" which may behave somewhat like workshop space. It will be important for the application of service charges and rents to respective areas to understand how these specific areas might be treated.*
25. RISM CASLE - Dr. Ting Kien Hwa, Malaysia: *Generally Yes. Other comments are:*
- *But should not override local measurement standards for local practitioners.*
 - *IPMS does not address the issue of a single measurement that allows comparison between properties in other countries. Instead there are 4 other standards (IFA Office 1 to 4) for International Floor Areas.*
26. RICS HUNGARY- Group Response, Hungary: Yes.
27. RICS SWEDEN- Group Response, Sweden: *Yes, we believe it is a good initiative to standardize measurements. There is a definite need for standardization in the property business, so this is a welcome initiative.*
28. RICS FRANCE - Group Response, France: *We support the concept of IPMS for Offices and we recommend that IPMS should be extended to any other kind of building: residential, retail, logistic.*
29. PLOWMAN CRAVEN - Group Response, Europe: *On the whole yes, we need to ensure that it is fully adopted in the particular countries where other codes are in place.*
30. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *Looking at the different interests that play a role on the international office market we endorse the idea of an international standard for measuring floor area. We*

believe that an international standard that is broadly used will contribute to a more transparent office market.

However to convince all parties to leave their own standard (national standards, standards of certain professional organizations etc.) and adopt another, international standard it is necessary that this international standard has a very high quality level and that all experiences of previous standards are used to optimize the international standard.

For instance the change in The Netherlands from the Dutch NEN2580 standard to the proposed international standard will lead to very high costs as well for government agencies as for companies like real estate investors, brokers, etc. We have the opinion that the standards given in the Consultation Document do not reach that high quality level yet."

31. IVBN - Frank van Blokland, Netherlands: *The harmonisation of national property measurements into one main international standard is a very challenging task and will eventually lead to changing the more detailed national measurement standards. This will than necessitate re-measurement of all properties, with high costs involved. We prefer an approach in which, on the basis of a study of the different national measurement standards (and thus not only using as a starting point the CLGE Measurement Code), the Coalition focusses on the most needed international general parameters and the necessary alignment of these main parameters, looking for more general definitions and working on an aggregate level and by doing so, leaving the much more detailed national standards as much as possible, unchanged. This process must be given time to develop and give the real estate industry to anticipate and adjust. We strongly suggest to the Coalition to discuss the costs of introducing an international measurement method to all owners and to relate this to the benefits it will bring to the stakeholders. The Coalition should and could help countries that do not have a suitable real estate measurement standard by starting to study the best or good practises in the several existing national standards. Upon this study a new international global standard could be based. But it should be kept abstract and general; ideally a new international measurement standard should be based upon several main and abstract topics which enables international comparison. We can understand the growing need for an international measurement standard, but only if it is gradually developed and introduced and will not bring about huge costs for re-measurement. Obviously an international standard will be more abstract and less detailed than national measurement standards. (For example, the Dutch measurement standard NEN 2580 is a much more detailed and is well rooted local in standard/practice. It is well suited and also generally accepted (by all Dutch actors) for real estate purposes. This harmonisation process is now started from within the real estate industry itself, which is a good thing. We should welcome however that the Coalition works along with the existing international standards committee like*

CEN. For example, the European facility managers have been active on producing a facility management standard (EN 15221-6) which could be (on a general level) of help in the process. In the Netherlands however, we concluded that the European facility management was not suitable to replace the Dutch standard which is much more detailed and also dedicated to real estate purposes.

32. RICS PORTUGAL - Group Response, Portugal: *Yes. We support and recognize the importance of clearly identifying the criteria used for the measurement, making comparable the outputs from the measurements that are used for different purposes in the real estate market.*
33. JIQS - Group Response, Jamaica: *The concept of The IMPS for offices is one supported by the JIQS.*
34. TONY WESTCOTT - Tony Westcott, UK: *Yes.*
35. HYPZERT- Sabine Georgi, Germany: *Yes.*
36. BCIS - Joe Martin, UK: *Yes.*
37. PCA - Chris Mountford, Australia: *The Property Council is a foundation member of the International Property Measurement Standards Coalition and strongly supports the Coalition's aim of establishing an international standard for property measurement.*
38. RICS NETHERLANDS- Group Response, Holland: *Yes.*
39. RICS ROMANIA - Group Response, Romania: *Yes.*
40. CW BRAZIL - Claudio Bernardes, UK : *Yes, Cushman & Wakefield (C&W) supports the concept.*
41. CEN/TC for Facility Management - Dr. ir. Hermen Jan van Ree, Netherlands : *CEN/TC 248 for Facility Management supports the need for a global standard for area (and space) measurement of built objects. Considering the number of standards available the preferred next step would be to develop an ISO Standard together with all relevant stakeholder groups (Asset Management, Real Estate, Facility Management, Quantity Surveyors, etc.)*

With respect to the concept of IPMS for Offices and to avoid conflict with other standards currently in use, we strongly suggest the following additions / amendments:

- 1) *Include a framework as per the last slide of the PowerPoint attached*

- 2) Consider including an included/excluded tick-list similar to the one in Annex A of EN 15221-6 (or Appendix A of the IPD Space Code)
- 3) Introduce an 'Internal Construction' building block under IPMS Office Area 1 (and remove 'structural enclosing walls' from Category A to E (see last PPT slide)
- 4) Also include internal structural columns (larger than e.g. 0.5 m²) in this building block 'Internal Construction' (see last PPT slide)
- 5) Include voids, cavities and areas with a height less than 1.5 meter under the building block 'Atriums above lowest level' (perhaps to be renamed to Unusable Area) (see last PPT slide)
- 6) Include external columns and piers under the building block 'External Construction' (see last PPT slide)

42. RICS CZECH- Steve Withers, Czech Republic: *It would seem strange to have a global standard only for one type of built area, why are we not implementing for other asset classes, probably as office is "easiest" – I think unless there is one standard across all property types, then we don't solve the issue which IPMS is addressing. So whilst I can agree with much of the content of IPMS and the reasons behind this, it really needs to go further and address all asset classes, else risks jut being "another" measurement standard.*

Response Summary: There were 42 responses to this question and a range of different opinions. A number of respondees stated the benefits of their own existing standards and could not understand why these principles were not adopted. However on the whole the respondees were overwhelmingly in favour of the concept and need for IPMS for Offices.

Some of the responses suggested that there should not be separate standards for different classes of buildings.

SSC Rationale:

Based on the responses and due to the inherent complexities and potential differences in various classes of building the SSC felt it was critical to consider the measurement of each class of building individually.

IPMS principles, methodology and measurement practices used in the standard about office buildings will be applied when future IPMS standards for other building classes, for example, residential, industrial and retail, are drafted by the SSC. These will need to be consistent as another class of building is mixed use, which would incorporate several IPMS Standards. There will be consistency between these standards with IPMS 1 being the same for all classes of buildings in the absence of physical modifications.

Q2. Is the Draft fit for purpose as it stands? If not, what issues need to be addressed in the Standard or in supporting Guidance Notes?

Consultation Responses:

1. SCOTTISH GOVERNMENT - Anthony Andrew, Scotland: *Yes. Would there be merit in a list of references or sources?*
2. CIREA - Coco, China: *Some special issues are needed to indicate, such as offices of the type that jump a layer have indoor stairs, then the aggregate of the areas of each layer of indoor stairs should be combined into floor area. And the thickness of internal wall for fitting up should be included in the floor area as well.*
3. PAUL VARTY - Paul Varty, Hong Kong: *My overall concern is that the standard is too complicated with a number of different standards, a number of categories as well as four different international floor area approaches. Due to this complexity I suspect that it would not be adopted in common use. Whilst it is in my opinion correct to identify the various type of area, there could perhaps then be a recommendation on which of these areas is to be used in transactions or other circumstances.*
4. OXFORD BROOKES - David Sheirs, UK: *Generally okay but the methods set out for the IPMS Office Area 3 calculations (page 17) seem complex and are hard to follow.*
5. RICS GERMANY - Group Response, Germany: **IPMS 1** - *It should measure two different areas: 1.1 inside (enclosed) areas and 1.2 outside (open) areas. The outside areas should include all balconies, terraces, and covered galleries. The external basement area should be calculated according to exact plans. If this is not possible extending the exterior plane should be allowed. This must be stated in the calculation afterwards. The definition of accessible roof space should be changed to “roof space usable/lettable”.*

IPMS 2 - *Is not commonly used in Germany. The definition seems to be not exact enough. For example, where to measure the extend of covered galleries? And how are the backset external construction features then taken into account? Please clarify.*

IPMS 3 - *Over all, areas could be reduced for an easier use and less options. The Standard is to support IVS and IFRS, both income based views on a property. We believe the standard should differ and group areas according to how they can be let, not according to what they are. Currently, the Standard supports the construction cost view on the building, looking at what it is. Columns and structural enclosing walls can be measured in one. The areas for in- and outdoor parking areas have to be measured. The number of spaces should be reported additionally. The sentence “In Categories B, C, and D, if in multifunctional use, the area is to be categorised*

according to the predominant use.” is not clear. So far, there was no separation of uses in the Standard. A new category would simplify the remaining categories:

F Construction Area

(i) external construction features

(ii) Structural enclosing walls + columns

(iii) Non-structural enclosing walls

IFA1-4 - *The aggregate of areas reported in the categories in IPMS Office Area 3 will not equate to IPMS Office Area 2 (see page 17). Therefore according to the model IFA 1-4 always include the difference of IPMS 2 – IPMS 3. If it is intended, that all IPMS 3 areas have to be measured, the exact IFA areas can be much easier calculated by adding the relevant IPMS 3 areas. In the current model, the area of parking spaces not measured in IPMS 3 but measured in IPMS 2, will automatically result in any IFA. Does that make sense?"*

6. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia: *API is disappointed that the Consultation Draft rather than creating a single Method of Measurement for offices attempts to legitimise the range of existing Methods of Measurement bringing them all under one Standard. We do acknowledge however the difficulties in each of the existing jurisdictions where it is not just the Method of Measurement but the whole market that has adopted the concepts flowing from the Existing Method of Measurement to the extent that all “Users” have developed perceptions of value suited to their own purpose. To change that thinking may prove unrealistic. The API does not believe the Aim of the Standard has been achieved:*

The aim of IPMS is to meet the requirements of Users of Property for consistency in measurement. Until now the stated area of floor space in identical buildings has varied considerably between countries, and possibly within various markets in the same country, because of differing measurement conventions. As the Standard is currently drafted, identical buildings will still have measured floor space varying considerably between countries albeit, with those existing methods legitimised as conforming to the Standard. Cross Border uses should be provided with a tool to reconcile the various “Applications”. Each measurement application should make provision for the “User” to add or delete (sub) categories as the case may be with all categories tabled to allow that conversion to be completed simply by the User.

This may be more costly however, if the status quo is to be maintained as regards adopting Applications to meet the existing methods of measurement this tool should be provided to the Users in the Standard.

The Consultation Document overall, but particularly the Applications is regarded as too complex heavy reading which will inevitably detract from realising adoption across the markets. Simplification would be of assistance. We also note that prima

facie reading of the document by the sub-committee set up to complete this response resulted in different interpretations. It was only after discussion that consensus was reached on the intent of various sections. This is the first reading of various sections but particularly Part 4 Applications was not clear as to the desired outcome.

The primary aim of the document should be to identify a single measurement that has a meaningful application across all jurisdictions. The document as it stands does not articulate this point and is considered to lack focus. We make the following specific comments:

3.1.3 Measuring IPMS Office Area 1

- (page 13) For clarity purposes – suggest delete the word external from 1st para 1st line.*
- (page 13) The 3rd para is confusing - The external area of basement levels is calculated by extending the exterior plane of the perimeter walls at ground floor level downwards, or by estimation if the extent of the basement differs from the footprint of the Building. Suggest less ambiguous rewording.*
- (page 14) The Diagram 1 – IPMS Office Area 1 seems inconsistent with the wording below it e.g. the open light wells, open external emergency stairways, roof terraces referred to in the text should be delineated on the plan view above.*

In Category D non-structural enclosing walls generally form part of the tenancy area and the area of that wall should be included in Category E. Therefore the qualification should be included that non-structural walls “where not enclosing a Work Area.

The current draft would help advance the cause of consistent space measurement but could not be expected to allow “global investors, occupiers and tenants to accurately compare space” .

- 7. IPD - Christopher Hedley, UK: We recommend that the general and detailed comments listed below be taken into account. A few simple changes would, in IPD’s view, increase the benefits of the proposed Standard markedly.*
- 8. DUTCH ASSOCIATION DVM - A.P.J. Timmerman, Holland: Compared with our NEN 2580 standard and 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.*
- 9. MOSTYN ESTATES LTD - Mike Bird, UK: Yes.*

10. RICS GREECE- Group Response, Greece: *We feel there is certainly a need to incorporate hotels as a distinct asset class. Tourism industry is critical for many European countries, especially those undergoing economic crisis and major reforms in the debt-laden southern countries. Mixed-use properties may also pose a challenge. Predominant use of whole building or separate measurement standards per designated areas? Also, they might be problems with unallocated areas. The way Standards are proposed (offices, residential, industrial, retail), it seems that they shall remain silent and open to interpretation on this issue. Roof space can be a very important asset for buildings (depending on their height as well) and there should be a measurement of roof, differentiated in the way proposed. The measurement should be on a horizontal basis in all cases.*

Measuring IPMS Office Area 1 (pg 13 & 14): Use of roof "space" or "terraces" is confusing. There should be a clear differentiation between various roof types definition such as "readily accessible to the public-tenants-users" meaning temporary recreational use by the employees-general population of the building; distinct from the visiting of "authorized personnel only" for maintenance of roof top installations like HVAC.

Or:

- roof terraces: areas which are accessible to occupants of the building, the surface of which where people walk is of a hard material which is resistant to piercing.*
- roof platforms: areas which are accessible solely for maintaining the building and which are covered by a watertight layer (roofing), or automatically protected (aluminium), or filled (shingle)*
- pitched roofs: areas which are sloping and inaccessible.*

General Principles of IPMS (pg 12): "Measurements are to be taken using methods in accordance with local market practice" – Should measurements be according to the building permit / as -build / as 'legalized'? – There should be a clear identification on the basis of the 'local practice' measurement and maybe more than one set of 'local practice' measurements need to be produced.

Diagram 4 – Vertical Penetrations (pg 19): Columns should not be included in Category A?

Property management is highly interested in the atria areas even above ground since it poses challenges in maintenance. On the other hand tenants and users are not that interested since these are not directly ""usable"" sq.m. However, a floor plate with an atrium is interesting in terms of daylight, or semi basement areas converted to main use. In that sense it adds some quality to the areas surrounding it.

A contractor (and sometimes a cost consultant) is highly interested in the atrium area even on the higher levels, thinking in terms of a total slab, albeit with a void. The construction material saved should be weighted to the extra formwork needed for the void, as well as architectural works around the void (extra façade vs a building w/o the atrium).

The Valuer may take into account the existence of the atrium as a qualitative characteristic during on-site inspection, to assign a slight premium to the estimated rental values (and subsequently to the market value) of the areas surrounding it, but the area of the atrium itself may not be used quantitatively. Finally, the developer will take the opposite position with everyone: comply with authorities as to not count the atrium in site quotas, negotiate the area out of the contractor's estimates, "sell" the atrium to the user, downplay its maintenance burden to the property manager, and draw the valuer's attention to the feature trying to extract more value for the building.

11. GIF - Axel v. Goldbeck, Germany: No.

12. RICS RUSSIA - Group Response, Russia: *In opinion of the Self-regulating organization of Non-commercial partnership "Cadastral engineers activity organization", the proposed project of International Property Measuring Standard for business buildings is suitable for adoption to building area rates in Russia.*

13. CLGE- Jean-Yves Pirlot, Belgium: *The Draft isn't fit for purpose as it stands. The standard doesn't meet all the requirements of civil society in terms of transparency and legal certainty.*

Missing elements:

- *At ground-floor level, any area open to the side and covered, other than by a roof overhang or decorative projection, is also included in the external area and measured on the basis of the vertical projection of the covering part.*
- *The draft needs a table to represent the results of the measurement. This table can be used to compare different measurements in a simple way. Changes in the construction or form of occupation may result in changes to the different areas. Any record of the areas should always therefore be dated.*
- *Add a glossary to avoid different understandings or interpretations.*

14. APREA - Peter Mitchell, Singapore: *We think the examples are sufficient.*

15. CBRE - Simon Lewsey, UK: *In general yes but its use should be monitored and there should be a review of the standard following its implementation to ensure that it is actually achieving the desired aim.*

16. CEM - Sylvia Osborn, UK: *More consideration is required for :*

1) the measurement of basements ; 2) the necessity for both IPMS office areas 3 and 4 - we think only one or other is required ; 3) clearer definition of structural and non-structural walls ; 4) double counting in diagram 5 and 6 ; 5) closer wording of aspects of Appendix 2;

2) a standardised unit of measurement could be metres which should then be expressed alongside the local equivalent"

17. JLL VIETNAM - Chris Murphy, Vietnam: *"It appears from the preamble that the standards aim to tackle the problem where 10,000 sq m of space in one country would be described as 12,000 sq m in another. The standards will not overcome this. The different numbers will still be used, and the only change will be that the standard used in the first country could be IFA Office 3, while the standard in the second may be IFA Office 1. Other individual comments follow.*

1 The concept of 'application' should be introduced before introducing 'categories'. As currently written it is difficult to understand the need for measurement of the categories. It will be helpful to say that applications represent different types of 'net' floor areas depending on the extent of adjustment needed as defined in the categories.

2 Following from this, we propose that 'category' should be renamed as 'adjustment group' and 'application' renamed as 'net floor area type'. This will aid interpretation both by

professionals and by lay users of the standards. Possibly categories A to D should be clarified as different deduction groups. Category E differs from the others in that it does not relate to potential deductions. Is it appropriate to include this in categories?

3 Plans to aid the definitions of IPMS Office Area 1 and IPMS Office Area 2 are included in the main text. However the plans for interpretation of the categories are in Appendix 1. There seems no reason for this different treatment and we suggest that the category plans should be incorporated in the text.

4 Diagram 2 shows both exclusion of roof terraces and inclusion of an atrium. However, both elements are the same colour. We suggest that different colours should be used for inclusions

and exclusions. This also applies to categories. If these are areas to be excluded from floor areas as defined they should use a different colour from the inclusion plans such as Diagram 1.

5 The term 'International Floor Area' is abbreviated to IFA, suggesting Internal Floor Area. We suggest a different name be given to this concept for the avoidance of misunderstanding."

18. RICS BENELUX - Group Response, Benelux: *It seems ok as long as it is clear to all stakeholders and that there's no misinterpretation between several other guidelines. One measurement standard used by occupiers, brokers, valuers, developers,*

investors, contractors, architects, building and land surveyors, should be the goal. What does the government?

What could be nevertheless addressed better is how to deal with local practices.

IPMS should for instance allow the local definitions of the 'lettable area' which is even literally mentioned as not included in the IPMS, this or by referring to / combining surfaces of IPMS or by an own local definition by creating a link towards one or more of the IPMS surfaces. Is there a transition period to foresee to evolve from the local practice to the IPMS (like we had at the introduction of the Euro – in parallel products in Belgium were still announced in Belgian Francs) or shouldn't IPMS allow the continuation of local codes – which is in our idea preferable if a local code (like BACS for the BeLux) is well and broadly embedded to be used for the "lettable area" for instance – like we see in the financial reporting world (for years and years we now have the IFRS and in parallel still the local GAAP that remains in place and has a real reason of existence).

A challenge will be to make sure everyone will use the IPMS once it's approved.

One should seriously consider to add "FAQ's" (Frequently Asked Questions). This allows to give correct interpretations of the general rules towards specific situations or 'exceptions' in a natural way."

19. APPRAISAL INSTITUTE - Ken Wilson, USA: *It seems ok as long as it is clear to all stakeholders and that there's no misinterpretation between several other guidelines. One measurement standard used by occupiers, brokers, valuers, developers, investors, contractors, architects, building and land surveyors, ... should be the goal. What does the government ?*

What could be nevertheless addressed better is how to deal with local practices.

IPMS should for instance allow the local definitions of the 'lettable area' which is even literally mentioned as not included in the IPMS, this or by referring to / combining surfaces of IPMS or by an own local definition by creating a link towards one or more of the IPMS surfaces. Is there a transition period to foresee to evolve from the local practice to the IPMS (like we had at the introduction of the Euro – in parallel products in Belgium were still announced in Belgian Francs) or shouldn't IPMS allow the continuation of local codes – which is in our idea preferable if a local code (like BACS for the BeLux) is well and broadly embedded to be used for the "lettable area" for instance – like we see in the financial reporting world (for years and years we now have the IFRS and in parallel still the local GAAP that remains in place and has a real reason of existence).

A challenge will be to make sure everyone will use the IPMS once it's approved. One should seriously consider to add "FAQ's" (Frequently Asked Questions). This allows to give correct interpretations of the general rules towards specific situations or 'exceptions' in a natural way."

20. RICS CORPORATE OCCUPIERS GROUP - Julian Lyon, UK: *No, generally market participants expect clear identification of below grade space. The draft standard seems to do what it sets out to do but it is very complicated and may put off the user of the standard who might find it intimidating. It is also the case that the use of colours in the examples is unhelpful for those who are colour blind and it is lost on those who tend to have black and white copies. It may be appropriate to consider using a mix of colour and hatching to ensure that the difference between the areas is clear and unambiguous in most circumstances. The use of IPMS Office Area n is understood since there may have been a desire to set new nomenclature rather than adopt someone's existing terminology. It achieves that goal but it leaves the user less wise than many of the individual standards that have preceded it because those standards have a more descriptive title. It should be considered whether there is an uncontroversial suffix that can be applied - for example IMPS Office Area 1 (External Area).*

There should be some indication or examples as to how the international standard can be applied to arrive at different local market practices (this would be required to demonstrate that there is no duplication of effort and that having collected and categorised the data, the output could actually be expressed in any national equivalent basis by simply applying the local formula. To an extent, this is what is achieved by setting out to define International Floor Area standards but it is then not clear that this IFA measure is consistent across all market sectors or if it is just for offices. In principle this should be workable but the draft does not make the compelling case for its use that RICS COG would have expected. This is probably a matter for presentation and of providing a simplified overlay for users.

21. RISM CASLE - Dr. Ting Kien Hwa, Malaysia: *Generally Yes. Other comments are:*

- It would be useful if method is verified to compare floor areas in different country – to convert into a single type of measurement.*
- The draft proposes 4 other standards (IFA Office 1 to 4) - there should only be 1 uniform standards to avoid confusions.*
- Usage of measurement standards should be specified as the required standards if any countries were to adopt it.*

22. RICS HUNGARY- Group Response, Hungary: *Not entirely. For the measurements it is acceptable however, when application is concerned the most important definition is missing, namely, the "leasable area", which the tenant/occupier pays for.*

23. RICS SWEDEN- Group Response, Sweden: *Yes, we believe it is a good starting point for further discussions.*
24. RICS FRANCE - Group Response, France: *Relating to area 2, the draft can be more precise about areas which are not accessible for measurement. Should IPMS intend to be dedicated to any kind of building; specifications can be provided for measurement of these other kinds of building. The draft can also be improved by including measurement relating to an internal area of the building. This internal area stands as a reference for benchmark in different scopes of activities in real estate practices: renting, transaction, valuation..., and it gives also consistency for international comparison. We recommend to remind that IPMS must be used coherently with current legal domestic standards relating to measurement.*
25. PLOWMAN CRAVEN - Group Response, Europe: *At present the standard is not fit for purpose, these is a number of issues that need to be addressed and these will be highlight later. Our main point is that the diagrams need to be clearer, with annotation of colour coding of the elements.*
26. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *We think that a comparison between this draft for an international standard and the different standards in use in different countries will lead to different topics that have to be described in more detail. In The Netherlands and Germany for instance, there are two very well described, commonly used standards, which give a much more detailed description of different floor areas, than the IPMS does. In the pages following, we point out some of the ambiguities we found in the IPMS. A very important example is how to deal with not accessible floors, for instance floors with a floor-to-ceiling height of less than 1.5 m (see Q6). This question however is not only related to Category E. We believe that introducing a norm that leaves certain ""open ends"" will probably not lead to much acceptance in countries where there is already a well-functioning standard for measuring floor area. Therefore to be a good substitute, the IPMS should give much more detailed information about different situations in different buildings and should also make choice that are in accordance with experiences in practice.*
27. RICS PORTUGAL - Group Response, Portugal: *We are of the opinion that the diagrams should be more detailed and that some more diagrams should be added, covering more situations that could arise, especially the common "grey" situations that can create different interpretations about what to include or exclude from the measurement. We think, given its importance, that a new category in IPMS Office 3 should be created for the car parking areas.*
28. JIQS - Group Response, Jamaica: *The JIQS considers the draft document to be fit for purpose.*

29. TONY WESTCOTT - Tony Westcott, UK: No – substantially ok, but see following comments.

30. HYPZERT- Sabine Georgi, Germany: No.

IPMS 1 - It should measure two different areas: 1.1 inside (enclosed) areas and 1.2 outside (open) areas. The outside areas should include all balconies, terraces, and covered galleries. The external basement area should be calculated according to exact plans. If this is not possible extending the exterior plane should be allowed. This must be stated in the calculation afterwards. The definition of accessible roof space should be changed to “roof space usable/lettable”.

IPMS 2 - Is not commonly used in Germany. The definition seems to be not exact enough. For example, where to measure the extent of covered galleries? And how are the backset external construction features then taken into account?

Please clarify.

IPMS 3 - Over all, areas could be reduced for an easier use and less options. The Standard is to support IVS and IFRS, both income based views on a property. We believe the standard should differ and group areas according to how they can be let, not according to what they are. Currently, the Standard supports the construction cost view on the building, looking at what it is. Columns and structural enclosing walls can be measured in one. The areas for in- and outdoor parking areas have to be measured. The number of spaces should be reported additionally. The sentence “In Categories B, C, and D, if in multifunctional use, the area is to be categorised according to the predominant use.” is not clear. So far, there was no separation of uses in the Standard.

A new category would simplify the remaining categories:

F Construction Area

(i) external construction features

(ii) Structural enclosing walls + columns

(iii) Non-structural enclosing walls

IFA1-4 - The aggregate of areas reported in the categories in IPMS Office Area 3 will not equate to IPMS Office Area 2 (see page 17). Therefore according to the model IFA 1-4 always include the difference of IPMS 2 – IPMS 3. If it is intended, that all IPMS 3 areas have to be measured, the exact IFA areas can be much easier calculated by adding the relevant IPMS 3 areas. In the current model, the area of parking spaces not measured in IPMS 3 but measured in IPMS 2, will automatically result in any IFA. Does that make sense?

31. BCIS - Joe Martin, UK: Yes, more or less.

32. PCA - Chris Mountford, Australia: The Property Council endorses the underlying approach of the draft IPMSO which is to facilitate cross border comparisons of the existing diverse range of national standards. It is not appropriate for the IPMSO to

seek to impose a singular method on all jurisdictions. However it is important that the language, definitions and descriptions embedded in the IPMSO are unambiguous. The Property Council is concerned that aspects of the current drafting may result in varying interpretations unless they are refined. We are particularly concerned with the lack of specificity/detail in the following areas.

- 1. IMPS Office Area 3 category and sub-category definitions.*
- 2. Diagrams.*
- 3. Issues not considered.*
- 4. Measurement accuracy.*

In respect of the issues not considered there are a number of important office measurement issues are not considered within the IPMSO. These include: Dominant wall, Treatment of internal stairs, Voids above stairs, Balconies, Awnings, Planter boxes. The Property Council's Method of Measurement provides guidance on all of these matters."

- 33. RICS NETHERLANDS- Group Response, Holland: NEN will look into this standard.*
- 34. RICS ROMANIA - Group Response, Romania: Yes, but I think it needs good Guidance notes, as it is a new concept.*
- 35. CW BRAZIL - Claudio Bernardes, UK : C&W believes that it should have a guidance notes explaining which of the IFAs areas should be used for agency leasing, etc. In our opinion the IFA 4 should be the established area to calculate rent values.*
- 36. CEN/TC for Facility Management - Dr. ir. Hermen Jan van Ree, Netherlands: As for Valuation Calculation Purposes you may need more detail concerning measurement. For example, a structural enclosing wall between a lift shaft (Category A) and a toilet (Category C) will need to evenly or proportionally split. Also, there is significant discussion about measuring staircases (a three storey building may have only two stairs).*
- 37. RICS CZECH- Steve Withers, Czech Republic: IPMS Office Area 1, 2 and 3 can create confusion, whilst the definitions are practical and work, the definition would better if as now referred to as GEA, GBA, GIA, NIA, NLA etc, I would prefer to see the words External and Internal in the definitions to clarify this and also Built and Leasable.*

Response Summary: There were 37 responses in relation to this question and the respondees stated a number of different opinions. Some respondees felt the standard was too complicated, whereas others felt the draft standard wasn't sufficiently detailed. The majority of respondees felt that IPMS Office Area 1 and 2 required further clarification.

Some respondees also felt that the Categories contained in IPMS Office Area 3 were too complicated and would add further confusion to the market and did not constitute a separate international office area standard, but were part of IPMS office Area 2.

Part 4 was also criticised for comprising four International Floor Area applications and therefore potential adding further confusion to the market through a lack of consistency.

A typical response in relation to this was as follows; *“...is disappointed that the Consultation Draft rather than creating a single Method of Measurement for offices attempts to legitimise the range of existing Methods of Measurement bringing them all under one Standard.”*

Other common responses included

- *an opinion that the same principles for measurement should apply for all purposes of use of a building and a single Standard should be prepared.*
- *IPMS does not address the issue of a single measurement that allows comparison between countries Rather produces 4 other standards.*
- *to convince all parties to leave their own standard and adopt another it is necessary that is a very high quality and all experiences of existing standards are used to optimise the international standard.*
- *Creation of a new standard will then necessitate re-measurement of all properties, with high costs involved. We prefer an approach in which, on the basis of a study of the different national measurement standards (and thus not only using as a starting point the CLGE Measurement Code), the Coalition focusses on the most needed international general parameters and the necessary alignment of these main parameters, looking for more general definitions and working on an aggregate level and by doing so, leaving the much more detailed national standards as much as possible, unchanged.*

The diagrams contained within the Appendices were also criticised in some responses for being insufficiently detailed or for including elements of double counting between Appendix 5 and 6.

SSC Rationale: The SSC realised that a radical change needed to be made to the structure of the initial Consultation Draft.

On particular issues the SSC panel of technical experts are of the opinion:

- The concepts between the various uses of property are such that there will be separate IPMS standards documents for each class of building with consistency between the principles, methodologies and measurement practices adopted for various uses.
- Accepts the comments that the Applications process was too complicated.
- The benefits and detriments of existing standards were robustly debated.

- Finally the SSC have revised all the diagrams contained within both the document and Appendices in order to provide further clarity. Further details on all these matters are contained within the appropriate section of this consultation response.

Q3. Does the Standard need to enable areas in exclusive occupation and those in shared use to be separately identified?

Consultation Responses:

1. EXPERT INVEST - Petar Andonov, Bulgaria: *We think that the Standard should enable areas in exclusive occupation and those in shared use to be separately identified. In this way it will achieve greater clarity and precision considering how many and what premises are shared.*
2. SCOTTISH GOVERNMENT - Anthony Andrew, Scotland: *Yes.*
3. CIREA - Coco, China: *It's better to identify clearly. The areas in shared use means the holder of the house should apportion public floor area of each joint possession or common use between the property owners, which include the elevator well, pipe well, stair, chute, substation rooms, equipment rooms, public hall, corridor, basement, the duty room with guards etc., as well as the whole of the service of public using and management room.*
4. PAUL VARTY - Paul Varty, Hong Kong: *I believe this would be highly desirable.*
5. OXFORD BROOKES - David Sheirs, UK: *Yes.*
6. RICS GERMANY - Group Response, Germany: *The standard is to support IVS and IFRS, both income based views on a property. We believe the standard should differ and group areas according to how they can be used and let, rather than according to what they are.*
7. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia: *The Standard does not cover the situation of multiple tenants on a single floor. There are a number of issues that would need to be considered including treatment of tenancy walls to common area circulation and inter tenancy walls.*
8. IPD - Christopher Hedley, UK: *It would be helpful if areas in exclusive occupation and those in shared use could be separately identified if the building is to have multiple users.*
9. DUTCH ASSOCIATION DVM - A.P.J. Timmerman, Holland: *In our opinion and in accordance with the current Dutch measurement standard NEN 2580, the definition of measurement of shared used space is a vital part of the standard and indispensable for daily (rental) measurement practice.*

10. MOSTYN ESTATES LTD - Mike Bird, UK: *No, that is not relevant to the dimensions of a building. Suitability for, or adaptations to allow, particular forms of occupation should be dealt with separately. Stick to a bald statement of standardised facts.*
11. RICS GREECE- Group Response, Greece: *This depends on the actual tenancy situation. On the other hand measurement should be object-oriented (i.e. the building and the areas themselves).*
12. GIF - Axel v. Goldbeck, Germany: *Yes.*
13. RICS RUSSIA - Group Response, Germany: *In opinion of the Self-regulating organization of Non-commercial partnership "Cadastral engineers activity organization", along with total area of a building (analog of the «Area №2») the areas of local rooms, both office and public (communication, technical, sanitary and hygienic) also have to be measured.*
14. CLGE- Jean-Yves Pirloty, Belgium: *The standard needs to enable areas in exclusive occupation and those in shared use to be separately identified to ensure owners and tenants legal certainty and to be transparent (which parts are private, which parts are common). A universal standard can't ignore the need for a distinction between private and common parts because it's source of a lot of problems. The standard needs a clear explanation of how to measure common areas (fixed rules, no choice for the one who's measuring). Therefore, CLGE proposes to add what follows: "For IPMS Office Area 1, the boundaries of common areas are defined as follows: - along the line of the wall contiguous with the private occupation; - along the plane of the outside wall in all other cases."*
15. APREA - Peter Mitchell, Singapore: *Yes we believe the standard needs to identify separately the two areas. Yes, but we understand that this is only for single ownership buildings. Once we get into strata title we need to be able to partition floors. For multi-let buildings there will be common corridors etc. Which seem to be excluded?"*
16. CBRE - Simon Lewsey, UK: *Yes it would be helpful if this is clearly defined.*
17. CEM - Sylvia Osborn, UK: *There may be issues between shared occupiers where structural enclosing walls may run between separate two separate demises, perhaps some guidance is required here.*
18. JLL VIETNAM - Chris Murphy, Vietnam: *Yes.*
19. RICS BENELUX - Group Response, Benelux: *A measurement of a property must be independent from its use or occupation. In this way a difference between exclusive or shared occupation shouldn't have to be made as this may evolve over time. But yes, a*

rule or process regarding areas in shared use should have to be added and is absolutely required in line with the basic IPMS principals: how to deal with surfaces in exclusive use commonly by some of the building users – this is a principle included in the BACS for instance.

20. APPRAISAL INSTITUTE - Ken Wilson, USA: No.

21. RICS CORPORATE OCCUPIERS GROUP - Julian Lyon, UK: *As long as lease plans are clear what is a shared area and what is exclusive it should not be necessary to apply any additional colours or hatching. On the other hand, specific areas of a building should be subtotalled in each category for the respective exclusive and shared uses.*

22. RISM CASLE - Dr. Ting Kien Hwa, Malaysia: *Generally Yes. Other comments are:*

- *Additional partition will reduce net floor area.*
- *The Standards are not clear in defining net lettable and non-lettable areas e.g voids which are covered or not covered are considered as auxiliary areas, columns and pillars are not included.*
- *“Exclusive” needs definition.*

23. RICS HUNGARY- Group Response, Hungary: *Yes, please see further comments in point Page 18. 4.1 Applications.*

24. RICS SWEDEN- Group Response, Sweden: *In some specific cases this will be necessary.*

25. RICS FRANCE - Group Response, France: *No, the standard does not need to enable areas in exclusive occupation and those in shared use to be separately identified.*

26. PLOWMAN CRAVEN - Group Response, Europe: *It does, many building have multiple tenancies and even on one floor you may have 2 or more tenants where part of the accommodation is shared.*

27. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *Yes, certainly. But it is also necessary to define the area rented by a company, when part of the space used is in exclusive occupation and other parts are shared with one or more other companies. To make rent prices per square meter comparable it is necessary to have an uniform definition of the area rented in this kind of situations.*

28. RICS PORTUGAL - Group Response, Portugal: *This is a grey area, since in the same building; it is likely to find floors with Circulation and Hygiene Areas that are shared and floors, with a single occupier, where those areas not shared areas. In Portugal buildings are divided in fractions, like offices, and besides the different fractions there are areas designated as common areas that, legally, can be used by any of the*

occupiers, tenants or landlords In the specific case of the offices, the common areas include in most cases the circulation areas, but in some cases also the Hygiene Areas. Considering the fact that an office with an area of 300 sqm where 60 sqm are common/shared areas, is not equal to an office with an area of 300 sqm where 20 sqm are common/shared areas, we think it is important to state separately the exclusively used and the shared areas.

29. JIQS - Group Response, Jamaica: *We are of the opinion that there should be differentiation of areas in exclusive occupation from those in shared use.*

30. TONY WESTCOTT - Tony Westcott, UK: Yes.

31. HYPZERT- Sabine Georgi, Germany: *The standard is to support IVS and IFRS, both income based views on a property. We believe the standard should differ and group areas according to how they can be used and let, rather than according to what they are.*

32. BCIS - Joe Martin, UK: Yes.

33. PCA - Chris Mountford, Australia: *The measurement of lettable area is necessarily different for a floor occupied by a single tenant compared to a floor with multiple tenants. Some areas/facilities that are available for the sole use of a single tenant may be required as common space/facilities in the case of a multiple-tenancy. Examples may include thoroughfares, foyers and hygiene facilities. This would clearly have an impact on what is or is not reasonable to include as lettable area within a lease. The Property Council is particularly concerned that this lack of distinction within the IPMSO reduces the clarity of: Category D: Circulation Areas in IMPS Office Area 3. Category E: Workspace/Amenities in IPMS Office Area 3. For example corridors that provide access to fire stairs may be considered workspace in a single tenancy. However in a multiple tenancy they may be considered circulation areas. The Property Council's Method of Measurement provides a clear distinction between multiple and single tenancy measurements and therefore would provide a sound basis for further clarification within the IPMSO.*

34. RICS NETHERLANDS- Group Response, Holland: Yes.

35. RICS ROMANIA - Group Response, Romania: *Yes, it is necessary to identify the areas in exclusive occupation and those shared, especially as the split can change according to the occupation, for example the same building is occupied by a single tenant or multi-tenanted.*

36. CW BRAZIL - Claudio Bernardes, UK : *Yes, we believe these areas have to be separated.*

37.CEN/TC for Facility Management - Dr. ir. Hermen Jan van Ree, Netherlands: *Yes, as this would be vital in determining rental values for occupiers sharing spaces such as an entrance with reception or cafeteria with seating.*

38.RICS CZECH- Steve Withers, Czech Republic: *I personally think that so long as we differentiate external, internal, built and leasable then the proposal can work, the problem would come when a multi-tenanted building and how the “common areas” are counted and allocated – would the shared space for entrance say on a 4 tenanted floor be classed as Category “D” – can this be leased, as all the measurement standards I know exclude this area from NLA.*

Response Summary: There were 38 responses in relation to this question and the vast majority felt that the Standard should enable those areas in exclusive occupation and those in shared use to be separately identified. However a small minority felt the Standard should only deal with measurement and therefore this was unnecessary. A number of comments also referred to a multi-occupant scenario and noted that the Consultation Draft only dealt with a single-occupant scenario.

SSC Rationale: Further to the consultation the SSC felt that the responses were overwhelmingly in favour of a standard, which would allow users to separately identify those parts in exclusive occupation. The SSC therefore revised the Components (previously Categories) in IPMS 2 to facilitate this separate identification when needed.

Moreover the SSC created a new IPMS Office Area 3 to deal with those areas that are exclusively occupied. IPMS Office Area 3 is now defined as *“The sum of the areas of each floor level of a Property available on an exclusive basis to an occupier, but excluding Standard Building Facilities, and reported on a floor-by-floor basis for each Building.”*

Q4. Does the Standard need to define more explicitly whether a floor is above or below ground level?

Consultation Responses:

1. EXPERT INVEST - Petar Andonov, Bulgaria: *We consider that the Standard needs to define more explicitly whether a floor is above or below ground level and suggest the following text: ' A floor is above ground level when the bottom is situated on and above average ground level ' and ' A floor is below ground level when the ceiling is situated under the average ground level or up to 0.30 m above'.*
2. SCOTTISH GOVERNMENT - Anthony Andrew, Scotland: *Yes – not just above or below – but semi-basements as well.*
3. CIREA - Coco, China: *It's unnecessary. The floor below ground level is generally classified into the category of basement.*
4. PAUL VARTY - Paul Varty, Hong Kong: *Yes. Again this would be very useful.*
5. OXFORD BROOKES - David Sheirs, UK: *Yes.*
6. RICS GERMANY - Group Response, Germany: *No.*
7. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia: *Perhaps, in particular car parking could be articulated more clearly by the addition of another Category in Appendix 1. Otherwise there is no benefit of defining what space is above or below ground.*
8. IPD - Christopher Hedley, UK: *It would be helpful to distinguish between floors (and part-floors) above and below ground level for IPMS Office Areas 1, 2 and 3.*
9. DUTCH ASSOCIATION DVM - A.P.J. Timmerman, Holland: *In our opinion and in accordance with local practice there is no need for further specification.*
10. MOSTYN ESTATES LTD - Mike Bird, UK: *Strictly, no, that is not relevant to the dimensions of a building. However, as it is something probably relevant to all data users (whether for occupation, reinstatement, etc), perhaps a means of readily identifying this could be devised. However, it should not interfere with standardising measurements (e.g. by weighting measurements depending upon location, above or below ground), as that begins to defeat the purpose of standardisation and is something about which different data users will have different views, so should be dealt with separately.*

11. RICS GREECE- Group Response, Greece: *Yes, there should be a clear definition on what is considered above and what below ground, in order to take into consideration the use of the area, health & safety conditions and daylight. According to the Greek Building Regulations, the definition of below ground-basement floor depends on the local planning regulations applied.*

If the under measurement building is situated within the city's plan, then a floor, whose ceiling is situated between ground level (0.00) and +1,20m above ground is regarded to be below ground. Otherwise, the basement's ceiling limit is reduced to +0,80m above ground, if no special planning regulations are applied.

12. GIF - Axel v. Goldbeck, Germany: No.

13. RICS RUSSIA - Group Response, Germany: *Under the Russian building code, offices have to be situated above ground floor, but underground areas of a building can have parking for personnel, that's why, in our opinion, separation of these areas are necessary.*

14. CLGE- Jean-Yves Pirlot, Belgium: *A building is generally composed of spaces above and below ground. Thus there are floors above ground and floors below ground. For measuring purposes, this distinction may be important in determining the conditions under which the premises may be used in the light of labour legislation and rules on fitness for habitation or taxation.*

In Europe there is currently no standard that lays down the conditions to be met for a floor, or part of a floor, to be described as above or below ground. For most buildings this distinction does not raise any questions of interpretation. However, in some exceptional cases, the layout of the building and the lie of the land require a distinction to be made for part of a floor.

If the standard doesn't explicitly define whether a floor is above or below ground level, then the standard will be in contradiction with part 2 - 2.1 - point 4 and 6 of the Draft that says "the measurement must be repeatable" and "the measurement must be objectively verifiable".

15. APREA - Peter Mitchell, Singapore: *No, but we don't seem to specifically address car parking.*

16. CBRE - Simon Lewsey, UK: *Yes it would be helpful if this is clearly defined.*

17. CEM - Sylvia Osborn, UK: *There is no specific mention of how office space below ground is to be treated – but note that "floor levels are to be recorded in accordance with local market practice" yet the standards and diagrams specifically mention entrance level, ground floor and upper floor. Some clarification may be helpful.*

18. JLL VIETNAM - Chris Murphy, Vietnam: *This is not needed but would be beneficial.*
19. RICS BENELUX - Group Response, Benelux: *It depends on the use, but yes, in general that would be necessary, especially for high buildings. For instance in floor area 1: usage for construction cost calculation and urban regulation context: below ground surface to be stated separately. Also to be clearer about the surrounding wall below ground, as mentioned below elsewhere. Those aspects are also foreseen in the BACS.*
20. APPRAISAL INSTITUTE - Ken Wilson, USA: *Yes, generally market participants expect clear identification of below grade space.*
21. RICS CORPORATE OCCUPIERS GROUP - Julian Lyon, UK: *The standard should make it clear how the levels relate to ground level (perhaps as a convention, since some sites slope and there is occasionally doubt as to exactly which level is 'Ground', it would be appropriate to categorise a building such that street level for the front/main entrance is Level 0 and the floors ascend or descend numerically from Level 0.*
22. RISM CASLE - Dr. Ting Kien Hwa, Malaysia: *Generally Yes. Other comments are:*
 - *Not entirely. Should be based on space usage i.e lettable/non-lettable space, space used for maintenance, etc.*
23. RICS HUNGARY- Group Response, Hungary: *Not more than currently*
24. RICS SWEDEN- Group Response, Sweden: *Yes, we assume that this is part of the legislation in most countries (as it is in Sweden). So this will need to be specified also in a future international standard.*
25. RICS FRANCE - Group Response, France: *We recommend that the Standard defines more explicitly whether a floor is above or below ground level.*
26. PLOWMAN CRAVEN - Group Response, Europe: *I don't think this is necessary to elaborate further.*
27. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *We don't think this is necessary. We think it is much more important to give guidelines whether a floor with a floor to ceiling height of less than 2 meter can be considered "workspace".*
28. RICS PORTUGAL - Group Response, Portugal: *It is of paramount importance, since those are completely different situations not only in terms of value but also on use.*
29. JIQS - Group Response, Jamaica: *The JIQS would support standards that define location of floors above and below ground level in particular.*

30. TONY WESTCOTT - Tony Westcott, UK: *Yes.*
31. HYPZERT- Sabine Georgi, Germany: *No.*
32. BCIS - Joe Martin, UK: *No.*
33. PCA - Chris Mountford, Australia: The Property Council does not consider the relationship of the floor to ground level a relevant factor to be incorporated into the IPMSO.
34. RICS NETHERLANDS- Group Response, Holland: *Yes. This is quite often relating to worker's council issues.*
35. RICS ROMANIA - Group Response, Romania: *Yes, perhaps as a Category / Sub-category in IPMS Office Area 3 which would give it the flexibility to be used according to local practices.*
36. CW BRAZIL - Claudio Bernardes, UK: *Yes. It has to be clear if the area below ground level will be considered leasable or not. There are some buildings that have leasable areas below ground level.*
37. CEN/TC for Facility Management - Dr. ir. Hermen Jan van Ree, Netherlands: *No comments.*
38. RICS CZECH- Steve Withers, Czech Republic: *Yes, I believe it should, often there is a difference in the grade of above and below ground floors, the Standard does not consider this, further below ground areas are often used for parking and storage and the "area" rentalised in a different way than the above ground floors, so it would make sense to follow this, i.e. size in m² / sqft and number of parking spaces, not exclusively one or the other. The FM cleans m², the user pays per parking spot, ratios may come into play for various stakeholders (BREEAM for example with lower parking ratios scoring more points on "in-use" certificates. Whilst elaborating this point, I don't think an underground structure has to mirror the above ground, it is logical from a construction perspective, but many examples of bigger basements to accommodate parking on fewer levels, and conversely, there are examples of above ground being greater than underground – have a look at the Barcelona Gas company building and see how you apply these standards to that building?*

Response Summary: There were 38 responses in relation to this question. However there was no consistency in response. A number of respondees felt that this was integral whereas other respondees felt that this was unnecessary. Further respondees misunderstood the

question and believed it was referring to basements or defining the floor levels of the building.

SSC Rationale: The SSC discussed the responses and the issues contained within and felt that the inclusion of a schedule defining components and floors would deal with a number of these issues. The SSC further felt that the definition of above and below ground varied on a national basis and was often defined in statute law.

This issue is further addressed in the Exposure Draft and there is a new Section 2.7, which deals with legal restrictions and provides examples such as;

- Above and below ground,
- Areas with limited height,
- Areas with limited natural light.

Q5. In relation to IPMS Office Area 2 should 'the predominant face' be defined in more detail?

Consultation Responses:

1. EXPERT INVEST - Petar Andonov, Bulgaria: *In relation to IPMS Office Area 2 'the predominant face' is clear especially from the sketch.*
2. SCOTTISH GOVERNMENT - Anthony Andrew, Scotland: *Yes. It may seem obvious what is meant, but on the ground could give rise to debate with more detail.*
3. CIREA - Coco, China: *That will be better if "the predominant face" could be defined in more details. It makes the standard clearer and more unambiguous.*
4. PAUL VARTY - Paul Varty, Hong Kong: *This is clearly understood in my opinion and would not require greater definition.*
5. DUBAI LAND - Mohamad Al-Dah, Dubai: *Regarding the issue of defining the "predominant face" of a wall, we would suggest the minimum distance that you could fit a desk at (i.e. at 90 cm height from the ground) . This is because we're dealing with offices, and ideally you will need the space to cater for desks and the like.*
6. OXFORD BROOKES - David Sheirs, UK: *Yes – or there will a legal challenge on the grounds of ambiguity at some point in the future! It could be in an Appendix?*

7. RICS GERMANY - Group Response, Germany: *Yes, please. If IPMS 2 is not correct, all IFA will result incorrect.*
8. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia: *No, 'predominant' is a well-defined term being 'present as the strongest or main.*
9. IPD - Christopher Hedley, UK: *The predominant face in IPMS Office Area 2 should be described in more detail.*
10. DUTCH ASSOCIATION DVM - A.P.J. Timmerman, Holland: *The added value of the Office Area 2 is not clear to us. There is no relation with our current measurement practices.*
11. MOSTYN ESTATES LTD - Mike Bird, UK: *It should be defined such that there can be no confusion, although it is hard to see how the standards could be more prescriptive other than to say a measurement must define "the predominant face".*
12. RICS GREECE- Group Response, Greece: *Yes, the 'predominant face' should be defined in more detail. Please note that on high streets or in general commercial areas, the predominant face is obviously the one facing the "main street" but normally the main entrance is located on the side, so as not to interrupt visibility and window façade of the ground floor retail.*

A definition of 'the predominant face' could be "the face along the only or the most visible/prominent public area/street frontage of the building/plot".

13. GIF - Axel v. Goldbeck, Germany: *Yes.*
14. RICS RUSSIA - Group Response, Germany: *"Under the Russian building code "Public buildings" the total area of a public building is measured with the same detail level as in the «Area №2» of IPMS.*

In opinion of the Self-regulating organization of Non-commercial partnership "Cadastral engineers activity organization", in some cases of the property management process the building area without underground level has to be calculated."
15. CLGE- Jean-Yves Pirloty, Belgium: *"On the one hand CLGE needs a more detailed definition, on the other hand CLGE will propose to change the term "predominant face" in "area measured on the floor" (keep in mind that we are measuring floor area!).*

If we have to measure "the predominant face" then we need a explanation in the draft to ensure that the difference between "the predominant face" and "the area measured on the floor" will be measured.

Other questions: At which height do we measure “the predominant face”? Quid if there is no “predominant face” (50-50%)?”

16. APREA - Peter Mitchell, Singapore: *We think that there should be clarification and a definition. Possibly the works should say “the (pre)dominant part of the wall face”.*
17. CBRE - Simon Lewsey, UK: *There are mixed views on this. The general consensus however is that the clarity offered by the Code of Measuring Practice is helpful. If the IPMS does not have a similar level of clarity this could result in differences in floor areas under the different bases of measurement which may cause confusion unless there is a requirement to be very clear as to the basis of measurement adopted.*
18. CEM - Sylvia Osborn, UK: *This is fairly clear.*
19. JLL VIETNAM - Chris Murphy, Vietnam: *No.*
20. RICS BENELUX - Group Response, Benelux: *“What is meant by the predominant face should be perfectly clear via the diagram, which may be a bit more explicit about it.

One should make it even more clear in the FAQs that we advise to add at the end.”*
21. APPRAISAL INSTITUTE - Ken Wilson, USA: *No.*
22. RICS CORPORATE OCCUPIERS GROUP - Julian Lyon, UK: *How does this phrase translate into other languages? In and for itself, it is a phrase which does not entirely explain its purpose and yet its purpose seems clear. In translation this concept may prove more challenging without a clear explanation or definition.*
23. RISM CASLE - Dr. Ting Kien Hwa, Malaysia: *“Generally Yes. Other comment are:
• Should be defined in more detail.”*
24. RICS HUNGARY- Group Response, Hungary: *No comment.*
25. RICS SWEDEN- Group Response, Sweden: *Maybe. We do not at his point have a strong opinion about this.*
26. RICS FRANCE - Group Response, France: *No, it is not necessary. We would like to suggest writing that “area should be measured on the floor”.*
27. PLOWMAN CRAVEN - Group Response, Europe: *Yes, for those countries that do not currently use the predominate face, the advice is not clear as to how the walls and therefore how the measurement is to be treated. Some simple diagrams may assist.*

28. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *Yes, it should. For instance, by defining a minimal size of the structural elements that will be seen as not part of this predominant internal wall face. For instance in the Dutch NEN2580 standard it is defined that when this structural element is larger than 0,5 square meter it should be taken into account. When the structural element is smaller the wall face is considered a straight line. Depending on the kind of structural element this can make the floor area smaller or larger.*
29. RICS PORTUGAL - Group Response, Portugal: *Yes. We think it is not clearly defined, specially because the affirmation "In doing so, columns or other building support systems that protrude inward are disregarded" create the notion that the IPMS Office Area 2 does not include those elements when in fact they are included. We think also that the diagram could be presented in a bigger scale with attention to the detail of the protruding elements that should be included in the measured area. We are of the opinion that it could be a good option to include diagrams with the right and the wrong measurement criteria.*
30. JIQS - Group Response, Jamaica: *The JIQS supports having "the predominant face" as described in "IPMS Office Area 2" clearly specified /and or described.*
31. TONY WESTCOTT - Tony Westcott, UK: *Yes. Perhaps include statement to the effect that where there is doubt or ambiguity about the 'predominant face', eg. where it represents less than 90% of the surface area, the 'predominant face' used for measurement shall be specified. Where there are significant intrusions from the 'predominant face', specify a minimum area beyond which area of intrusions are deducted from the measured floor area, eg. Columns projecting from the 'predominant face' more than 0.5m².*
32. HYPZERT- Sabine Georgi, Germany: *Yes, please. If IPMS 2 is not correct, all IFA will result incorrect.*
33. BCIS - Joe Martin, UK: *Yes it should identify it separately. 1.5m is a good cut off point.*
34. PCA - Chris Mountford, Australia: *"The IPMSO should provide a definition for determining the predominate internal and external wall face in IPMS Office Area 1 and 2. If a singular definition is not able to be achieved, multiple options should be established in a similar manner to the approach developed for the International Floor Area Office (IFAO) under IPMS Office Area 3. The Property Council's Method of Measurement provides the following clear definition of the dominant portion of a wall: DOMINANT PORTION is that portion of the internal or external (as relevant) finished surface of a vertical wall, which comprises in excess of 50% of the wall's surface area. If there is no dominant portion or if the dominant portion is not vertical, the measurement should be to the finished surface of the wall where it intersects the finished floor. Source: Method of Measurement, page 11. The Method of Measurement also provides detailed guidance*

and examples for determining the dominant portion and would therefore provide a sound basis for providing greater clarity within the IPMSO."

35. RICS NETHERLANDS- Group Response, Holland: *TBD.*

36. RICS ROMANIA - Group Response, Romania: *No, it is a reasonable description that most surveyors can relate to.*

37. CW BRAZIL - Claudio Bernardes, UK: *Yes, C&W believe the ' predominant face' expressions need to be clarify if RICS intends this new standard to be use in multiple markets around the globe. That definition is clear for America and European countries, but it is not for other regions.*

38. CEN/TC for Facility Management - Dr. ir. Hermen Jan van Ree, Netherlands: *Yes, as this is treated different in various countries and may again significantly impact rental values (e.g. landlords in the Netherlands prefer windows to the outer side of the perimeter as this means more rental income, whereas occupiers in the Netherlands prefer windows to the inner side of the perimeter as this means less rental charges).*

39. RICS CZECH- Steve Withers, Czech Republic: *I don't know, I think the problem is a generic one, if you detail too much you will be constricted and if not enough you have room to manoeuvre.*

Response Summary:

There were 39 responses to this question and for those respondees who live in an environment where the concept is adopted there was little concern.

On the other hand it was obvious there was a significant body of respondees that required further clarification. Responses ranged from *"Please note that on high streets or in general commercial areas, the predominant face is obviously the one facing the ""main street"" but normally the main entrance is located on the side,.... A definition of 'the predominant face' could be "the face along the only or the most visible/prominent public area/street frontage of the building/plot". To "This is clearly understood in my opinion and would not require greater definition.....'predominant' is a well-defined term being 'present as the strongest or main."*

The latter two recognised that the reference is to each face and not to a particular façade.

SSC Rationale:

SSC has modified the description of Predominant External Wall Face and Dominant Face to help clarify this matter. Further modifications and insertion of plans is proposed.

This issue is further addressed in the Exposure draft.

Q6. In IPMS Office Area 3 should Sub-category E(i) separately identify areas with a restricted floor-to-ceiling height? If so, should that be below 1.5m, or what alternative height?

Consultation Responses:

1. EXPERT INVEST - Petar Andonov, Bulgaria: *"In relation to IPMS Office Area 3 Sub-category E (i), we consider that the areas with a restricted floor-to-ceiling height below 1.5m should be identified separately.*
2. LITHUANIAN ASSOCIATION OF SURVEYORS - Rimantas Ramanaushas, Lithuania: *Next question to be resolved in the Draft is the minimum height of premises (in the roof spaces, under the stairs etc.) where the measurements of areas have not been made yet and still are to be performed. We suggest that such height could be 1.50- 1.60 meter. We think that the building floor areas with the height less than 1.50- 1.60 meter cannot be used for any purpose.*
3. SCOTTISH GOVERNMENT - Anthony Andrew, Scotland: *Yes it should identify areas with a restricted wall to ceiling height and 1.5m is consistent with RICS UK precedent.*
4. CIREA - Coco, China: *It's unnecessary to limit the height from floor to ceiling. The height does not affect the area measurement.*
5. PAUL VARTY - Paul Varty, Hong Kong: *Yes. This would be useful. 1.5m seems very low and I would think 1.8m would be more appropriate. Also it should clearly state whether this is measured to floor slab or the finished floor with tiles etc.*
6. DUBAI LAND - Mohamad Al-Dah, Dubai: *Regarding the issue of low headroom, we would suggest classifying anything below 2.0m as low headroom for obvious reasons.*
7. OXFORD BROOKES - David Sheirs, UK: *"Definitely identify restricted floor-to-ceiling heights. Perhaps 2.3m would be a better height to use as this was a minimum standard in many buildings for many years.*
8. RICS GERMANY - Group Response, Germany: *Yes, they should be identified separately, 1.5m is okay.*
9. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia; *Yes, suggest 1.8 metres would be more appropriate for a universal standard. Australian Method of*

Measurement is currently 1.5 metres. Area below 1.8 metre has a different utility and should be separately measured.

10. IPD - Christopher Hedley, UK: *Consideration should be given to how all areas with restricted floor-to-ceiling heights should be treated when calculating Office Areas 1, 2 and 3.*
11. DUTCH ASSOCIATION DVM - A.P.J. Timmerman, Holland: *This is not an issue. Although this is not an issue for us, a height of 1.50 meter is a common standard height for demarcations. We see other issues that need to be solved.*
12. PAUL COLLINS- Paul Collins, UK: *"This is entirely a legitimate issue to be clear about, and most certainly should be appropriately identified. However, I'm not sure why 1.5m has been chosen in that that it is below useable space areas, other for storage or plant and machinery. I think it might be better to use a close standard of less than 2.4m as accepted for standard offices. More importantly, should there also an internationally agreed set measurements for floor-ceiling heights in offices in general? Simply clarity should be sought as to whether vertical measurements include a raised floor or dropped ceiling - or as in older buildings where there may not be either – but could be refitted to include such. There could also be agreed measurements in relation to floor-to-floor measurements. One way or another, having the vertical dimension might aid the consideration of issues in relation to space heating and energy calculations.*
13. MOSTYN ESTATES LTD - Mike Bird, UK: *Yes, there needs to be a common understanding of what constitutes usable space for work/amenity. 1.5m seems right and is pretty much in line with UK current practice, but whatever height is adopted will need to have widest acceptance.*
14. RICS GREECE- Group Response, Greece: *"Height should be noted at all times as a separate measurement as it has an impact on the attractiveness of the area under consideration, as well as its heating / cooling needs (ie it has value and cost implications). So, it should be identified in subcategories E(i) –workspace /amenities and C(i) – hygiene areas and D(i) -circulation areas whose height is of equal importance. According to the Greek Building Regulations the minimum "floor-to-ceiling height" for main areas is 2.65m and for auxiliary areas 2.20m, in order to allow human entry.*
15. GIF - Axel v. Goldbeck, Germany: *Yes.*
16. RICS RUSSIA - Group Response, Germany: *"Under the Russian regulations of operating area calculation the following areas have to be excluded from calculation:*
 1. *Having height from a floor to an overhang construction equal or less than 1,8m.*
 2. *Having inclined walls, at inclination 60° h = 0,5m or less, 45° h = 1,2m or less, 30° h = 1,5m or less*

3. *Excluding areas under the stairs inside a building in case of height from a floor to overhang stairs construction equal or less than 1.6m.*

17. CLGE- Jean-Yves Pirlot, Belgium: *"IPMS Office Area 3 should separately identify areas with a restricted floor-to-ceiling height of 2.1m. Separate areas depending on a restricted floor-to-ceiling height of 2.1m are not only needed in sub-category E(i), but also in sub-categories C(i) and D(i). A distinction between "primary areas" and "residual areas" is needed.*

Let's illustrate this with an example: an office building with 90% "primary area" and 10% "residual area" will have a different value as an office building with 50% "primary area" and 50% "residual area". If we don't make a distinction, the measurement will be identical for both buildings (100% area) and thus both buildings will have the same value. If we make this distinction at the moment of measurement, another value can be given to the residual area at the moment of valuation and the value of the buildings will be different. Moreover, part 2 - 2.1 - point 6 and 9 of the draft state that the measurement must be transparent and objectively verifiable. Without this distinction it's not possible to do so.

The existence of separate areas depending on a restricted floor-to-ceiling height of 2.1m (areas with a height below 2.1m and areas with a height above 2.1m) is important for valuations, facility management, taxation, ...For CLGE, all areas – independent of their height – have to be measured. To be clarified in the standard."

18. APREA - Peter Mitchell, Singapore: *Why does this apply just to 3E(i)? Why not to all areas? Agree with 1.5m.*

19. CBRE - Simon Lewsey, UK: *It is helpful to ensure that these areas are identified separately in the way they would be for example in a "Plowman Craven" or a similar survey. It is then for the valuer to decide the value to be applied to these areas. This has historically been accepted as a compromise albeit we often see the area under such height being fully utilised.*

20. CEM - Sylvia Osborn, UK: *This would be a useful addition – the UK code states that areas below 1.5m which seems to work well but more input from practitioners is advised.*

21. JLL VIETNAM - Chris Murphy, Vietnam. *Yes; 1.5m is appropriate.*

22. RICS BENELUX - Group Response, Benelux: *"1.5m seems to be a good cut off. We have nevertheless the suggestion to split the category E into at least 2 (so an E and F or an E and E') or even more, namely in pure workspace on one hand and in primary private circulation on the other hand, or other separate categories for archives etc. It is namely the net usable private surface that will really interest an occupier or tenant. This private*

primary circulation is the 'minimum' necessary circulation to enable people to arrive at all office parts and is independent from the fact if the offices are closed or in open landscape. "

23. APPRAISAL INSTITUTE - Ken Wilson, USA :*Yes, 1.5m (or approximately 5 feet) appears reasonable.*
24. RICS CORPORATE OCCUPIERS GROUP - Julian Lyon, UK: *Perhaps there should be a separate category for such areas. RICS COG does not have a definitive view but this should be referred to Valuers to understand the point at which value is affected by restricted height.*
25. RISM CASLE - Dr. Ting Kien Hwa, Malaysia: *"Yes. See below.*
- It should be below 1.5m to cover most human height. Spaces below that height may fetch a lower rental.*
 - State the average measureable ceiling height accepted in various countries. "*
26. RICS HUNGARY- Group Response, Hungary: *Yes, areas below 1.9 m shall not be calculated at all.*
27. RICS SWEDEN- Group Response, Sweden: *Yes, we assume this is part of the legislation/standard in most countries as it is. The suggested 1.5m, we believe is a bit low. Swedish standard for residential apartments is 1.9m, which might be a bit high.*
28. RICS FRANCE - Group Response, France: *Yes, in IPMS Office Area 3, Sub-category E should separately identify areas with a restricted floor-to-ceiling height but with a higher height than 1.5m. We recommend at least 1.8m, and ideally 2.1m.*
29. PLOWMAN CRAVEN - Group Response, Europe: *Areas with headroom below a certain height should definitely be separately identified as it equates to different rents and usability. It may be down to the guidance note produced by each country to define this height, the UK has 1.5m but other countries may have 2.1m.*
30. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *It seems logical to differentiate between floors with a minimal height of 1.5m and floors with a lower height. However this is not only relevant for Category E. We think it will be useful to distinct between floors with a minimal floor-to-ceiling height of 1.5 meter and floors with a lower height already in the definition of IPMS office area 2. Only when floor-to-ceiling height is over 1,5 meter the area should considered as part of IPMS Office Area 2. Even when spaces with a floor-to-ceiling height of less than 1,5 meter are not considered part of IPMS office area 2, it can be useful exclude areas with a limited floor-to-ceiling*

height (for instance less than 2 meter) from the workspace area, for they aren't useful as such.

31. RICS PORTUGAL - Group Response, Portugal: *"In Portugal it is legally defined that the minimum floor to ceiling height for spaces to be used as offices is 3,0 m, that can be reduced to 2,7 m in pre existing buildings adapted to office buildings. It is clear that areas with floor to ceiling height bellow 2,7 m are not in compliance with the current legal requirements. Even if the offices have a use permit prior to the law being changed, and therefore, their use as office space is legal, the existence of a lower FTCH have impact in the market value of those areas. We therefore think that it should be stated the areas that are below the minimum current legal FTCH of 2,7 m. On the other hand, the practice in Portugal, even when owning a use permit, is to not consider areas with a FTCH below 2,0 m, that only can be used as storage or cabinets, that should be clearly identified and maybe considered in no more than 50% of its extend. "*
32. JIQS - Group Response, Jamaica: *Areas having restricted floor – ceiling heights should be separately identified. Such areas should be described from a minimum height of 2000 mm and in stages not exceeding 500mm below minimum.*
33. TONY WESTCOTT - Tony Westcott, UK : *Yes – 1.5m.*
34. HYPZERT- Sabine Georgi, Germany: *Yes, they should be identified separately, 1.5m is okay.*
35. BCIS - Joe Martin, UK: *Yes.*
36. PCA - Chris Mountford, Australia: *The Property Council agrees that areas with a floor-to-ceiling height should be identified separately in line with the Method of Measurement: 1.3.3 areas where there is less than 1.5 metre height clearance above floor level—these spaces should be measured and recorded separately (see diagram page 31). Source: Method of Measurement, page 17.*
37. RICS NETHERLANDS- Group Response, Holland: *TBD.*
38. RICS ROMANIA - Group Response, Romania: *Yes, if the area with restricted floor-to-ceiling height represents more than 2-3% of the entire usable area. Perhaps a min height of 2m height is more appropriate for work space. If the restricted floor-to-ceiling height area is negligible, then it is easier to include this area in the general workspace area.*
39. CW BRAZIL - Claudio Bernardes, UK: *C&W believe the Area 3 - subcategory E (I) should state that the restricted floor-ceiling -height should be below 1.8 m. The 1.8 meters is not enough to fit an office space, but it is a little higher than 1.5m as proposed. We know*

there are some equipment's and /or garbage spaces that need a ceiling high of 1.8 m, for example.

40. CEN/TC for Facility Management - Dr. ir. Hermen Jan van Ree, Netherlands : *"Yes, but this should apply to any area (e.g. also hygiene areas with a height less than 1.5 meter are pretty unusable). The most commonly used height would be 1.5 meter (some Scandinavian countries advocate 1.8 meter and CLGE at one point advocated 2.1 meter)."*

41. RICS CZECH- Steve Withers, Czech Republic: *I personally think that a 1.5m height can not be used for "office workspace" so should be somewhere else, but it could be used for many things such as storage, cleaning, technical rooms etc... the problem with taking a horizontal measurement only is that these issues will always occur, for example many apartments in CZ have 4 m or 5 m clear heights and some cheeky vendors have built mezzanine structures to "exaggerate" floor area, so they can effectively charge twice for the same space. Whilst I don't think this could happen under these standards, there doesn't seem to be any mezzanine areas considered – This is a mistake especially when most modern office building have double height (and sometimes triple height or full atrium type reception areas) – Mezz space should be measured and permitted and perhaps a minimum height level included for what is Office 3 (i.e. the number which will go into the lease).*

Response Summary: There were 41 responses in relation to this question. However there was no consistency in response. A number of respondents felt that restricted height should be identified and restricted heights were identified at between 1.2 metres (3.94 feet) and 2.3 metres (7.55 feet). Others believed that minimum heights should refer to all areas not just those contained within Sub-category E(i).

SSC Rationale: The SSC robustly discussed the extensive range of responses and the issues contained within. The SSC concluded that many restricted heights varied according to local national standards. SSC agreed that restricted (limited) height was more of a valuation issue and the IPMS for Offices should provide the horizontal two-dimensional areas that aggregate to the total IPMS 2.

This issue is further addressed in the Exposure Draft and there is a new Section 2.7, which deals with legal restrictions and provides examples such as;

- Above and below ground,
- Areas with limited height,
- Areas with limited natural light.

The restricted height areas should be addressed in the bridging guideline adopted in each jurisdiction.

General comments related to IPMS for Offices

Consultation Responses:

1. CORE IPMS - Jim Drysdale, MENE: *Wanted general call for clarification.*
2. MITIE - Simon Priestley, UK: *"Interesting study that would no doubt be useful to help establish a rule of thumb for Property and Asset Managers. For specifics around FM we all know there are so many variables that can greatly impact the FM costs. o Asset age, type and condition*
 - *Building age and associated infrastructure*
 - *Tenant usage type (e.g. high foot-fall makes big impact)*
 - *Space / ICT policy*

On the wider FM picture this may have some use as it could give a decent indicative range of cost per space. Specific to an FM provider it is very dangerous to estimate FM costs for properties / spaces without knowing the detail (in a previous life I've readily rejected tender submissions that have been done in this way). Best for FM is to know the client and the environment being serviced.

The trick we miss right now (but will get there some day) is to be able to aggregate all our client data (by building / space / type) to come up with a truly indicative FM cost. The amount of data we sit on top across a broad UK client base would be phenomenal to cut and dice. In theory this is mind blowing to think about but we are not currently in a state (with a breadth of systems holding inconsistent data sets) to even think this is in a "too hard to do box" (as it is beyond that right now!)."

3. BAM CONSTRUCT - John Burke, UK: *"Comments as follows but underlying them is the general view that a consistent common approach is good and UK most likely has an edge in offices*
 1. *Let's remember that the consumer [investor/tenant] needs to understand what is being measured. [So UK net lettable [sort of] works in office buildings although period buildings less so.]*
 2. *The consumer is less interested in gross areas.*
 3. *Let's go to Metric?*
 4. *A clear explanation to consumers whether reception areas are rentable is needed*
 5. *Gross areas are a measure of efficiency so why gross external when gross internal is easy to assess*
 6. *There is often confusion on cost planning between gross including or excluding car parking [and cost plans often offer up both] – regularise*

7. *Areas of limited headroom or other restrictions and how they are treated need to be clear*
 8. *The advent of the Space Measurement Professional is troubling-this used to be a surveyors job. 'Interpretation' by these Professionals of RICS standards in my experience has distorted what the consumer is actually getting. If that is to grow as a trend then clarity is needed in some of the more esoteric measurement standards eg up to the glass where sills are <28mm. [In The Netherlands there is a convention that says measure 50% of the sill as I recall]*
 9. *Many UK leases have stated floor areas used for rent reviews and service charges therefore there may be retrospective conversion*
 10. *Leases often refer to ERV per net lettable area and RICS standards which would need to be recalibrated*
 11. *Date eg IPD measures rent performance against net lettable floor areas would need to be recalibrated*
 12. *Periodic revaluation for funds and propcos that are often desk top would need to be recalibrated to compare like with like*
 13. *9-12 may involve considerable data conversion*
 14. *9-13 may lead to a recalibration of rent to any new measurement standard therefore considerable data conversion"*
4. WHITMARSH LOCKHART - James Lockhart, UK: *John has given a very succinct critique of the quality measurement standards. It is one of these classic conundrums of what appears to be a fairly straight forward issue at the outset, becomes more and more complex once you get into the detail.*
 5. LITHUANIAN ASSOCIATION OF SURVEYORS - Rimantas Ramanaushas, Lithuania 5: *The Draft does not cover buildings, which are under construction and physically damaged. It should be defined when the areas can and cannot be measured in such buildings.*
 6. SCOTTISH GOVERNMENT - Anthony Andrew, Scotland:
 - "i) Is there a role for cubic measurement which might be useful in space heating, and environmental analysis?*
 - ii) Does 'ceiling' need definition?*
 - iii) Is there merit in saying where the wider project hopes to go after the office guidelines?"*
 7. PAUL VARTY - Paul Varty, Hong Kong: *Undoubtedly the most frequent problem I come up against in dealing with submissions from parties is in respect of floor areas. Submissions by professional parties are frequently framed in their client's favour by the use of different definitions of floor area measurement for comparables and often the subject premises.*

8. GENSLER - Tom Houlihan, USA: *"We would welcome any standard that requires the least amount of discretion and interpretation. The interpretations we are required to define primarily fall in the definition of boundaries and the categorization of spaces. The boundary definitions depend on terms such as structure, finish, and dominant that has different meanings to different people. That is the inherent nature of language especially when translated to various cultures.*

We also recognize that when individual spaces are categorized by any criteria there is even more discretion required regardless of the method of category definitions. Spaces can be categorized by function, control, configuration, use type, etc. etc. None of these can be defined in such a way that they are absolutely clear for all circumstances. Ironically, the more precise a standard attempts to become the more interpretation is required. When a standard is refined to satisfy a specific use or answer a specific question it will generally become less pertinent to other uses.

Does this mean that there is no value in attempting to specify a standard that indicates boundaries or classifies space? Not if everyone recognizes that the standard is simply a common reference from which to begin a discussion. That is why it is important that the standard be at least understandable to the various parties.

While we don't attempt to judge the value of any one standard versus another we do find that some are easier to explain for certain uses. The most impactful problems arise when inappropriate terminology is referred to in an agreement between parties. This happens when the people preparing the agreement do not understand the standard well enough to use terminology that fits their intent.

Are the definitions and categories that you propose in your standard clearer than those of other local standards? Probably not. It all depends on how the resulting metrics are to be used. Are they as workable? Probably. Be aware that the BOMA office standard is a 64 page document that has over 350 pages of "clarifications". You can pretty much assume that you will be drawn down a similar path over time. From that assumption we do not propose any technical tweaks to your draft at this time. "

9. DUBAI LAND - Mohamad Al-Dah, Dubai: *"Our preliminary area of concern is how to define common areas in buildings. Such areas include stairwells, lifts, access areas, communal corridors, etc. We would like the IPMS to be very clear about this. We have many problems with this regards here in Dubai, many of them reaching the courts.*

Our system at OLD at the moment is to measure the areas based on the centre-line of boundary walls . That's pretty much it. It's very crude and basic but it is consistent. We want to improve the accuracy of this which is why we will be working to adopt IPMS gradually in all property transactions in Dubai.4.

Using the names IPMS Office 1, 2, and 3 is brilliant! We like the idea and support not using Gross External Area, GIA and NIA etc."

10. JAREA - Koji Tanaka, Japan: *"Thank you for send us the IPMS draft. Our international committee of JAREA have looked at the contents, to understand well and to make any comments.*

In general, we have no particular objection nor problems, however, the followings are our observations in line with the customs and valuation practice in Japan.

- 1) We do not see any problems in terms of all the definition of Office Area 1, 2 and 3.*
- 2) For the lease agreements in japan, it is standard to use the floor area based on 'centre of wall' measurement. As such, the valuation (discounted cash flow method) also adopts that "centre of wall" floor measurement.*
- 3) On the other hand, GIA is often used for commonly hold- residential properties (e.g. condominium, apartments). However, it is not usual to use GIA for office properties, in terms of both floor measurement and lease or other contract agreements.*

We understand that each country has different regulations, requirements and circumstances, as such, the above comments are only to highlight the Japan specific circumstances, and we are not necessarily requesting that our comments need to be incorporated into the IPMS draft.

Our understanding is that IPMS would serve as a "common language" to provide a definition of floor measurement when so required.

As such, we do not see any problems about this IPMS draft which provides the common understanding (definition) of floor measurement, as it takes into account the different circumstances of each state and country."

11. IPD - Christopher Hedley, UK: *"The document should emphasise the value and use of consistent measurement and illustrate the benefits of standardisation more than it does at present. For example, consistent measures of useable space available to the tenant should allow end-users to:*

- a. Compare space efficiency across an international portfolio*
- b. Compare costs per unit of space from country to country*
- c. Make business decisions based on the above*
- d. Consequently save financial and other resources in running the portfolio*

The creation of space efficiency and similar ratios using floorspace figures does not appear to be recognised in the Consultation Draft. Such ratios require consistent definitions to be effective. The IPMS Office Areas 1 and 2 provide an overall standard for space which is broadly consistent from country to country. Nevertheless, the way in which IPMS Office Area 3 is expressed in terms of one or more of IFA 1, IFA 2, IFA 3 and

IFA 4 is not helpful, since different terminology will inevitably be applied to buildings in different regions. A uniform and consistent measurement of Office Area 3 in all countries should be identified.

IPD recognises that it would be difficult to build consensus behind one of the four IFA definitions. We therefore strongly suggest that the Standard recommends the publication of all four of these measures for each building. Given that the standard has chiefly been designed to apply to modern, large office facilities, the data should be easy to produce from CAD systems. The advantages of doing this are threefold:

- a. The industry's customers can adopt the standard with which they are most familiar.*
- b. The relationships between the four IFA definitions will become increasingly evident over time.*
- c. Gradually one of these four definitions might emerge as the industry's favourite.*

If the Standard does not include all four of these IFA measures, any one of them should be identified as the preferred way of describing "useable" space consistently from building to building. IPD prefers IFA 3 out of the four alternatives since it is arguably most proportionate to the rental or capital value of the building. To help users of the Standard, both professional and managerial, fuller definitions of the different types of space would be useful. (See points 21-24.) IPD would be happy to discuss with the Coalition's Standards Setting Committee the use of material from the IPD Global Estate Measurement Code for Occupiers. The ability to be able to choose whether to include parking space in the total amount of space under Office Area 1, 2 and 3 is most unhelpful. It will consequently not be possible to produce consistent floorspace figures, which is against the objective of the proposed Standard, as expressed by the Chair, Vice-Chair and Secretary General of the IPMS Coalition. Parking floorarea should be excluded altogether from Office Areas 1, 2 or 3 but (like roof terraces) be separately identified. Graphics and tables illustrating the differences between IFA1, IFA2, IFA3 and IFA4 would be helpful. We had to create tables to describe the differences to ourselves so that we could understand each of the IFA definitions. The application of this Standard to older buildings needs to be considered, especially where these buildings have a large number of personal/cellular offices and/or have extensive structural walls enclosing corridors. The Standard should incorporate a recommendation to produce plans within an information pack, preferably in electronic format, showing a scaled drawing of the layout of each floor in the office building with marked allocations to Office Areas 1, 2 and 3. These plans should then be passed to all stakeholders so that:

- a. All stakeholders use the same version of the office floorspace in the building to avoid unnecessary duplication of effort and any future dispute about measurement.*
- b. The new Standard is properly promoted. 17. IPD would be delighted to explain our comments more fully, if required."*

12. DUTCH ASSOCIATION DVM - A.P.J. Timmerman, Holland: *"As far as the Dutch measurement practices are concerned, the current and detailed NEN 2580 measurement is a functional and accepted standard in developmental and rental transactions.*

For European facility management practices, there is a recently introduced measurement standard, the EN 15221-6, that might be a good basis for further development towards the field of asset development and management. Therefore, we question the introduction of the IPMS as a new international (global) standard next to the current European standard. In our opinion, further development of the current European facility measurement standard EN 15211-6 would be a more efficient and structured starting point for global standardisation. Most appealing in this standard is 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.

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. "

13. PAUL COLLINS- Paul Collins, UK: *I am very supportive of the IPMS project and the rationale for the initiative. It is really good that the RICS is taking a lead on this.*

14. NEN - Mr R. van der Aa, Holland: *"When we received the first signals of the initiative of a new standard on measurement of property, we were surprised about the initiative and about the status of this document at that time; a consultation document.*

First of all, we do recognize the ambition of the Coalition to enable properties to be measured on a transparent basis that promotes market efficiency through greater confidence between investors, occupiers and funds. But, as a standardization body, NEN strongly supports the use of existing international standards on this subject or the use of international standardization organizations to develop the necessary standards (such as CEN and ISO). Published ISO—standards on many subjects have proven their value on matters of transparency, clarity and the principles of all parties concerned'. Therefore, we are surprised to note that the IPMS Coalition has developed a new method where already an international standard exists, i.e. ISO 9836:2011. ISO 9836 'Performance standards in building —Definition and calculation of area and space indicators' was published in October 2011. It was developed within the actual standardization procedures of ISO with appropriate input from all stakeholders who are involved in the standardization work of the ISO members. If the members of the IPMS Coalition are convinced that this ISO—standard is not workable or is incomplete, we strongly suggest you to contact the ISO Central Secretariat in Geneva to examine the possibilities to adapt

the existing ISO— standard. The publication of this new IPMS document is counterproductive to your aim for transparency in the world of property measurement. Furthermore, we have noted that there are several other standards on this issue. For instance, in the Netherlands we have the national standard NEN 2580 (also part of the national legislation), on European level we have the EN 15221-6 on Area and Space Measurement in Facility Management and at a global level we have the ISO 9836 (already mentioned). Also, we have the European Measurement Code for the floor area of buildings (developed by CLGE and part of the European Directive INSPIRE).

The publication of all these documents over the last few years has ensured that, at this moment, transparency in measurement methods for the property market is still! not agreeable. You can imagine that this will be even more enhanced when the IPMS Coalition publishes the IPMS document. We trust that our response to your consultation document will ensure that the IPMS Coalition contacts ISO to examine the possibilities of cooperation and thus to increase transparency in the international property market."

15. APREA - Peter Mitchell, Singapore APREA: *applauds the International Property Measurement Standards Coalition for the initiatives contained in the Consultation Paper.*
16. CBRE - Simon Lewsey, UK: *"I refer to your request for feedback in response to the consultation draft standard of measurement. From the discussions I have held internally within CBRE it seems there is a demand from international clients (both landlords and occupiers) for there to be a consistency in the way their portfolios are measured which is of course understandable. In my opinion, given the demand from our international clients for consistency, the proposal to introduce an internationally common standard of measurement is important and should be supported. I can of course understand that for many UK landlords who have no holding outside the UK that the current RICS code adequately protects their position but in Central London in particular where much of the market is dominated by international investors and large multi-national corporates the ability to compare their global assets on a level playing field has attractions. I do however have some concerns about the level of exposure of the consultation draft to date. I understand that the RICS ran a workshop earlier this year looking at the impact of IPMS but the comment from colleagues who attended was that representation from actual practitioners was poor. This is obviously disappointing but perhaps reflects the fact that although I have seen a variety of articles relating to the introduction of IPMS there seems to have been a lack of profile given to the introduction of the Standard and there is a lack of awareness other than perhaps from junior members who have recently sat or are due to sit their APC. Few of the people with whom I have spoken appear to have paid sufficient attention to the articles about IPMS. Those that have heard of IPMS don't seem to understand the depth of support it has from the various international bodies such as BOMA and the RICS. The common belief appears to be that the proposals will have limited chance of success. Given the lack of awareness I personally believe the consultation process should be extended to allow for a more high profile campaign to*

increase the exposure of the IPMS and secure greater industry feedback before it is introduced."

17. CEM - Sylvia Osborn, UK: *Yes, certainly. In general the document is very clear and well structured. It is general enough as not to be completely in contradiction with and can be complementary to what is in place in our countries. It has an important added value, not only for international organisations but also locally, where misinterpretations may exist regarding local guidelines. Quite convinced of the importance of having a standard, which will work for every business line and country.*

18. APPRAISAL INSTITUTE - Ken Wilson, USA: *"We have one specific concern relating to the inclusion of valuation methodology or guidance as part of the proposed property measurement standard. Section 1.4. "Purpose of IPMS," includes the following statement:*

Any measurement used as part of a valuation calculation should be consistent with the method that is used to analyse data from comparable transactions or other evidence. That is, the valuation should be calculated after consideration of evidence on a like-with-like basis.

We do not believe this statement belongs in IPMS, as it relates with appraisal methodology or the practical application of property measurement standards by valuation professionals. Such commentary would best belong in guidance documents, education materials or generally, the body of knowledge of real estate valuation. As such, we request this statement be removed, as it does not relate to the actual measurement of properties."

19. GLENN BLAKE - Glenn Blake, UK: *"The setting of a standard is to be welcomed. However, this appears to be drafted from the perspective of the building owner/ landlord/ investor with little consideration to the occupier. An IPMS office area for the workspace area that can be used by the occupier for his business -i.e. excluding wall all enclosing walls, columns, technical areas, vertical penetrations , hygiene and circulation areas and any areas that are incapable of beneficial occupation, should be an imperative. This would be the equivalent to the Net internal Area described in the RICS Code of Measuring Practice. As presented there are anomalies which, if removed would improve their credibility of the definitions that are given. It is asserted that IPMS office Area 2 is the aggregate of the categories in IPMS Office Area 3 a principle that is endorsed . As presented this is not the case. For example the, shaded area between the WCs in Category B - Technical Services areas (Diagram 5) are included in Category C - Hygiene Areas Category C (Diagram 6). Similarly the non-structural enclosing walls of the Category D- Circulation Areas are also included in the Category B -Technical Services and Category E - Workspace/Amenities. The Category E- Workspace/Amenities should exclude enclosing structural walls and columns to be consistent with JPMS Office Area 2. "*

20. RISM CASLE - Dr. Ting Kien Hwa, Malaysia:

- "• NFA should be usable area or quality area excluding the floor-for-ceiling below 2.0 metres, i.e. store below 2 metres or under staircase excluded.*
- IPMS should also get acceptance from engineers, architects, land surveyors, etc. and other related professions.*
- Need to clarify on double volume space, mezzanines, additional ceiling or rooftop space e.g. telecommunication tower sitting on rented space on rooftops."*

21. RICS SWITZERLAND - Group Response, Switzerland: *"- There is an important difference between the net area (IPMS 2) and the net area as understood under Swiss standards: in the Swiss standards load bearing walls and columns are excluded from the net area. This difference makes the IPMS incompatible with Swiss standards (and probably German standards as well). We would therefore suggest amending accordingly to be in line with International Standard (ISO 9836) as well as national standards.*

- Also there is a question about stairs: it seems they are once included in Category A and once in Category D. The reasoning behind is not 100% clear.*
- There are other measurement difference but not as important like the separate listing of sanitary rooms for example.*
- The structure of the document is quite complicated with categories and sub-categories. It makes the norm confusing to read and apply.*
- The purpose and the goal of the IFA's at the end of the document are unclear for most of the people. Do we need this? Would it be better to stick to IPMS 1, 2, 3, etc.?*
- One question was raised: is there a research done by IPMS regarding existing national standards?*
- There is also the wish to have more time to better involved national organisations and get support from them as well as deeper feedback."*

22. RICS FINLAND - Group Response, Finland: *"RICS Finland sees the benefits of standardised space measurement across countries. However, with regard to the proposal, we made some comparisons with the established Finnish space codes, and made the following remarks:*

- IPMS Office Area 1 is equivalent to the Finnish concept of Gross Area*
- IPMS Office Area 2: the closest reference here would be the Finnish "huoneistoala" ("so called useful floor area"), with the (quite significant) difference that IPMS OA2 includes many areas that are excluded from the Finnish concept; eg. stairs, technical facilities, lifts etc.*
- IPMS Office Area 3: is derived from IPMS Office Area 2, so the same challenges prevail as with the Office Area 2.*

The Finnish space codes, especially the concept of “huoneistoala” are very deeply rooted in the Finnish property and construction sectors, and widely used in legislation, building code, all kinds of agreements, property valuations, investors’ and managers’ data systems etc. We do not believe it’s realistic to change these - in any reasonable time frame – to something else, and, therefore, the international codes would not get any official status, or would not be used locally. Therefore, we think that – at least in the short term – it would make more sense to try to create some sort of a “translation key”, which would clearly highlight the key differences between the Finnish and the proposed international standards, which might be helpful for international players. The local standards would, however, prevail as the mainstream practice.

In addition, there are two points we would like to raise:

1) what is the relationship between this initiative and CEN? – CEN also includes international standards for, for instance, facilities management, and has also put reasonable effort on space measurement standards; so has this work been used in this process?

2) in CEN; the abbreviation “IFA” is used to refer to “internal floor area”. In this IPMS process, the same abbreviation refers to “international floor area”. This is a potential – and maybe unnecessary – source of confusion, or what do you think?

We are happy to discuss these in more detail."

23. PLOWMAN CRAVEN - Group Response, Europe: This is the collective response from Plowman Craven Limited a UK based Space Measurement Firm, operating across Europe. We welcome the opportunity to contribute and by so doing have more understanding of the proposed standard and some sort of ownership that we see being helpful in the future when we are operating at the ‘sharp-end’ and applying the details of the code in the commercial environment. There is a danger though of appearing overly critical but we trust that our comments will be considered as constructive ones borne out of 30 plus years to applying the RICS Code and putting its guidelines into practice. And it follows therefore that we might be thinking too much of the UK situation and the possible new RICS Code 7th Edition that will follow and not enough of the application of the IPMS Standard on the international stage. We would be interested to hear comments and responses from other countries such as USA, Australia and Europe on this consultation document. We imagine that revisions to existing RICS Codes in the past have been introduced as a means of simplifying and clarifying the guidelines. Elements of the IPMS Standard are far from simple and imply a greater degree of measuring and reporting much beyond the current practices within UK. And in that respect, there should be some expectation of opposition. If there is one major comment, it relates to the illustrative diagrams. These could be such a powerful tool towards effective communication and there is a need here to make the most of them with graphics, colours and reference number/labels. Previous editions of the RICS Code of Measuring Practice, we feel, have been hampered by the non-use of colour and the continued use of original plans that

whilst ensuring some consistency between editions did not reflect modern building layouts, especially in the case of offices.

24. IAAO - Group Response, USA: *The Standard is limited to buildings and floor areas. What about buildings with towers and other appurtenances? Structures such as dams with offices inside; industrial properties containing offices, etc.?*

25. IVBN - Frank van Blokland, Netherlands: *"The International Property Measurement Standards Coalition aims to bring about the harmonisation of national property measurement standards through the creation and adoption of agreed international standards for the measurement of office, residential, industrial and retail property. This initiative was taken by 28 real estate organisations in different parts of the world, including international operating organisations like the RICS, the Appraisal Institute and the Open Standards Consortium for Real Estate (OSCRE). IVBN understands the aim of the Coalition. At the same time, IVBN has several substantial reservations. We have discussed the IPMSC- proposal with the Dutch Association 'De Vierkante Meter' (the m2) and we quite agree with the comment this organisation has prepared. In especially we refer to their opinion that the current European facility measurement standard EN 15211-6 would be a more efficient and structured starting point for global standardization. Also we would like to underline their plea for a standard for the manner in which a measurement survey report is prepared. Anyone can prepare a measurement survey report with a measurement certificate, without there being any guarantees about the procedure followed and, above all, the results. The Association 'De Vierkante Meter' took the initiative of drafting a 'Guideline for the preparation of measurement certificates', and to convert it through in NTA 2581 "Preparing NEN 2580 Measurement Survey Reports"."*

26. RICS FACILITIES MANAGEMENT - Group Response, UK: *"The IPMS initiative aligns with the RICS FM Board objective to support RICS Members in the delivery of consistent high quality international working environments to public and private sector occupiers. The common approach intended through IPMS for office measurement, and in the future for other classes of accommodation, will support RICS Facilities Management objectives in:- Global Benchmark consistency of all aspects of occupancy cost including services, and Real Estate*

Consistent links from construction to delivery through BIM utilising a common approach to measurement

Consistent measurement for lifecycle costing

Common benchmarking for CSR initiatives at local and global level.

Benefits to a consistent approach to measurement are anticipated in tendering with a common approach anticipated to speed up the tender process.

From a CRE perspective taking account of all occupational costs, international common standards for measurement will support our members in Benchmarking across global

portfolios. This will help increase portfolio and service efficiency and enable our members to support clients in the efficient utilisation of their accommodation, It is also anticipated that in house teams devoted to cross-portfolio benchmarking will be a reduced overhead to the business they support."

27. PCA - Chris Mountford, Australia: *"The Property Council endorses the underlying approach of the draft IPMSO which is to facilitate cross border comparisons of the existing diverse range of national standards. It is not appropriate for the IPMSO to seek to impose a singular method on all jurisdictions. However it is important that the language, definitions and descriptions embedded in the IPMSO are unambiguous. The Property Council is concerned that aspects of the current drafting may result in varying interpretations unless they are refined. We are particularly concerned with the lack of specificity/detail in the following areas.1. IMPS Office Area 3 category and sub-category definitions. 2. Diagrams. 3. Issues not considered. 4. Measurement accuracy*
More detailed comments on the other concerns are contained within the relevant section of this spreadsheet. However in respect of the Issues not considered we believe that a number of important office measurement issues are not considered within the IPMSO. These include: Dominant wall, Treatment of internal stairs, Voids above stairs, Balconies, Awnings, Planter boxes

The Property Council's Method of Measurement provides guidance on all of these matters."

28. PCNZ - Connal Townsend, New Zealand: *"For a number of years Property Council has developed and published, in conjunction with the Property Institute of New Zealand, the New Zealand Guide for the Measurement of Rentable Areas.1 Whilst this New Zealand standard is unique, it broadly reflects the approach taken in The Property Council of Australia's Method of Measurement publication. The only differences between the two documents are subtle ones of emphasis. This is perhaps not surprising as the New Zealand commercial property industry operates in an Australasian market.*

For that reason, rather than submit directly, we have taken the opportunity to closely review the Property Council of Australia's recent submission to you on the development of the IPMSO.

We can advise that Property Council New Zealand broadly shares The Property Council of Australia's views.

We consider that Property Council of Australia have, in their submission raised entirely reasonable and valid points. We thank them for their work, and we support their submission and commend their views to you."

Response Summary: There were 28 general responses in relation to IPMS for Offices, which covered a wide range of issues. The majority of responses were favourable to the standard though requested areas of further detail and clarification or details

SSC Rationale: The SSC direct you to the rationale detailed in respect of Q2.

Page 8. IPMS Standards Setting Committee

Consultation Responses:

1. PERSONAL RESPONSE - Mark Griffin, UK: *"1.1 Definitions - Space Measurement Professional and Valuer Compare and contrast the definitions of 'Space Measurement Professional' and 'Valuer'. A Space Measurement Professional is usually called a land surveyor. By the same token a Valuer might be called a 'Space Value Estimating Professional'. A Valuer could be defined as a Service Provider qualified by experience or training to estimate the value of property in accordance with IPMS. A Land Surveyor might be defined as a Service Provider with appropriate professional qualification in land surveying. These definitions should be consistent."*
2. GENSLER - Tom Houlihan, USA: *"We would offer a suggestion for your consideration. It would be very valuable to us if just a "North Pole" was established that would give us a common reference by which other standards could be evaluated. Many clients ask us to perform an area analysis using multiple standards for the same building. They then ask us to explain where the differences are. An attempt to do that becomes an exercise of creating an extensive matrix that tries to define all of the variances in boundaries and classifications for all of the standards. Instead of doing this matrix exercise it would be very helpful to at least have a couple of basic building values that are defined from a construction or use perspective. Ideally the definitions would be based on geometry that would be apparent to at least 9 out of 10 surveyors. The goal of these definitions would not be to serve any specific use other than creating a clearly identifiable reference point from which all other standards could be evaluated. In database terms we would then have a many to one reference instead of a many to many reference. We believe that a geometric definition could be defined for an exterior perimeter, interior perimeter, and major voids on a building-wide basis. This could be the initial effort to establish the "latitude" of each local standard. The intent would be to set definitions that would be geometrically obvious even though the resulting areas might not "make any sense". In looking at the plans for a specific building interested parties could recognize how that particular building was measured and what adjustments to the number would be required for a particular purpose."*

(Examples)

Exterior building enclosure- The exterior perimeter area will be determined by measuring the intersection of the extended top of the horizontal surface to the furthest exterior connected vertical surface of the enclosing envelope surrounding the building in a continuous line.

Interior building perimeter - The interior perimeter area will be determined by measuring at the point where the top of the horizontal surface intersects the furthest interior vertical surface of the enclosing envelope in a continuous line.

Major void floor areas - Major void floor areas such as atriums will be measured at the edge of the opening at a point where the opening intersects the extended top horizontal surface of the floor.

Establishing a “longitude” would entail defining a Greenwich for the categorization of space within the perimeter and that would involve classifying spaces. For the reasons cited above we do not suggest that this be attempted at this time. We believe that a standard reference is achievable for space categorization but the required political shifts would probably limit the success of that effort and would probably threaten the success of the standard in general.

If you think there is an opportunity to define just the “North Pole” element in to the standard please consider it. Imagine trying to define the location of anything without a latitude and longitude reference. That is where real estate has been and is. We enthusiastically support your effort and will certainly encourage the adoption of whatever standard you ultimately arrive at.”

3. CEM - Sylvia Osborn, UK: *There is only one representative from the whole of continental Africa*

Response Summary: There were 3 general responses in relation to the Standard Setting Committee and definitions.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these responses. Whilst we understand the concerns in regard to the definitions to approach the issues in the manner discussed would be to introduce more complexity whereas our aim is the reverse.

Any further representation on the SSC by someone from other countries in Continental Africa provided that have the necessary level of expertise would be welcome.

Page 10. 1.2 Aim of the Standards

Consultation Responses:

1. JLL VIETNAM - Chris Murphy, Vietnam: *The word 'possibly' should be deleted. Either it has varied or it hasn't.*
2. PLOWMAN CRAVEN - Group Response, Europe: *"Definitions. Some clarification may be required over what is deemed as a qualified space measurement professional and whether this is needed to be specified in the reports"*
3. RICS NETHERLANDS- Group Response, Holland: *Why names, no institutions? What role (science, industry)?*

Response Summary: There were 3 general responses in relation to the Standard Setting Committee and definitions.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these responses. Definitions have been re-considered and where the SSC believed beneficial, amended.

Page 10. 1.3 Use of the Standards

Consultation Responses:

1. JAREA - Koji Tanaka, Japan: *Once again, many thanks for sending through the consultation document. It all seems very sensible to me as a layman in these matters. The one concern I did have was that the "Service Provider" (presumably a specialist surveyor) is the authority for the appropriate method of measurement (paragraph 2.2.3). I can see that as an expert, in that sense, he would be the appropriate person to nominate the measurements method. However, if the IPMS standard is all about consistency and conformity it seems to me it may be better to suggest a "default" mechanism which is departed from only with the consent of both the Service Provider and the party for whom the report is being written. Is this an area, which has been chewed over already and if so, please disregard my comments? If not, I can see it could be a contentious area.*
2. IPD - Christopher Hedley, UK: *Section 1.3. There is no need to include the second paragraph in this section since the whole purpose is to produce consistent and comparable numbers, irrespective of national and local legislation.*
3. APREA - Peter Mitchell, Singapore: *"Strata Title or individual ownership within a single building – should this be defined?"*

Definition of the term "Tenancy"

Definition of the term "Licences"

4. TONY WESTCOTT - Tony Westcott, UK: *Ok but better to add where there is a conflict between IPMS and the provisions or intent of national or local legislation, there should be a clear statement of the basis of measurement to IPMS or local standard.*

Response Summary: There were 4 general responses in relation to the 'Use of the Standards' with the majority feeling that clarification was needed where there was a conflict between IPMS and local standards.

SSC Rationale: In preparing the Exposure Draft the SSC have considered the conflict between IPMS and local standards.

Page 10. 1.4 Purpose of IPMS

Consultation Responses:

1. PERSONAL RESPONSE - MARK GRIFFIN: *In the last paragraph it is suggested that plans should be used if required. I think there should be a recommendation that plans are used.*
2. IPD - Christopher Hedley, UK: *"Section 1.4 does not describe the purpose of IPMS. Section 1.4 needs redrafting for clarity. We disagree that the Standard should be used mainly by Service Providers; the concepts behind the Standard are of interest to all stakeholders."*
3. APREA - Peter Mitchell, Singapore: *"Purpose of IPMS – The intent of this paragraph appears out of place with the document – The paragraph focuses on Service Providers and the approach taken for measurement as part of a valuation process.*

Does this paragraph adequately state the purpose of IPMS? We don't believe this paragraph adequately state the true "Purpose of IPMS". This paragraph may be better placed under a discussion on "Method or Approach" NOT Purpose."

4. TONY WESTCOTT - Tony Westcott, UK: *2nd para: remove 'endeavour'*

Response Summary: There were 4 general responses in relation to the 'Purpose of IPMS' with the majority feeling that this paragraph did not adequately describe the purpose of IPMS.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments and redrafted the Purpose of IPMS.

Page 11. 2.1 Principles of Measurement

Consultation Responses:

1. PERSONAL RESPONSE - MARK GRIFFIN: *Two of the fundamental principles i.e. 'The measurement must be repeatable' and 'The measurement tolerance must be explicit' are not followed in section 2.2.2 and Appendix 2.*
2. CEM - Sylvia Osborn, UK: *The international system of units (SI units) is the metric system . The metre is an SI unit . It is widely used to enable a common language and understanding amongst scientists — why not surveyors ?*
3. RICS NETHERLANDS- Group Response, Holland: *Both metric and imperial : could be good for global comparison.*

Response Summary: There were 3 general responses in relation to the 'Principles of Measurement'.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments.

Page 12. 2.2 General Principles of IPMS

Consultation Responses:

1. DUBAI LAND - Mohamad Al-Dah, Dubai: *"We would suggest making IPMS take precedence over local standards, or at least point out the area according to both standards as needed. "*
2. RICS GREECE- Group Response, Greece: *General Principles of IPMS (pg 12): "Measurements are to be taken using methods in accordance with local market practice" – Should measurements be according to the building permit / as -build / as 'legalized'? – There should be a clear identification on the basis of the 'local practice' measurement and maybe more than one set of 'local practice' measurements need to be produced.*
3. GIF - Axel v. Goldbeck, Germany: *"- What are as-built plans (only verified plans? Electronic (CAD) plans or plans on Paper? Electronic plans can't have tolerances). - What information are mandatory for the as-built plans (structural/non-structural walls, tolerances, deduction for plastering)?*

- *What are the tolerances in Appendix 2 for? Do they apply only to control as-built plans or also to development/developed plans.*
- *Is appendix 2 to be used only by the service-provider for check measurement or also by the developer.*
- *What does "Check measurement" mean? Measuring only one room or the whole building?*
- *What does „explicit and ideally agreed“ (2.2.2) mean? Wenn Pläne nur verwendet werden dürfen, wenn die Toleranzen nicht unterschritten werden, muss eigentlich immer aufgemessen werden. Dann macht es aber wenig Sinn, dass grundsätzlich die „as built plans“ verwendet werden.*
- *It would be very helpful to define whether to measure on the bottom line or in certain high (e.g. 1 m above floor level) "*

4. APREA - Peter Mitchell, Singapore : *"What about strata titled or tenancy areas? 2.2 (d) – "Measurements are to be taken using methods in accordance with local market practices" – This needs to be further defined. What does it mean? Area measurement standards? What about part floors where ownership and/or occupation is divided?"*

5. IAAO - Group Response, USA: *"In 2.2, why are vertical measurements not covered? Storage space and other utility could be affected. Yet, only horizontal measurements are discussed .*

There is different treatment between internal and external area. External area is used for ""planning"" or ""outline costing."" Internal area is ""not used for leasing purposes, but it is the foundation of all further calculation"".

The glossary defines a Space Measurement Professional. If this is going to be a Standard it needs to be stated as an IPMS Professional. And defined as Any Person not A Service Provider. "

6. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *"Measurements are to be taken using methods in accordance with local market practice." This implicates that even when this standard is used, in different regions, identical buildings could still have various floor space areas. We think it would be better to state that if because of local market practice specific methods are used this has to be reported as part of the results of the measurement.*

7. TONY WESTCOTT - Tony Westcott, UK:
*"(c) should include reference to areas with minimum specified floor-to-ceiling height – suggest 1.5m
 (d) why? Contradicts principle of setting IPMS – method needs to be defined. "*

8. RICS NETHERLANDS- Group Response, Holland: *When Building and when Property?*

Response Summary: There were 8 general responses in relation to the 'General Principles of IPMS'. However there was no consistency in response in relation to this section.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments.

Page 12. 2.2.1 Measurement Practice

Consultation Responses

1. PERSONAL RESPONSE - MARK GRIFFIN: *"More clarity is needed. In the UAE market for example, as-built plans are not usually the result of a survey but rather are the final marked-up drawings that should include all the last minute changes to design. They rarely reflect reality. I think the intent is to refer to as-built plans that are the result of a survey. This needs to be explicit.*

The second paragraph is also not clear. The examples given may be methods that were used to produce the as-built plans."

2. DUBAI LAND - Mohamad Al-Dah, Dubai: *Replace the word "established " with "measured".*

3. PLOWMAN CRAVEN - Group Response, Europe: *"Some concern is drawn towards the mention of 'specialist scaling from plans' surely in a computer age this should state measurement taken using a CAD system rather than by using a scale ruler to estimate the measurements.*

An alternative section is as follows;

"There are various options for measuring Property. In the most sophisticated and high value markets a specialist Space Measurement Professional will be employed to prepare detailed as-built plans of each floor level. Areas can then be calculated from these plans with the plans forming part of the report. Figured dimensions should be provided on plans to allow other users to assist in the confirmation of measurements. In-direct measurements may be taken using a desktop CAD system to measure areas from existing CAD drawings.

It will be for the Service Provider to state whether check measurements have been taken on site if the plans have not been warranted. In the absence of plans it is for the Service

Provider to state how or whether the floorspace has been established, for example by laser or tape measure or by adopting pre-agreed areas.””

Response Summary: There were 3 general responses in relation to Section 2.2.1 on ‘Measurement Practice’.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments.

Page 12. 2.2.2 Accuracy and Tolerance

Consultation Responses

1. PERSONAL RESPONSE - MARK GRIFFIN: *References to ‘the highest possible level of accuracy’ and ‘the highest degree of accuracy’ are inappropriate. They are contrary to a basic principle of surveying that the survey should be fit for purpose. The document has already stated that repeatability and explicit tolerances are fundamental principles so I don’t think they should be relegated to an appendix but instead should appear here as unambiguous statements. Appendix 2 does not fulfil this requirement. Accuracy based on survey scale is a fading concept in an age of abundant digital spatial data. Percentage accuracy is a term rarely if ever used in surveying. Examples of survey given in the table such as low-accuracy setting out and high accuracy utility tracing are irrelevant in the context of this standard. In the notes reference is made to ‘specialist measurement surveyors’ instead of ‘space measurement professional’ or ‘land surveyor’. To embrace the fundamental principles of repeatability and explicit tolerances statements along the lines of the following are needed: 95% of all areas measured shall be within 1% of the true or theoretical area.*
2. JLL VIETNAM - Chris Murphy, Vietnam: *This mentions Appendix 2. But Appendix 1 has not yet been mentioned. As good practice and for consistency, the first appendix referred to in a text should be Appendix 1.*
3. PLOWMAN CRAVEN - Group Response, Europe: *We suggest that the order of the 2 paragraphs are changed. And given that a tolerance table is included as an appendix this should be made reference to.*
4. TONY WESTCOTT - Tony Westcott, UK: *Should include requirement to state conversion factor used between imperial and metric.*
5. PCA - Chris Mountford, Australia: *4. Measurement accuracy. Section 2.2.2 and Appendix 2 create ambiguity in relation to the accuracy of any measurements. Appendix 2 refers to the size of the lease as a consideration in determining the accuracy of the measurement. Such an approach will reduce confidence in the IMPSO, particularly for large areas where*

a greater level of inaccuracy will be assumed by necessity. Section 2.2 outlines general principles of the IPMSO. Clause (d) states “measurements are to be taken using methods in accordance with local market practice.” It is unclear what is meant by this statement.

6. RICS NETHERLANDS- Group Response, Holland: *Measurement should be well defined, as should be the accuracy and tolerance per method (repeatable and comparable) and not be dependent on the use to which it will be put. Why else would we have a standard?*

Response Summary: There were 6 general responses in relation to Section 2.2.2 on ‘Accuracy and Tolerance’.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments and revised Section 2.4 on ‘Accuracy and Tolerance’.

Page 12. 2.2.3 Measurement Reporting

Consultation Responses

1. RICS NETHERLANDS- Group Response, Holland: *How many “appropriate methods” can we expect?*

Response Summary: There was 1 general response in relation to Section 2.2.3 on ‘Measurement Reporting’.

SSC Rationale: In preparing the Exposure Draft the SSC have considered this comment.

Page 12. 2.2.4 Unit of Measurement

Consultation Responses

1. CEM - Sylvia Osborn, UK: *See comment under 2 .1 . Consider requiring users to state the area in metres and the local unit of measurement in brackets after .*
2. JLL VIETNAM - Chris Murphy, Vietnam: *Consider to add – ‘Where conversions are supplied, the conversion factor should be stated.’*
3. PLOWMAN CRAVEN - Group Response, Europe: *Surely a recognised conversion factor should be used based on the SI Brochure and conversion factors*

4. TONY WESTCOTT - Tony Westcott, UK: *Should include requirement to state conversion factor used between imperial and metric.*
5. RICS NETHERLANDS- Group Response, Holland: *Both metric and imperial : could be good for global comparison. And fixed conversion method.*

Response Summary: There was 5 general responses in relation to Section 2.2.4 on 'Unit of Measurement. All the responses requested for IPMS for Offices to provide a conversion factor

SSC Rationale: In preparing the Exposure Draft the SSC have considered this comments and suggested that where a conversion factor is used it should be stated explicitly.

Page 13. Part 3 IPMS Standards

Consultation Responses

1. APREA - Peter Mitchell, Singapore: *"Can the areas be further defined in the Title i.e.,*
 - *IPMS Office Area 1 – Gross External Area*
 - *IMPS Office Area 2 – Gross Internal Area*
 - *IPMS Office Area 3 - Segregated Areas*

The purpose of this initial extended definition is to provide greater meaning to the three identified standards.

Additional clarity around the names would be most useful and agree with the first two.

The question from any user will be "which is the net area?". This may need to be better defined."

Response Summary: There was 1 general response in relation to Part 3 on 'IPMS Standards" requesting the standards to also be defined according to existing measurement definitions.

SSC Rationale: The SSC had initially considered these existing measurement definitions but realised that these definitions were inconsistent and subject to variance in interpretation across different markets.

The SSC therefore agreed new terms and definitions in IPMS Office Area 1, 2 and 3, which though similar to the existing terms were not subject to regional variation.

Page 13. 3.1.1 Definition

Consultation Responses

1. PLOWMAN CRAVEN - Group Response, Europe: *"Please could there be clarity what the aggregate of the areas of each floor are.*

Does external construction features include standalone columns?"

Response Summary: There was 1 general response in relation to Section 3.1.1 on 'Definition'.

SSC Rationale: In preparing the Exposure Draft the SSC have considered this comment.

Page 13. 3.1.2 Use

Consultation Responses

1. CEM - Sylvia Osborn, UK: *The reference to the use for costing architectural plans may create confusion with the more detailed reference to the use of IPMS2 for costing purposes. A closer definition these two different situations is required, or a clear requirement as to which basis should be used for costing .*
2. JLL VIETNAM - Chris Murphy, Vietnam: *Add 'and development control' after 'planning'.*
3. BCIS - Joe Martin, UK: *"At the moment the RICS Code of Measuring Practice is used by all surveyors, i.e. in construction as well as property and it is in this context that I make these comments.*

It is important that IPMS 1 and 2 should be consistent for all building types as new standards are developed."

Response Summary: There were 3 general responses in relation to Section 3.1.2 on 'Use.'

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments.

Consultation Responses

1. EXPERT INVEST - Petar Andonov, Bulgaria: *Measurement of IPMS Office Area 1 should include the area of the roof terraces when they are situated on the level of the floor.*
2. LITHUANIAN ASSOCIATION OF SURVEYORS - Rimantas Ramanaushas, Lithuania : *"The Draft does not clearly define measures of roof space area. Draft 3.2.1. sec. only says that Measurement of IPMS Office Area 1 is to include the area of: ..roof space, if readily accessible". We think that it should be made clear in the Draft, that only the premises installed in the roof space have to be measured and areas calculated, but not unused roof space."*
3. PAUL VARTY - Paul Varty, Hong Kong: *Page 13114 - IPMS office area 1 – I note that this includes "roof space" but excludes "roof terraces". This would seem to be rather odd as a roof terrace would often be more useable than roof space as I assume a roof terrace would be on the same level as a related office whereas the roof space would be above an office floor. I wonder if another approach may be to consider whether or not the space is covered .*
4. DUBAI LAND - Mohamad Al-Dah, Dubai: *"IPMS Offices 1-Why exclude protruding elements? Basements: What is stated is not accurate in the case of basements larger than the ground floor above them . We suggest measuring each floor without making assumptions. Will vertical risers be included or excluded in IPMS Offices 1?"*
5. "AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia:
"• (page 13) For clarity purposes – suggest delete the word external from 1st para 1st line.
• (page 13) The 3rd para is confusing - The external area of basement levels is calculated by extending the exterior plane of the perimeter walls at ground floor level downwards, or by estimation if the extent of the basement differs from the footprint of the Building. Suggest less ambiguous rewording. "
6. IPD - Christopher Hedley, UK: *Section 3.1.3. What are roof space, covered voids and so on? We believe that more description of these items is required. Indeed, roof space is excluded from Office Area 1 on page 13 and roof terraces are included on page 14.*
7. RICS GREECE- Group Response, Greece: *"Measuring IPMS Office Area 1 (pg 13 & 14): Use of roof "space" or "terraces" is confusing. There should be a clear differentiation between various roof types definition such as "readily accessible to the public-tenants-users" meaning temporary recreational use by the employees-general population of the*

building; distinct from the visiting of “authorized personnel only” for maintenance of roof top installations like HVAC.

Or:

- roof terraces: areas which are accessible to occupants of the building, the surface of which where people walk is of a hard material which is resistant to piercing.*
- roof platforms: areas which are accessible solely for maintaining the building and which are covered by a watertight layer (roofing), or automatically protected (aluminium), or filled (shingle)*
- pitched roofs: areas which are sloping and inaccessible.*

8. GIF - Axel v. Goldbeck, Germany

"a. IPMS 1

- i. It is not logical that roof space is part of IPMS1 (3.1.3) roof terraces not.*
- ii. Is building only the building above ground level? If not, 3.1.3 forth dash (“area at ground level ... “unless by a roof overhang...””) Is not logical because they are part of the building if there is part of the building is below.*

9. CLGE- Jean-Yves Pirlot, Belgium: *Diagram 2 has to be explained more in detail: it’s difficult to understand what the diagram represents as it shows two different definitions at the same time (or use different colours).*

10. CEM - Sylvia Osborn, UK: *Paragraph 3 This is not really satisfactory advice for the measurement of basements — particularly given that it is normally physically impossible to measure a subterranean GEA of a basement. Diagram 2 on the following page makes the shortcomings of this advice abundantly clear. Would it not be more appropriate to measure a basement on a gross internal area basis (or Office area 2 basis)? Presumably open light wells can only be measured and excluded if it is possible for the space measurement professional to gain access to them.*

11. JLL VIETNAM - Chris Murphy, Vietnam: *It is difficult to envisage a ‘roof space’, which should be included here when looking at purpose-built office buildings. Plant rooms, lift machinery rooms should be included (and mentioned here) but ‘roof space’ tends to refer to residential dwellings with pitched roofs. We suggest deleting this element.*

12. PLOWMAN CRAVEN - Group Response, Europe: *"Here it is mentioned that protruding elements are excluded but what if they form part of the external construction?*

A diagram may provide clarity how a covered gallery is defined. It is not clear whether covered galleries are included or excluded from the measure.

What constitutes if a roof space is readily accessible?

Covered voids are included at all levels?

Where is the cut off when detailing the area of the walkways or passages"

13. IAAO - Group Response, USA: *"In 3.1.3 what is the definition of a notional external wall? In 3.1.3 a Standard that states, to estimate if the basement differs from the footprint . Would it be more prudent to use an interior measurement, noted as such, rather than an estimate?"*

14. RICS PORTUGAL - Group Response, Portugal:

"1. IPMS Office Area 1 - Covered Voids (page 13) In the definition of "Measurement of IPMS Office Area 1" it is defined that "covered voids" should be included in the measurement. Although we agree with these criteria, it should be highlighted that the covered voids can only be accounted once, as is defined in page 15 for "Measuring IPMS Office Area 2".

2. IPMS Office Area 1 - Enclosed Walkways Or Passages Between Separate Buildings. The proposed standard includes the "Enclosed Walkways or Passages between Separate Buildings" in the IPMS Office Area 1. We are of the opinion that it should be emphasized that the area should be distributed by pro-rata criteria between the different buildings.

3. IPMS Office Area 1 – Balconies and Terraces. It is not uncommon in the Portuguese market, and likely in other markets, that offices have balconies and terraces accessible and used by the office occupiers. The IPMS Office definitions and measurement criteria do not define the way these elements of the buildings should be measured and accounted in the IPMS Office

4. Area 1, 2 or 3. It is our opinion that the standards should clearly define the criteria to adopt. Considering the practice in the Portuguese market, we think that terraces and balconies should be measured and stated separately"

15. TONY WESTCOTT - Tony Westcott, UK: *"Section 3.1.3 What are 'covered galleries'? Balconies or covered atrium?"*

IPMS Office Area 1 is to include the area of:

- enclosed roof space, if readily available*
- any area at ground floor level open to the sides and covered, unless by a roof overhang or decorative projection - clarify?"*

16. HYPZERT- Sabine Georgi, Germany: *"No IPMS 1. It should measure two different areas: 1.1 inside (enclosed) areas and 1.2 outside (open) areas.*

The outside areas should include all balconies, terraces, and covered galleries

The external basement area should be calculated according to exact plans. If this is not possible extending the exterior plane should be allowed. This must be stated in the calculation afterwards.

The definition of accessible roof space should be changed to "roof space usable/lettable".

Response Summary: There were 16 general responses in relation to Section 3.1.3 on 'Measuring IPMS Office Area 1'. The majority of comments asked for greater clarity in respect of inclusions and exclusion within IPMS Office Area 1.

SSC Rationale: The SSC has considered these comments and have revised the name of 'IPMS Office Area 1' to 'IPMS 1'. Moreover IPMS has been rewritten clearly state the 'Extent', 'Inclusions' and 'Exclusions'. Moreover there will be consistency between these standards with 'IPMS 1' being the same for all classes of Building in the absence of physical modifications.

Page14. Diagram 1 IPMS - Office Area 1 and Text

Response Summary:

Consultation Responses

1. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia: *(page 14) The Diagram 1 – IPMS Office Area 1 seems inconsistent with the wording below it e.g. the open light wells, open external emergency stairways, roof terraces referred to in the text should be delineated on the plan view above.*
2. CEM - Sylvia Osborn, UK: *"Diagram 1 is clearly meant to correlate to other diagrams in the standards – the problem is that it does not look like a roof terrace with the inclusion of lavatories and lifts – perhaps the appropriate architect's plan is required here, showing the lift plant room over the lifts and the top of the duct vent from the lavatories. The atrium / light well appears to be filled in here - is this correct or should it be blank, if it is glass covered should it be excluded? Perhaps this could be clarified – because as currently shown the greyed out area implies a solid construction of the roof terrace .*
3. PLOWMAN CRAVEN - Group Response, Europe: *Diagram 1 - The section drawing does not correspond to the floor plan diagram. There needs to be some explanation of the elements of the plan, labelling, linking to inclusions/exclusions in 3.1.1 and 3.1.3*
4. TONY WESTCOTT - Tony Westcott, UK: *"Measurement for IPMS Office Area 2 should be after Diagram 3."*

Response Summary: There were 4 general responses in relation to 'Diagram 1 IPMS - Office Area 1 and Text'. The majority of comments asked for greater clarity in respect of the diagrams for IPMS Office Area 1.

SSC Rationale: The SSC has considered these comments and has revised the Diagrams within 'IPMS 1' in order to provide greater clarity.

Page14. Diagram 2 IPMS - Office Area 1 and IPMS Office Area 2 and Text

Consultation Responses

1. CEM - Sylvia Osborn, UK: *Diagram 2 IPMS - Office Area 1 and IPMS Office Area 2 and Text* Diagram requires shading and text should probably make mention of the basement measurement but see comments under 3 .1 .3.
2. JLL VIETNAM - Chris Murphy, Vietnam: *"Diagram 2 shows both exclusion of roof terraces and inclusion of an atrium. However, both elements are the same colour. We suggest that different colours should be used for inclusions and exclusions."*
3. PLOWMAN CRAVEN - Group Response, Europe: *Diagram 2 - We feel that this should not be used to demonstrate 2 of the IPMS Office Areas. It does not provide enough clarity. An example of the covered gallery can be included in this section. A suggestion also that for the basement car park that one side of the extents is in line with the building above and the other side protrudes outside the building footprint to help demonstrate the comment on 3.1.1 para 3.*

Response Summary: There were 3 general responses in relation to 'Diagram 2 IPMS - Office Area 1 and IPMS Office Area 2 and Text'. The majority of comments asked for greater clarity in respect of the diagrams for IPMS Office Area 1 and 2.

SSC Rationale: The SSC has considered these comments and has revised the text and Diagrams within 'IPMS 1' and 'IPMS 2 – office', in order to provide greater clarity.

Page15. IPMS Office Area 2 - 3.2.1 Definition

Consultation Responses

1. LITHUANIAN ASSOCIATION OF SURVEYORS - Rimantas Ramanaushas, Lithuania: *Draft 3.2.1. sec. defines that „IPMS Office Area 2: The aggregate of the areas of each floor of a Property measured to the inner perimeter of external construction features and reported on a Building-by-Building basis”. It is obvious that because of the enclosing walls, columns or other construction elements it will not be possible to measure IPMS Office Area 2 in a majority of cases. It will be possible to determine inner perimeter only by summarizing measurements of premises, thicknesses of walls and other construction elements situated by the external walls. This should be taken into account and the Draft needs to be corrected.*
2. GIF - Axel v. Goldbeck, Germany:

- i. *3.3.2: why is IPMS 2 not to be used by the other service providers as defined in the definitions (e.g. property managers) ? And why is IPMS 2 (and not IPMS 1 relevant for cost consultants)? In Germany the cost consultant would be the one to control the construction costs while the maintenance costs are controlled by the property or the facility manager.*
- ii. *For which purpose should the IPMS 2 be used by facility managers and cost consultants? "*

3. PLOWMAN CRAVEN - Group Response, Europe: *"3.2.3 Clarity on the definition of predominant internal wall face - diagram? Provide further explanation what is deemed as a building support system? Again diagram needs labelling. Clarity is required on the treatment of voids, atria, ducts and risers. Clarity is required on the extents of measurements of atria voids, is it just the void or does the exclusion take into account the surround walls?"*

Response Summary: There were 3 general responses in relation to Section 3.2.1 on 'Definition.'

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments.

Page15. IPMS Office Area 2 - 3.2.2 Use

Consultation Responses

1. LITHUANIAN ASSOCIATION OF SURVEYORS - Rimantas Ramanaushas, Lithuania: *"Draft 3.2.1. sec. denes that „Measurement of IPMS Office Area I is to include the area of: any area at ground floor level open to the sides and covered, unless by a roof overhang or decorative projection“. We would like to argue the measurement and calculation of building areas, which are not separated from the outside by walls. We think that the measurement of areas has to be objective, i.e. measurements cannot be done between non existing (imaginary) surfaces. We think that areas of porticos and other open to the side parts of buildings cannot be measured."*
2. APREA - Peter Mitchell, Singapore: *"In doing so, columns or other building support systems that protrude inward are disregarded" – Does this mean columns etc. are "Excluded" from the calculation as per Diagram?*

Second paragraph "includes all areas including internal walls, columns, covered galleries " – The second paragraph appears to contradict the first paragraph. While we understand what the authors are trying to say there may be a better way to explain it."

3. DUBAI LAND - Mohamad Al-Dah, Dubai: *The columns protruding inwards are excluded in the text yet are included in Diagram 3.*

Response Summary: There were 3 general responses in relation to Section 3.2.2 on 'Use.'

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments.

Page15. 3.2.3 IPMS Office Area 2 - Measuring IPMS Office Area 2

Consultation Responses

1. CLGE- Jean-Yves Pirloty, Belgium: *"3.2.3 Measuring IPMS Office Area 2. The Draft states "IPMS Office Area 2 includes all areas including internal walls, columns, covered galleries and enclosed walkways or passages between separate buildings, available for direct or indirect use. Covered void areas such as atria are included at their lowest level but do not form part of IPMS Office Area 2 at upper levels." That definition has to be changed. CLGE proposes what follows: "IPMS Office Area 2 includes all areas available for the direct or indirect use of occupants, excluding all fixed construction features and partitions." The reason for that is obvious. Because of the enclosing walls, columns or other construction elements, it will not be possible to measure IPMS Office Area 2 in a majority of cases. It will be possible to determine inner perimeter only by summarizing measurements of premises, thicknesses of walls and other construction elements situated by the external walls. This should be taken into account and the Draft needs to be corrected.*

Balconies, terraces, accessible roofs and loggias have to be included.

Add a definition for "roof space" to avoid different interpretations by different users of the standard (e.g. roof space can be usable or not usable)."

2. TONY WESTCOTT - Tony Westcott, UK Suggest: *'In doing so, columns or other building support systems that protrude inward are disregarded if not exceeding 0.5m² floor area'*
3. HYPZERT- Sabine Georgi, Germany: *"IPMS 2 is not commonly used in Germany. The definition seems to be not exact enough. For example, where to measure the extent of covered galleries? And how are the backset external construction features then taken into account? Please clarify.*

4. BCIS - Joe Martin, UK: *Predominating internal wall face' I have no objection to this phrase.*

Response Summary: There were 4 general responses in relation to Section 3.2.3 on 'Measuring IPMS Office Area 2'. The majority of comments asked for greater clarity in respect of inclusions and exclusion within IPMS Office Area 2.

SSC Rationale: The SSC has considered these comments and have rewritten 'IPMS 2 – office', to clearly state the 'Extent', 'Inclusions' and 'Exclusions'.

Page16. IPMS Office Area 3 - 3.3.1 Definition

Consultation Responses

1. APREA - Peter Mitchell, Singapore: *First paragraph – “When an enclosing wall is common to two Categories the area occupied by the enclosing wall may be either allocated to one of the Categories in sequence A, B, C and D or divided equally between the respective Categories” - Would this create confusion? We would recommend only one option here.*
2. JLL VIETNAM - Chris Murphy, Vietnam: *"Rename 'categories' with a self-explanatory name such as 'Adjustment Group'. Add 'The use of different adjustment groups will lead to a number of different Net Floor Area Types which are defined below.'"*
3. IVBN - Frank van Blokland, Netherlands: *"The Coalition has now introduced a concept for the international measurement of offices: IPMS Office Area 1 ('gross external), IPMS Office Area 2 ('gross internal') and IPMS Office Area 3, the latter being divided into Categories and Sub-categories. Key concept is that the 'office working space' E is considered to be all areas which are not 'A' (areas for Vertical Penetrations), not 'B' (areas for Technical Services), not 'C' (Hygiene Areas), and not 'D' (Circulation Areas). Defining the working space is than depending on defining these other areas. The real problem is already described in the examples in the consultation document: entrance level reception areas may either be allocated to Sub-category D or separately identified within Category E. The IPMSC proposed standard differentiates in A – B – C – D – E separate measurements; which is very detailed and international comparison is difficult if these different categories are not quite well defined; and that will lead to a very detailed and complex standard.*

- *Therefore IVBN wants to ask the Coalition which (main) countries (with a professional and mature real estate industry) have already made this choice in these A – B – C – D – E*

separate measurements?

- *Also IVBN wants to ask the Coalition whether each building which has been measured in the proposed way, then will be than be nominated by ‘A – B – C – D – E’ or should it be*

expected that the ‘E’ measurement will be dominant? How will users/occupiers react on this way of measurement? CoreNet International is member of the Coalition."

Response Summary: There were 3 general responses in relation to Section 3.3.1 on ‘IPMS Office Area 3 - Definitions.’ The majority of comments were asking for further clarity in relation to the Categorisations and the existing Categories.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments. Further to the consultation the SSC felt that IPMS Office Area 3 did not constitute a separate international measurement standard, but formed part of IPMS Office Area 2. The SSC therefore revised the Components (previously Categories) in ‘IPMS 2 – office’ to provide greater clarity.

Page16. IPMS Office Area 3 - 3.3.3 Measuring IPMS Office Area 3

Consultation Responses

1. IPD - Christopher Hedley, UK: *"Section 3.3.3. Longer definitions are required for Categories A, B, C and D and also for some of the sub-categories. For example a term like "other circulation areas" in Category D needs a much fuller explanation, especially given the high proportion of the floorspace taken up by "other circulation" within an open plan layout in a modern office building. Standard hygiene facilities should be treated similarly in all office buildings, if possible. Balconies and roof terraces are rightly excluded but also need to be measured consistently. The rules for such measurement could usefully be explained in the document. "*
2. GIF - Axel v. Goldbeck, Germany:
 - i. *It should be stated more clearly that walls and columns being part of a category listed first can't be part of a lower category (e.g.: walls enclosing a circulation area can't be part of category E).*
 - ii. *P.17: There may be other tenant related changes to the area than hygiene facilities. A more general approach how to deal with the changes would be helpful (see e.g. German RA/C)*

- iii. *Structural walls can't be IPMS 3 even if they are not enclosing! E.g. structural walls in an office workspace. Structural and load bearing walls could be in the same sub-category as columns.*
- iv. *Is car parking normally category E"*

3. CLGE- Jean-Yves Pirlot, Belgium: *"3.3.3 Measuring IPMS Office Area 3. Add a definition for "structural enclosing walls" and "non-structural enclosing walls". Indicate the difference between both, again to avoid different interpretations. Will the area of a lift shaft be counted at each level or only once? Has to be clarified in the Draft. The classification in categories as stated in the Draft is justified for facility management, but not for other purposes (e.g. toilet facilities, entrance hall and any other circulation areas have to be in the same category as office workspace as it represents a principal use of the building; e.g. if the SSC of IPMS will have a look in residential buildings toilets and other facilities will be part of the principal use of the building and will be classified in the same category as living room, bathroom, kitchen, bedrooms, ... if the floor-to-ceiling height is of the same height). The classification as stated in the Draft is not appropriate. The SSC of IPMS has to think already about the classification of residential use or mixed use. The classification must be the same for all kind of buildings (see also comment on question 1). The classification has to meet broader objectives as valuation and management of buildings and that for simple and more complicated cases.*

The Draft states "where an enclosing wall is common to two Categories the area occupied by the enclosing wall may be either allocated to one of the Categories in sequence A, B, C and D or divided equally between the respective Categories". CLGE prefers a well-defined statement. Don't leave a choice to allocate the area to one of the Categories or to divide the area equally between Categories.

Further the Draft states "entrance level reception areas may either be allocated to Sub-category D(i) or separately identified within Category E". Don't leave a choice: entrance level reception areas have to be in category E.

The Draft states "areas within Category E not available for direct office-related use may be stated in an alternative way, for example, basement car parking reported by the number of spaces instead of floor area. To that extent the aggregate of areas reported in the categories in IPMS Office Area 3 will not equate to IPMS Office Area 2. In the case of indirect office-related accommodation this could be described as additional or ancillary". Keep in mind that the SSC of IPMS is working on a measurement standard and that the floor area is needed. The number of spaces can be added, but give priority to floor area.

The Draft states "the areas of balconies and roof terraces are not included in IPMS Office Area 1 and hence IPMS Office Area 2 and IPMS Office Area 3, but are to be

measured and stated separately". What does "separately" mean? The SSC of IPMS must state them somewhere. They have to be included in the draft. They need to be defined in a category or sub-category!

Missing elements:

At ground-floor level, any area open to the side and covered, other than by a roof overhang or decorative projection, is also included in the external area and measured on the basis of the vertical projection of the covering part.

The draft needs a table to represent the results of the measurement. This table can be used to compare different measurements in a simple way. Changes in the construction or form of occupation may result in changes to the different areas. Any record of the areas should always therefore be dated.

Add a glossary to avoid different understandings or interpretations."

- 4. CEM - Sylvia Osborn, UK: Generally item (i) in every category is clear. Closer definition of items (ii) structural.. and (iii) non-structural need closer definition . Are these definitions meant to imply something constructed in masonry (or not) or they meant to imply walls that are loadbearing (or not). Masonry walls can be demountable and removed and so if they have been erected at the tenant's discretion then they could justifiably be included. However load bearing walls should not be removed so is it fair to the tenant to have this included in IPMS office area 3 particularly in category E ?*
- 5. PLOWMAN CRAVEN - Group Response, Europe: Generally the categories are self-explanatory. It may be advisable to have the diagrams following straight on from each category to avoid flicking back and forth.*
- 6. IAAO - Group Response, USA: page 17,when dealing with common walls the Standard states to divide equally ...two paragraphs later...it suggests that if multifunctional-categorize by predominant use. This appears to conflict.*
- 7. RICS PORTUGAL - Group Response, Portugal : "IPMS Office Area 3 – Multifunctional Use – Categorization According to the Predominant Use. It is not clear how to measure and account areas in these cases, and we think a more detailed explanation is needed. For mixed-use buildings in most cases it is quite simple to understand what are the different areas of the buildings that are allocated to each use. We think that it is possible to apply the criteria for the different uses in the building, independently for the predominance, measuring and stating the area for categories A, B, C and D for each use, being this a more objective criteria.*

IPMS Office Area 3 – Category C - Hygiene Areas Even if not very frequent, it can happen than a Hygiene Area although outside of the leased office is exclusively used by a single tenant.

It also can happen that in the same building some floors are occupied by different tenants that use the common Hygiene Areas in the floor, and some floors are occupied by a single tenant that is the single user of the Hygiene Areas of that floor. In the Portuguese market, Hygiene Areas are, even if used by several tenants, included in the leased area, and distributed amongst the different tenants by a prorata criteria based on the occupied area

We think that the possibility of including the Hygiene Areas in Category C or E will increase the likelihood of the existence of different outputs in the measurement made by different persons, so we are of the opinion that, excepting in the case of public Hygiene Areas it would be suitable to consider these areas included in category E.

IPMS Office Area 3 - Entrance Level Reception We are of the opinion that it should be emphasized the importance of using a prorata criteria in the distribution of the entrance area.

IPMS Office Area 3 – Amenity Areas We agree with the inclusion of these areas in Sub-category E if used exclusively with the office workspace. We do not agree that these areas are included in subcategory D –Circulation areas, comparing it with emergency exits or technical services. Amenity Areas, such as cafeterias, fitness areas and others, are often leased to third part tenants that provide services to the tenants of the office building were those areas are included or even to other clients. It is of paramount importance that these areas will be clearly separated and included in subcategory E and never in subcategory D.

IPMS Office Area 3 – Areas within Category E not available for direct office related use. In page 17 it is proposed that areas not available for direct office-related use could be stated in alternative ways. For a basement car parking it is given the alternative that this areas are stated not considering the area but the number of parking places. Nevertheless the IPMS Office is only office related, considering the importance of areas like parking floors that in some cases have the same area as the office upper floors, we think more detailed criteria should be defined. Leaving it up to the surveyor to choose the criteria about how to state these areas could lead to huge differences between measurements.

It is clear to us that in IPMS Office Area 3 a specific category for the Parking Area should be created and that both the area and the number of parking places should be stated. This will reflect the quality of the building, considering not only the number of parking places available, but also the quality of the parking area reflected in the average area of each parking place."

8. TONY WESTCOTT - Tony Westcott, UK: *Category A 'excluding those walls which are part of external walls.'*
9. BCIS - Joe Martin, UK: *"In construction the area is built up from 'usable' to 'gross internal', i.e. the client defines the spaces he requires and allowance is made for the floor area that will be taken up by the 'internal structure', 'vertical and horizontal circulation', and 'Services'.*

Would it be possible to include a Category for 'internal structural and non-structural walls and columns'? As defined at the moment there is danger of double counting. Even in the document it is not clear if in Diagram 10 the Workspace/Amenities area includes the walls to the atrium. I assume it doesn't so the walls need to be drawn thicker.

This could be an alternative so that floor area taken up by internal walls and columns could be:

- *shown separately as a category*
- *included in another category*
- *included in another category and shown separately.*
- *Category definitions generally. It needs to be made clear that 'enclosing walls' means enclosing walls to the areas not enclosing walls to the building.*
- *Category B add 'service risers and ducts'.*

10. PCA - Chris Mountford, Australia: *"IPMS Office Area 3 identifies a series of categories (A-E) each of which has a set of subcategories listed within it. For example Category B: Technical Services includes plant rooms, lift rooms, maintenance rooms structural enclosing walls, non-structural enclosing walls and columns as sub-categories. Therefore the sub-categories in aggregate operate as a quasi-definition for the overarching category. The Property Council believes this approach is inadequate and each category should have a clear definition. This is particularly important in relation to Category D: Circulation Areas and Category C: Hygiene Areas. As noted above there is a clear difference between a multi-tenanted and single tenanted office premise. Circulation areas and hygiene areas will by necessity be defined differently in these circumstances. This may result in the need for new categories that better draw the distinction between single and multiple tenancies.*

In addition to this, the IPMSO does not explicitly define or clarify the scope of application of each of the sub-categories in sufficient detail. For example 'columns' are listed as a sub-category in categories B,C,D and E. The Property Council's interpretation of the draft IPMSO is that within each category (B-E) columns only need to be considered in so far as they are present in the space defined within that category. For example, Category B only includes those columns that are present in an

area that would be defined as 'technical services'. All other columns in the building would not be considered. This is clearly confusing and may lead many to assume that columns are excluded from the IFAO in all cases. Greater clarity is required to define how the categories and sub-categories are defined and the limits to which they apply."

Response Summary: There were 10 general responses in relation to Section 3.3.3 on 'Measuring IPMS Office Area 3.' The majority of comments were asking for further clarity in relation to the Categorisations and the existing Categories and diagrams in relation to this.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments. Further to the consultation the SSC felt that IPMS Office Area 3 did not constitute a separate international measurement standard, but formed part of IPMS Office Area 2. The SSC therefore revised the Components (previously Categories) in 'IPMS 2 – office' and diagrams to provide greater clarity.

Page17. IPMS Office Area 3

Consultation Responses

1. AUSTRALIAN PROPERTY INSTITUTE - A.L. McNamara, Australia: *In Category D non-structural enclosing walls generally form part of the tenancy area and the area of that wall should be included in Category E. Therefore the qualification should be included that non-structural walls "where not enclosing a Work Area".*
2. APREA - Peter Mitchell, Singapore: *Fourth paragraph – The term "specifically leased" – Does this mean "exclusively occupied" – Consideration should be given to changing the term.*
3. CEM - Sylvia Osborn, UK: *Text underneath category E - where an enclosing wall is common to two categories advice – further consideration of the treatment of this where the enclosing wall is common to two separate demises is suggested.*
4. PLOWMAN CRAVEN - Group Response, Europe: *"Some confusion how categories B, C and D can be multifunctional. Some clarification that additional facilities provided by the tenant could represent, any of the categories. Please provide an example of direct or indirect office related accommodation, does this include building management areas? Please provide clarification on the types of amenity areas. Balconies and roof terraces are mentioned as not included but what about covered galleries are these to be included in IMPS office 3?"*

5. IAAO - Group Response, USA: *page 17,when dealing with common walls the Standard states to divide equally ...two paragraphs later...it suggests that if multifunctional-categorize by predominant use. This appears to conflict.*
6. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *In a lot of building the floor area for parking is a significant part of the building. We think it is important to consider this parking space as a specific category. When renting office area often the parking space is not rented per square meter but per parking lot. Therefore it is important to know how much area of the building is "not rentable" because it is parking space.*
7. HYPZERT- Sabine Georgi, Germany: *"IPMS 3 Over all, areas could be reduced for an easier use and less options. The Standard is to support IVS and IFRS, both income based views on a property. We believe the standard should differ and group areas according to how they can be let, not according to what they are. Currently, the Standard supports the construction cost view on the building, looking at what it is.*

Columns and structural enclosing walls can be measured in one.

The areas for in- and outdoor parking areas have to be measured. The number of spaces should be reported additionally.

The sentence "In Categories B, C, and D, if in multifunctional use, the area is to be categorised according to the predominant use." is not clear. So far, there was no separation of uses in the Standard.

A new category would simplify the remaining categories:

F Construction Area

- (i) External construction features*
- (ii) Structural enclosing walls + columns*
- (iii) Non-structural enclosing walls "*

8. BCIS - Joe Martin, UK: *Category E includes the internal walls to these areas is this intended? The definition should read '(ii) structural enclosing and internal walls', 'Non-structural enclosing and internal walls'*
9. RICS CZECH- Steve Withers, Czech Republic: *Balconies and terraces seem to be excluded from area 3 – Area 3 is what will become rentable? As we spoke, if it is built, it can be measured and if built then needs to be rentalized – whilst emergency exits, lift shafts and other technical areas are excluded from NLA in a lease, they are still rentalized in a total rent. I think the standard considers more so roof areas (which have to be built as a function of construction) but I am think more about real areas which are often additional social areas, function areas, connected to top management meeting rooms etc – think*

about having your ciggie on the balcony at Jalta – these are nice areas which enhance the usability of internal areas and I believe that most buildings have them.

I think the other point which is not considered and addressed above, it is too simplistic to have a 'area' for example a lot of companies have large archive areas, these are often 'grade' other groups have 'server rooms' which are sometimes above grade, sometimes grade and sometimes below grade, this could cause confusion in the Standard I mean is a server room Category "E", "D" or "B" – I understand they are all area 3, but I am sure that some areas will be included and rented and others excluded.

Response Summary: There were 10 general responses in relation to IPMS Office Area 3. The majority of comments were asking for further clarity in relation to the Categorisations and the existing Categories and diagrams in relation to this.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments. Further to the consultation the SSC felt that IPMS Office Area 3 did not constitute a separate international measurement standard, but formed part of IPMS Office Area 2. The SSC therefore revised the Components (previously Categories) in 'IPMS 2 – office' and diagrams to provide greater clarity.

Page18. Applications

Consultation Responses

1. WHITMARSH LOCKHART - James Lockhart, UK: *"An example is page 18. The only other observation I would add to John's list is in the UK the location and style of the perimeter heating systems, such as radiators, can influence where you measure to."*
2. JAREA - Koji Tanaka, Japan: *"It would be much clear for general public, if Drawing examples of IFA 1-4 are included in the appendix.*
International Floor Area Office 1 (IFA Office 1)
IFA1 = IPMS 2 – [Category A]
International Floor Area Office 2 (IFA Office 2)
IFA2 = IPMS 2 – [Category A + Category B + Category C + Category D]
International Floor Area Office 3 (IFA Office 3)
IFA3 = IPMS 2 – [Category A + Category B + Category C + Category D + Sub-category E(iv)]
International Floor Area Office 4 (IFA Office 4)
IFA4 = IPMS 2 – [Category A + Category B + Sub-categories C(ii), (iv) + Sub-categories D(ii), (iv) + Sub-categories E(ii), (iv)] "

3. CEM - Sylvia Osborn, UK: *It is not really clear why IPMS 3 and IPMS 4 are required, they differ in their inclusion or not of hygiene areas and structural walls and columns . Given the commentary for 3 .3.3 above could this be reviewed and reconsidered? Further it is not clear why in IFA 3 hygiene areas would be included where as in IFA 4 they are not . Despite international differences surely hygiene areas would be a standard provision on all office floors and something that the tenant should not have to pay rent for ? Coupled with the lack of clarity regarding definitions of structural and non-structural – perhaps IFA 3 and IFA 4 should be revisited?*

4. JLL VIETNAM - Chris Murphy, Vietnam: *"We suggest the term 'applications' be renamed as 'net floor area type' to aid interpretation of the standards by users and third parties. The term 'International Floor Area' is abbreviated to IFA, suggesting Internal Floor Area. We suggest a different name be given to this concept for the avoidance of misunderstanding."*

5. RICS HUNGARY- Group Response, Hungary: *"In terms of the application of the areas, I miss the definition of the "Lettable area". If we want to be able to use this standard also for valuation purposes and for determining capital values for properties, this is a main point as this generates the revenue in terms of a lease, which is then capitalised. This should be equal to Category C+ Category D+ Category E. Also, in several countries as well as in Hungary, the Tenant pays rent for the terrace areas as well. Either 50% of the rent for the entire area or the same rent for 50% of the area. Therefore, I suggest to include 50% of the terrace areas as well into the "lettable area" Another thing, which is standard market practice In Hungary, (and also in other CEE countries) is that Tenants pay rent even on areas that they use, even if it is not used by them exclusively. These areas are mainly, the reception areas and elevator lobbies as well as guest toilets on the ground floor and the elevator lobbies on the upper floors if applicable. These areas form part of a common area ratio or add-on factor. So these areas are added and divided by the exclusively used areas of the tenant. This results in a CAR percentage.*

The calculation of the lettable area is therefore:

*Exclusively used areas (Category E + part of Category D and Apart of Category C) * (1+CAR [part of Category D and Apart of Category C]) + 50% of the terrace area = Lettable area*

Parking is always determined on the number of spaces and not the size of the parking. "

6. PLOWMAN CRAVEN - Group Response, Europe: *"General - It may provide further clarity if a different colour or type of hatching is used to demonstrate the sub categories in the diagram. General - labelling of elements of the plans would be helpful."*

7. TONY WESTCOTT - Tony Westcott, UK: *"Areas within Category E – a balancing area should be stated to ensure a 'zero sum' check can be proven. Areas of balconies, etc. – better included as sub-category in D or E"*

8. HYPZERT- Sabine Georgi, Germany: *"IFA1-4. The aggregate of areas reported in the categories in IPMS Office Area 3 will not equate to IPMS Office Area 2 (see page 17). Therefore according to the model IFA 1-4 always include the difference of IPMS 2 – IPMS 3.*

If it is intended, that all IPMS 3 areas have to be measured, the exact IFA areas can be much easier calculated by adding the relevant IPMS 3 areas. In the current model, the area of parking spaces not measured in IPMS 3 but measured in IPMS 2, will automatically result in any IFA. Does that make sense? "

9. PCA - Chris Mountford, Australia: *"Diagrams - All of the supporting diagrams within the IPMSO are of insufficient scale and do not include adequate descriptions of what is being depicted in the diagram. This makes it difficult to ascertain exactly what each diagram is attempting to communicate. The Property Council's Method of Measurement includes detailed diagrams that clearly identify all relevant features and information. A similar approach should be adopted in the IPMSO. An example is provided within the full response contained on the community site. Source: Method of Measurement, page 30."*

10. RICS NETHERLANDS- Group Response, Holland: *Both metric and imperial : could be good for global comparison. And fixed conversion method.*

Response Summary: There were 10 responses in relation to Part 4 on 'Applications'. Part 4 was criticised for comprising four International Floor Area applications and therefore potential adding further confusion to the market through a lack of consistency. A typical response in relation to this was as follows; *"...is disappointed that the Consultation Draft rather than creating a single Method of Measurement for offices attempts to legitimise the range of existing Methods of Measurement bringing them all under one Standard."*

SSC Rationale: Further to the consultation the SSC felt that the responses were overwhelmingly in favour of a standard, which would allow users to separately identify those parts in exclusive occupation. The SSC therefore removed Part 4 on 'Applications' section and created a new 'IPMS 3 – office' to deal with those areas that are exclusively occupied. 'IPMS 3 – office' is now defined as *"The 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."*

Page19. Category A Vertical Penetrations - Diagram 4 Upper Floor Illustration

Consultation Responses

1. WHITMARSH LOCKHART - James Lockhart, UK: *A clear explanation to consumers whether reception areas are rentable is needed.*
2. RICS GREECE- Group Response, Greece: *Diagram 4 – Vertical Penetrations (pg 19): Columns should not be included in Category A?*
3. JLL VIETNAM - Chris Murphy, Vietnam: *Suggest the addition of, electrical, water and IT services ducts, refuse collection chutes, fire services ducts, none of which are shown in the diagram. This applies to all diagrams.*
4. PLOWMAN CRAVEN - Group Response, Europe: *Some confusion why the staircase through the atrium is not part of Category A.*
5. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *The image indicates that both the stairs and the landings are category A area. What if that landing is also used for horizontal circulation, like the floor area between the lift shafts in the diagram?*
6. RICS PORTUGAL - Group Response, Portugal: *It is our opinion that, in general, the diagrams that are in the document with the purpose of representing the buildings areas to consider in each standard should have a higher level of detail, so that the final users can clearly understand what to measure. It will be useful if some diagrams could be included representing the right and the wrong way to do the measurement. We are of the opinion that the RICS Code of Measuring can be a good basis for the definition of type of diagrams to be included in the IPMS.*
7. JIQS - Group Response, Jamaica: *"The JIQS, although predominantly concerned with construction costs, considers "IPMS Office Area 2", proposal most suitable for conveying the information we provide. We are concerned that architectural drawings issued for proposed projects should be prepared to a similar standard where comparable cost, replacement cost or projected value on completion are required. It is not uncommon that the investor/financier or insurer will have in hand documents from both the Quantity Surveyor and Valuation Surveyor at the same time to assess an investment and/or possible returns."*

Response Summary: There were 3 general responses in relation to 'Category A Vertical Penetrations - Diagram 4 Upper Floor Illustration'. The comments asked for greater clarity in respect of the diagram.

SSC Rationale: The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page20. Category B Technical Services- Diagram 5 Ground Floor Illustration

Consultation Responses

1. CEM - Sylvia Osborn, UK: *The ventilated corridor between the lavatories in this diagram is double counted in the next diagram – diagram 6 . It looks like it should be removed in diagram 5.*
2. JLL VIETNAM - Chris Murphy, Vietnam: *The colour key is not understood. No walls and columns are coloured.*

Response Summary: There were 2 general responses in relation to ‘Category B Technical Services- Diagram 5 Ground Floor Illustration’. The comments asked for greater clarity in respect of the diagram. The diagram was criticised for being insufficiently detailed and for including elements of double counting between Diagram 5 and 6.

SSC Rationale: The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page21. Category C Hygiene Areas- Diagram 6 Upper Floor Illustration

Consultation Responses

1. PLOWMAN CRAVEN - Group Response, Europe: *There is a query regarding the room between the two sets of toilets it seems to form part of Category B and C.*
2. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *Considering the blue marked area in the image below, this area are both category B and category C areas. This means that the sum of category A to E is larger than IPMS Office Area 2.*

Response Summary: There were 2 general responses in relation to ‘Category C Hygiene Areas- Diagram 6 Upper Floor Illustration’. The comments asked for greater clarity in respect of the diagram. The diagram was criticised for being insufficiently detailed and for including elements of double counting between Diagram 5 and 6.

SSC Rationale: The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page 22. Category D Circulation Areas- Diagram 7 Ground Floor Illustration

Consultation Responses

1. RICS HUNGARY- Group Response, Hungary: *If the separation walls are shown as potential leased or exclusively used areas, then the areas shown below should be included as Circulation Areas and not Workspace/Amenities.*
2. PLOWMAN CRAVEN - Group Response, Europe: *"Consistency, it appears that 2 or 3 areas that appear to be corridors have been ignored when showing examples of the corridors in the diagram. Clarification on what is expected to be 'other circulation areas'"*
3. NETHERLANDS COUNCIL FOR REAL ESTATE - Ruud M. Kathmann, Netherlands: *It seems unclear what the exact definition of the circulation area is. For instance in the image below, the blue marked area is neither defined as circulation area nor as workspace or amenity area.*

Response Summary: There were 3 general responses in relation to 'Category D Circulation Areas- Diagram 7 Ground Floor Illustration'. The comments asked for greater clarity in respect of the diagram.

SSC Rationale: The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page23. Category D Circulation Areas- Diagram 8 Upper Floor Illustration

Consultation Responses

1. PLOWMAN CRAVEN - Group Response, Europe: *Again, it appears that 2 corridors are not highlighted in this diagram. Clarity required for the staircase through the atrium, as previously indicated should this from part of Category A?*

Response Summary: There was 1 general response in relation to 'Category D Circulation Areas- Diagram 8 Upper Floor Illustration'. The comment asked for greater clarity in respect of the diagram.

SSC Rationale: The SSC has considered this comment and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page24. Category E Workspace/Amenities- Diagram 9 Ground Floor Illustration

Consultation Responses

1. DUBAI LAND - Mohamad Al-Dah, Dubai: *Why exclude the space in the bottom left corner of the drawing?*
2. JLL VIETNAM - Chris Murphy, Vietnam: *"This category is confusing. The other categories show areas which may be excluded depending on market practice. It should be made very clear that this category is inclusive rather than exclusive. Suggest that it should be Category A."*
3. RICS HUNGARY- Group Response, Hungary: *Please see comments above, for Page 22. Circulation Areas - Diagram 7 Ground Floor Illustration*

Response Summary: There were 3 general responses in relation to 'Category E Workspace/Amenities- Diagram 9 Ground Floor Illustration'. The comments asked for greater clarity in respect of the diagram.

SSC Rationale: The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page25. Category E Workspace/Amenities- Diagram 10 Upper Floor Illustration

Consultation Responses

1. JLL VIETNAM - Chris Murphy, Vietnam: *This category is confusing. The other categories show areas which may be excluded depending on market practice. It should be made very clear that this category is inclusive rather than exclusive. Suggest that it should be Category A.*
2. PLOWMAN CRAVEN - Group Response, Europe: *A query on whether a terrace/covered gallery is included in IPMS Office 3.*

Response Summary: There were 2 general responses in relation to ‘Category E Workspace/Amenities- Diagram 10 Upper Floor Illustration’. The comments asked for greater clarity in respect of the diagram.

SSC Rationale: The SSC has considered these comments and has revised Diagrams within the Exposure Draft to provide greater clarity.

Page26. Appendix 2 – Tolerances

Consultation Responses

1. CEM - Sylvia Osborn, UK: *Heading of column 2 "accuracy X, Y" could it be more accurately described as "linear accuracy X, Y"? Does the percentage accuracy refer only to linear measurement or does it refer to squared measurement – this needs clarification.*
2. JLL VIETNAM - Chris Murphy, Vietnam: *"(X,Y)' should be deleted. It is not clear why 1/16 inch to 1 foot has been included in the 1:100 box. This imperial scale represents 1:192 and would therefore be more appropriate in the lower box. For the upper box the imperial scale closest to 1:100 is 1/8inch to 1 foot (1:96). Similarly, care needs to be taken with the minimum size of feature to be shown. As written the feature would be 0.5 mm on plan using the metric scale and only 0.17mm on plan with the imperial scale. The word 'ratings' should be 'rating'."*
3. IVBN - Frank van Blokland, Netherlands: *"The tolerances, stated in appendix 2, are quite ambitious; in combination with the detailed splitup of the office building in A – B – C – D – E it will however lead to high costs and too much detail?"*
4. PCA - Chris Mountford, Australia: *Measurement accuracy. Section 2.2.2 and Appendix 2 create ambiguity in relation to the accuracy of any measurements. Appendix 2 refers to the size of the lease as a consideration in determining the accuracy of the measurement. Such an approach will reduce confidence in the IMPSO, particularly for large areas where a greater level of inaccuracy will be assumed by necessity. Section 2.2 outlines general principles of the IPMSO. Clause (d) states "measurements are to be taken using methods in accordance with local market practice." It is unclear what is meant by this statement.*
5. RICS NETHERLANDS- Group Response, Holland: *See remarks about methods and fixed tolerances above.*

Response Summary: There were 5 general responses in relation to ‘Appendix 2 – Tolerances’.

SSC Rationale: In preparing the Exposure Draft the SSC have considered these comments.

Other responses

Consultation Responses

1. GENSLER - Tom Houlihan, USA: *"We would also like to offer some suggestions for the success of the global standard. As I indicated at our visit we believe that the key to any standard succeeding is to have place for the results of a survey to land so as to be available to all parties and to create a system of record perception. This is something that we recognized over a decade ago and caused us to get involved in the development of platforms that acknowledged the needs of contributors, publishers, and subscribers of building and space information. Initially we attempted to use off the shelf solutions and the resources of outside development entities. We quickly became aware that neither of these avenues could keep up with our requirements and brought in our own database, drawing file format, interface designers, programmers, and IT experts so that we could direct them at a pace and methodology suited to our clients needs.*

We were not able to succeed by trying to fit into someone else's development schedule. We have developed platforms to satisfy the needs of tenants, landlords, and programs. Over the past 3 years we have been developing what we refer to as the Global Building Database that can house and publish all of the drawings and building information from all sources.

In support of your efforts we would again like to offer you use of that platform as a resource to create a legitimate system of record for the collection and publishing of surveys completed according to your standard. We can configure "The Registry" to be perceived as a subset of your current web presence with your administration. The idea of a shared resource such as this is something we have discussed with our colleagues and clients over the past several years and the value of the concept has been universally accepted. This direction happens to be somewhere we are going in any case. This could be the best way we can support your efforts so that we all benefit. We would be happy to share an overview of our current platforms via web demo if you are interested.

We have many ideas related to business considerations that have come from our experiences in delivering information to the real estate industry and we will be glad to share them. For you, step one is getting to a globally accepted standard. Step two is defining the business model through which it is delivered. We applaud both of those efforts and are here to support you."

Response Summary: There was one other response in relation to IPMS for Offices.

SSC Rationale: In preparing the Exposure Draft the SSC have considered this comment.