

**INTERNATIONAL  
PROPERTY  
MEASUREMENT  
STANDARDS:  
INDUSTRIAL**

**SSC Response to Consultation Feedback**

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## Introduction

The International Property Measurement Standards for Industrial Buildings Consultation Document was in consultation between 5 July and 30 September 2016. During this period there were over a 1,1145 [**Alexander:** 1,145 is a bit specific if you're saying 'over'.] downloads of the Consultation Document and the responses were received from the 20 organisations or individuals listed below. The IPMS Standards Setting Committee has considered all the comments received before completing the IPMS – Residential Buildings.

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

*BNP PARIBAS REAL ESTATE*  
*CLGE*  
*EXISM DEVELOPMENT*  
*EXPERT INVEST*  
*GIF*  
*JOHN LUCAS LTD*  
*KNIGHT FRANK LLP*  
*MALCOLM HOLLIS LTD*  
*MATHEW JENNINGS*  
*MOHAMMED ALKHALAYLA*  
*NETHERLANDS COUNCIL FOR REAL ESTATE*  
*PLOWMAN CRAVEN*  
*PROLOGIS EUROPE*  
*RICS FINLAND*  
*RICS PORTUGAL*  
*RUAG REAL ESTATE AG*  
*SOCIETY OF CHARTERED SURVEYORS IRELAND*  
*SEGRO*  
*SIOR*  
*ZIA*

A number of responses were received from various RICS country groups, such as RICS Finland and Portugal. 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 several other responses such as those prepared by GIF, Netherlands Council for Real Estate, Plowman Craven and ZIA were also prepared by boards or working groups.

The IPMS principles, methodology and measurement practices used in this standard will be applied when the future IPMS standards for other building classes, for example 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 variance between IPMS 1 and IPMS2 across the building classes. However, it should be noted that though the concept of IPMS 3 as the area in exclusive occupation will be the same across building classes there may be some variance in the definition of IPMS 3 across the varying building classes to meet varying market practices and needs.

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

Finally, the diversity of responses received from major stakeholders within the industrial market has underlined the need for IPMS Standards.

## Executive Summary

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

**Q1. Please state whether, in your opinion, IPMS: Industrial Buildings is clear and unambiguous. In particular, are there any matters that need clarification or more detail? Please ensure you consider the diagrams in forming your response.**

***Response Summary:** There were 20 responses to this question and a range of different opinions. On the whole the respondents felt that IPMS Industrial Buildings improved market transparency for consumers. However, a number of respondents stated that the standard required further simplification and clarification to be fit for purpose and highlighted a number of areas such as tolerance, clearance height and IDF. Some other respondents felt that in some instances the plans and diagrams were contradictory and requested further clarification, whereas others requested fixed reporting templates.*

***SSC Rationale:** The SSC considered the responses received and noted that respondents generally accepted the need for an international measurement standard though felt some areas required further clarification in order for the standard to be fit for purpose. The SSC has spent the past three months discussing these matters, consulting and revising the document in order to prepare an Exposure Draft for further consultation to ensure that IPMS Industrial Buildings is fit for purpose prior to publication.*

*The Exposure Draft includes revised user friendly floorplans with text labelling and magnification of key measurement areas to provide further clarification. Further to discussions the SSC has removed the section on tolerance as it felt that tolerance related, as IPMSC SSC members felt that a professional would always try to measure to the best of his ability and the tolerance could vary considerably according to the nature of the instruction. The SSC has also included further clarification and revised*

*diagrams for IDF and has included revised definitions for clear height and internal height.*

**Q2. Which of the standards IPMS 1, IPMS 2 Industrial and IPMS 3A Industrial and 3B Industrial would be relevant to your markets?**

**Response Summary:** *There were 20 responses to this question and a range of different opinions. All the respondents would use at least one of the IPMS standards (IPMS 1, IPMS 2 or IPMS 3 A or IPMS 3B) and most respondents said they would use more than one of the IPMS standards. Several respondents also commented on the similarity between one of the IPMS measurements standards and their existing national measurement standards. Some respondents also felt that IPMS 3 A and IPMS 3B were irrelevant in many instances they produced the same measurement as IPMS 1 and IPMS 2.*

**SSC Rationale:** *The SSC considered the responses received particularly those in relation to the similarity between IPMS 1 and the current IPMS 3A and between IPMS 2 and IPMS 3B. The SSC discussed this matter in detail and felt that the distinction between IPMS 1 and 2 and IPMS 3 A and IPMS 3B was still necessary. Firstly, because across all the IPMS standards IPMS 1 measures the external area, IPMS 2 measures the internal area and IPMS 3A and IPMS 3B measures the area in exclusive occupation. Secondly although in many instances these areas will be equivalent, in some instances there will be a variance between IPMS 1 and IPMS – 2 Industrial and IPMS 3A – Industrial and IPMS 3B Industrial as measurements are taken to the centre line of adjoining walls for multi units. Furthermore, the SSC felt that the existence of IPMS 3A and IPMS 3B would provide greater transparency with the market over current measurement practices.*

**Q3. Within your industrial market is there other measurement issues that the IPMS Industrial Standard has not mentioned or clarified that you believe should be part of the IPMS Industrial Standard?**

**Response Summary:** *There were 20 responses to this question and the majority of respondents commented that there were no other measurement issues that the IPMS Industrial Standard has not mentioned or clarified. However, a number of respondents requested further clarification on height feeling that in addition to Clear height it*



*was also necessary to provide additional definition for Clear, Internal Height, Clear Internal Ridge Height and Eaves Height. Further respondents required additional clarification on the measurement of other areas and areas outside IPMS 1 such as yards and plant rooms.*

**SSC Rationale:** *The SSC considered the responses received and have included a definition for internal height within IPMS Industrial Buildings Exposure Draft. Furthermore, the SSC has engaged with stakeholders in relation to the number of height measurements required for an industrial building and will be asking a consultation question on the current definitions for Clear Height and Internal Height and the need for additional definitions such as Eaves Height. In relation to additional clarification on the measurement of other areas such as yards and plant rooms further clarification has been provided in the Exposure Draft, but much of the detail requested will be provided in the subsequent guidance issued by IPMSC members.*

**Q4. Are the reasons for the Service Provider stating the tolerance clear?**

**Response Summary:** *There were 20 responses to this question. The responses varied between respondents, who felt that no tolerance should be included within IPMS and others who felt that the measurement tolerance should be to the nearest centimetre. Others felt that as buildings are not heterogeneous it is not possible to state a tolerance that would apply to every type of building and furthermore some respondents were not sure how the degree of tolerance could be accurately calculated.*

**SSC Rationale:** *The SSC considered the responses received and have included a definition for internal height within IPMS Industrial Buildings Exposure Draft. Furthermore, the SSC has engaged with stakeholders in relation to the number of height measurements required for an industrial building and will be asking a consultation question on the current definitions for Clear Height and Internal Height and the need for additional definitions such as Eaves Height. In relation to additional clarification on the measurement of other areas such as yards and plant rooms, further clarification has been provided in the Exposure Draft, but much of the detail requested will be provided in the subsequent guidance issued by IPMSC members.*

**Q5. Are all other diagrams clear in demonstrating the concepts to which they apply?**

**Response Summary:** *There were 20 responses to this question and though the majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.*

**SSC Rationale:** *The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.*

**Q6. Are the Component Areas sufficient for industrial buildings?**

**Response Summary:** *There were 20 responses to this question and the majority of respondents said that the Component Area were sufficient for IPMS Industrial Buildings. However, some respondents asked for further Component Area Guidance on areas that may have multiple uses such as store rooms and changing room area. Further respondents felt that Component Areas were unnecessary if the User only intended to report IPMS 2.*

**SSC Rationale:** *The SSC considered the responses received and noted further clarification in relation to the use of Component Areas within IPMS 1 and IPMS 2. The SSC have added the following sentence “If required IPMS 2 – Industrial may be reported on a Component-by-Component basis for each floor of a Building” to highlight that it is not always necessary to use Component Areas when calculating IPMS 2. The*

*SSC also accepted that additional guidance was required on Component Areas in multiple use and have added the following additional paragraph within Section 4.1:*

*“If a particular portion of space may be assigned to more than one Component Area, then it is to be assigned to the Component Area that best reflects its primary design function within the larger space.”*

**Q7. IPMS Industrial Buildings differentiates between Component Area B2 – Internal Structural Elements and Component Area B3 Internal Non-Structural Elements. Is this differentiation helpful?**

***Response Summary:*** *There were 20 responses to this question and the majority of respondents felt that the differentiation between Component Area B2 – Internal Structural Elements and Component Area B3 Internal Non-Structural Elements was helpful. Some respondents asked for further differentiation within B3 between permanent and impermanent non-structural walls, whereas some others felt that the distinction was not especially helpful, particularly as some practitioners may not know whether a wall is structural or non-structural.*

***SSC Rationale:*** *The SSC considered the responses received and accepted that in some instances practitioners may not know whether a wall is structural or non-structural (i.e. B2 or B3). The SSC discussed this issue further and felt that there was no need for further guidance on this matter as Component Areas were not mandatory. Furthermore, the SSC felt that measurement practitioners should try and carry out further investigations to confirm if a wall was structural or not and were concerned that additional guidance would discourage measurement practitioners from doing this. Finally, the SSC suggested that any further guidance on this matter could be contained in the additional guidance provided by Coalition members.*

**Q8. Is there sufficient information to allow you, when dual reporting, to explain a reconciliation between IPMS and another standard? If not, please state what, if any, supplementary guidance would assist your organisation or membership in adopting IPMS: Industrial Buildings?**

***Response Summary:*** *There were 20 responses to this question and the majority of respondees felt that the information contained within Section 2.4 on ‘Adjustment between IPMS and other standards’ was sufficient.*

*Some respondents felt that IPMS Industrial Buildings should contain further guidance or a summary guide on the difference between IPMSs and other standards such as GEA, GIA and NIA.*

**SSC Rationale:** *The SSC considered the responses received and felt that as measurement standards and the definitions of areas such as GEA, GIA and NIA could vary on a region by region basis, any additional guidance should be provided by Coalition members as part of the adoption and implementation plan for their members. However, the SSC have included the following paragraph to provide further clarity to this section; “The SSC is aware that there are many different measurement conventions in use. Parts of Industrial Buildings might be taken to have limited use for other reasons, such as floor loading capacity or contamination. In some markets Floor Area is measured to the wall-floor junction, in others it is taken to the centre-line of walls or the external face. Other markets have adopted varying interpretations of the dominant face of an inside wall.”*

#### **Q9. Any Other Comments?**

**Response Summary:** *There were 20 responses to this question and the majority of respondents had no further comment. Some respondents commented for the need for immediate harmonisation across the Building Classes and others felt that the section on tolerance did not aid adoption and implementation within markets. Further respondents commented on the variations within IPMS 3 and felt that there should be only one IPMS 3.*

**SSC Rationale:** *The SSC considered the responses received, particularly the need for harmonisation across the Building Classes. The SSC accepted that though there was some currently some variation within IPMS across the Building Classes the general principles and definitions were consistent across all Building Classes. Furthermore, the SSC did not think it was practical to harmonise IPMS across the Building Classes until IPMS was published for the main Building Classes (office, residential, industrial and retail), as otherwise there could be further changes, which could lead to difficulties with version control and lack of transparency and confusion within the market. In respect of IPMS Industrial Buildings containing only one variant of IPMS 3, the SSC did not feel this was possible as this does not reflect current market practices where two measurement variants (GEA and GIA) are currently used for industrial buildings. Finally, in*

*respect to the comments raised on tolerances please refer to the SC Rationale for Question 4.*

**Q1. Please state whether, in your opinion, IPMS: Industrial Buildings is clear and unambiguous. In particular, are there any matters that need clarification or more detail? Please ensure you consider the diagrams in forming your response.**

**Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global:

*"1. Whilst accepting that there is a professional duty on a Chartered Surveyor to measure as accurately as possible having regard to the circumstances and the nature of the instruction we are not prepared to offer a % measurement tolerance. There is no accepted industry bench mark or court guidance to which the industry can refer.*

*2. Clearance Height – the accepted description previously was Working Height and would be measured to the underside of the roof structural element (for example the haunch of a portal frame or the horizontal member of a roof truss). Ducting, gantries, pipework and sprinklers are plant and machinery and are not relevant for this purpose. Diagrams clarifying the lowest point of different roof structures would be helpful.*

*3. It is likely that any industrial buildings with >50% glazing, the lower third is more than likely to be block/cladding. Market practice would then be to measure to the inside of that block/cladding when measuring to IPMS 2, not to the glazing. This interpretation of the IDF does not accord with market practice."*

2. CLGE - Maurice Barbieri, Global: *See all subsequent comments by CLGE.*

3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *It is clear and straight forward.*

4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *IPMS: Industrial Buildings is clear and unambiguous.*

5. GIF - Dr. Ira Hörndler, Germany: *All diagrams are clear and understandable.*

6. John Lucas Limited - Joanna Yexley, UK: *Clear.*

7. Knight Frank - Andrew Gooding, Global: *In our opinion the document is convoluted, overtly complex and simply too long. It is not clear as to the purpose of IPMS 3A and 3B. From a UK perspective, at the moment the public are clear as to what basis of measurement is to be used, but this IPMS will provide 4 choices with no guidance as to what basis is suitable for what purpose. We feel strongly that the "Component by Component" element is too complex (as well as time consuming) for the industrial market, with no appreciable benefit (except to measuring companies).*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *Overall yes however I do not think that 4.2 the "Sample spreadsheet for Component Areas" is very clear.*
10. El-Seif - Mohammed Alkhalayla, Saudi Arabia: *It is clear.*
11. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann , Netherlands: *In general the standard is clear. We see that compared with previous standards, much work has been done to achieve a good level of detail. We hope both new standards and the existing ones will follow this example. We call on you to ensure the IPMS – Office will be updated on those points where the IPMS – industrial deviates or has a higher level of accuracy.*
12. Plowman Craven - Robert Ash, UK: *"There are certain key issues; just listed here as headings and then described in more detail further into this response document.*
  1. *We believe that there is a contradiction (inconsistency) within the interpretation of the IPMS 1, 2 and 3 standards between the written definitions and the representation of these definitions within the relevant plans.*
  2. *The range of the type of buildings classified as 'Industrial' (and therefore under consideration here) requires clarification.*
  3. *In respect of IDF and industrial properties, we feel greater clarification is required when assessing perimeter wall elevations that frequently extend vertically through more than one storey to high levels.*

4. Generally, apart from a couple of exceptions, we feel that the diagrams are informative but if hard copy document presentation is being considered, the plans need to be enlarged to make full use of available space within the A4 format."

13. Prologis Europe - Pieter Ris and Mark Zulver, Europe: *Would be good if the reporting template for measurements will be fixed so that it is easy for everyone where to see total where to see square meters of individual components etc.*

14. RICS Finland - Seppo Koponen, Finland: *"There are certain key issues; just listed here as headings and then described in more detail further into this response document.*

1. *We believe that there is a contradiction (inconsistency) within the interpretation of the IPMS 1, 2 and 3 standards between the written definitions and the representation of these definitions within the relevant plans.*

2. *The range of the type of buildings classified as 'Industrial' (and therefore under consideration here) requires clarification.*

3. *In respect of IDF and industrial properties, we feel greater clarification is required when assessing perimeter wall elevations that frequently extend vertically through more than one storey to high levels.*

4. *Generally, apart from a couple of exceptions, we feel that the diagrams are informative but if hard copy document presentation is being considered, the plans need to be enlarged to make full use of available space within the A4 format.*

5. *Treatment of Vertical Penetrations is a bit complicated especially with closed shafts where it is quite hard to define on spot whether they represent area larger or smaller than 0.25 m<sup>2</sup>."*

15. RICS Portugal - Carlos Pereira, Portugal: *We are of the opinion that the document is clear and unambiguous.*

16. RUAG Real Estate AG - H. Hauri, Switzerland: *Enough clear.*

17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *The examples provided within the IPMS document are for straightforward property types and should include more complicated*



*designs to reflect those properties encountered when measuring industrial buildings.*

18. SEGRO - NICK WATSON, EUROPEAN: *Yes, generally, however some fine tuning is required for example a definition of the principal external perimeter line – is this the face of an external roller shutter or the face of the cladding above, which may project from the shutter.*

19. SIOR - PHIL NANAVATI, GLOBAL: *No comment.*

20. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *All diagrams are clear and understandable.*

**Response Summary:** There were 20 responses to this question and a range of different opinions. On the whole the respondents felt that IPMS Industrial Buildings improved market transparency for consumers. However, a number of respondents stated that the standard required further simplification and clarification to be fit for purpose and highlighted a number of areas such as tolerance, clearance height and IDF. Some other respondents felt that in some instances the plans and diagrams were contradictory and requested further clarification, whereas others requested fixed reporting templates.

**SSC Rationale:** The SSC considered the responses received and noted that respondents generally accepted the need for an international measurement standard though felt some areas required further clarification in order for the standard to be fit for purpose. The SSC has spent the past three months discussing these matters, consulting and revising the document to prepare an Exposure Draft for further consultation to ensure that IPMS Industrial Buildings is fit for purpose prior to publication.

The Exposure Draft includes revised user friendly floorplans with text labelling and magnification of key measurement areas to provide further clarification. Further to discussions the SSC has removed the section on tolerance as it felt that tolerance related, as IPMSC SSC members felt that a professional would always try to measure to the best of his ability and the tolerance could vary considerably according to the nature of the instruction. The SSC has also included further clarification and revised

diagrams for IDF and has included revised definitions for clear height and internal height.

**Q2. Which of the standards IPMS 1, IPMS 2 Industrial and IPMS 3A Industrial and 3B Industrial would be relevant to your markets?**

**Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global: *IPMS 1 is relevant to our Building Consultancy teams whilst IPMS 2 and IPMS 3B is relevant to our Valuation and Transaction teams.*
2. CLGE - Maurice Barbieri, Global: *IPMS 1 and IPMS 2.*
3. EXSIM Development Sdn. Bhd. Malaysia; *IPMS 1.*
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *All of the standards are relevant to our markets.*
5. GIF - Dr. Ira Hörndler, Germany: *We only use IPMS 1 for calculation or transaction purposes for Industrial. We are strict against various IPMS 3 alternatives. Reason: a standard should not have versions or applications.*
6. John Lucas Limited - Joanna Yexley, UK: *None.*
7. Knight Frank - Andrew Gooding, Global: *IPMS1 and IPMS2 only. We are not sure of the relevance of IPMS 3A and 3B in the UK market?*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *IPMS 3 – Industrial (Occupier).*
- 10.El-Seif - Mohammed Alkhalayla; , Saudi Arabia: *IPMS 2.*
- 11.Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *With respect to industrial buildings, we believe especially IPMS 1 and IPMS 3B could be relevant in our market.*
- 12.Plowman Craven - Robert Ash, UK: *All, IPMS 1, IPMS 2 – Industrial, IPMS 3 – Industrial.*
- 13.Prologis Europe - Pieter Ris and Mark Zulver, Europe: *All.*

14. RICS Finland - Seppo Koponen, Finland: *All of them.*
15. RICS Portugal - Carlos Pereira, Portugal: *In the Portuguese Market IPMS 1 and IPMS 3A will be the relevant standards.*
16. RUAG Real Estate AG - H. Hauri, Switzerland: *All (IPMS 1, 2, 3a & 3b) depending on the user (owner or tenant).*
17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *IPMS 3 is more appropriate to this market and is closely aligned with Gross External Area.*
18. SEGRO - NICK WATSON, EUROPEAN: *IPMS1 for the majority of industrial/ warehousing and rarely for retail warehousing. IPMS2 for majority of retail warehousing and rarely for industrial/warehousing. IPMS3 rarely.*
19. SIOR - PHIL NANAVATI, GLOBAL: *No comment.*
20. Zentraler Immobilien Ausschuss e.V; *We only use IPMS 1 for calculation or transaction purposes for Industrial buildings. We are strongly against the idea of different standards of Level 3 (3A and 3B). In our view this would counteract the idea of one standard for the whole world. If investor A decides to measure its property by standard 3A and then wants to sell it to investor B which chooses 3B they can't compare the results. This would be also true for different valuer. We therefore assume that IPMS coalition can't reach its own ambitious aim. A quite good alternative would be to provide only one Standard 3 and guidance to combine the different components to create national differences but to represent in every case IPMS 3.*

**Response Summary:** There were 20 responses to this question and a range of different opinions. All the respondents would use at least one of the IPMS standards (IPMS 1, IPMS 2 or IPMS 3 A or IPMS 3B) and the majority of respondents said they would use more than one of the IPMS standards. A number of respondents also commented on the similarity between one of the IPMS measurements standards and their existing national measurement standards. Some respondents also felt that IPMS 3

A and IPMS 3B were irrelevant in many instances they produced the same measurement as IPMS 1 and IPMS 2.

**SSC Rationale:** The SSC considered the responses received particularly those in relation to the similarity between IPMS 1 and the current IPMS 3A and between IPMS 2 and IPMS 3B. The SSC discussed this matter in detail and felt that the distinction between IPMS 1 and 2 and IPMS 3 A and IPMS 3B was still necessary. Firstly, because across all the IPMS standards IPMS 1 measures the external area, IPMS 2 measures the internal area and IPMS 3A and IPMS 3B measures the area in exclusive occupation. Secondly although in many instances these areas will be equivalent, in some instances there will be a variance between IPMS 1 and IPMS – 2 Industrial and IPMS 3A – Industrial and IPMS 3B Industrial as measurements are taken to the centre line of adjoining walls for multi units. Furthermore, the SSC felt that the existence of IPMS 3A and IPMS 3B would provide greater transparency with the market over current measurement practices.

**Q3. Within your industrial market is there other measurement issues that the IPMS Industrial Standard has not mentioned or clarified that you believe should be part of the IPMS Industrial Standard?**

**Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global: *No.*
2. CLGE - Maurice Barbieri, Global: *IPMS makes no differentiation between floor areas which are fully usable, i.e. floor areas which can accommodate equipment and standing humans, and which have sufficient ceiling height to comply with health and safety legislation in the jurisdictions in which they are located. Furthermore, there are minimum floor areas and room dimensions defined in most jurisdictions, below which it would be illegal to use the area as workspace. Normally the area must be of a minimum size before it is considered fit for use. Thirdly there are areas which, because of issues such as lack of ventilation, dampness or contamination, are deemed unfit for human occupation or storage. All of these spaces should not be classified and treated in the same way as legally usable areas. If the purpose of the standard is to allow comparison between floor areas internationally, then the areas must be broadly comparable. To treat a 1m square box room as comparable to 1m square of floor space in a large open room space, is misleading. Equally, to treat a floor area whose ceiling height is 1.5m as being equivalent to an area whose ceiling height is 2.1m and more creates anomalies which detract from the usefulness and transparency of the standard. Please make a differentiation between fully usable workspace and restricted use workspace.*
3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *Any specific limit of opening sizes for core/services openings need to be excluded in the area measurement? It seems that no deduction for the IPMS for core/services openings.*
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *No.*
5. GIF - Dr. Ira Hörndler, Germany: *No.*
6. John Lucas Limited - Joanna Yexley, UK: *No.*

7. Knight Frank - Andrew Gooding, Global: *"We do not feel that IPMS Industrial Standard has been sufficiently clear on the specific heights within a building. Although the single new definition of Clearance Height is clear (and equates to clear internal height in the UK market under the RICS Code of Measuring Practice), it would also be useful to state two further definitions:*

- *Clear Internal Height – the height to the lowest point of a portal steel frame, excluding haunches*
- *Eaves Height – the height to the lowest point of the centre roof line.*

*While Clearance Height is the standard by which industrial buildings are measured, many occupiers will still be interested to know the Clear Internal Height and the Eaves Height as this may give opportunity for higher storage/racking. Furthermore, it would be extremely useful to have a clear plan showing the three heights; or indeed a plan showing just the Clearance Height on both a portal frame and steel frame building. (as per below)."*

8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*

9. Mathew Jennings - Mathew Jennings, UK: *No.*

10. El-Seif - Mohammed Alkhalayla, Saudi Arabia: *No.*

11. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *No.*

12. Plowman Craven - Robert Ash, UK: *"Yes. Other than grammar issues in the question itself. Our market is very much focussed on the UK, and as such, we think that some of our observations made whilst going through the Consultation Document, relate to our experiences gained nationally rather than internationally. We foresee therefore that there may be a need for more adaptation when IPMS Industrial Buildings comes to be incorporated within RICS Property Measurement.*

*When undertaking building measurements for this type of building we have been asked to report on associated yard areas, plant room, etc. and perhaps such areas will be given more attention than appears to be the case here in the section on page 25*

*'Additional areas outside IPMS 1' when RICS Property Measurement is being revised."*

13. Prologis Europe - Pieter Ris and Mark Zulver, Europe: *Can we also convert to a previous national standard, as then we can for example for older properties check if the current measurement result is in line with the square meters as approved at the time the building permit was approved, like a compliance check.*
14. RICS Finland - Seppo Koponen, Finland: *No.*
15. RICS Portugal - Carlos Pereira, Portugal: *We did not identify any other issues.*
16. RUAG Real Estate AG - H. Hauri, Switzerland: *Our Swiss Standard SIA 416 and d 0165 is more detailed (especially other areas).*
17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *The measurement standard does not adequately address clear internal height and eaves heights. There are three measurements that can be provided and SCSi suggest the following is included:*
  - 1) *Clear/Internal Height - which is the measurement from the floor to the underside of the steel/concrete structure holding up the roof at the internal side of the building.*
  - 2) *Clear Internal Ridge Height - which is the measurement from the floor to the underside of the steel/concrete structure holding up the roof at the highest point internally.*
  - 3) *Eaves Height - which is the measurement from the floor to the highest point at the internal side of the building. Pharma, medical and some older production buildings will have a lot of plant and equipment (air extraction etc.) reducing the clear internal height but if possible both the lowest measurement and the Clear Internal Height should be provided as the next user of the premises may look to strip this out.*
18. SEGRO - NICK WATSON, EUROPEAN: *There should be a clear reference to clear height, eaves height, highest and lowest height. Next generation warehousing will be more about cubic capacity than 2 dimensional measurements. In addition, items such as*



*lights / pipes / duct work could be moved / altered and as such artificially remove the potential clear height.*

19.SIOR - PHIL NANAVATI, GLOBAL: *No comment.*

20.Zentraler Immobilien Ausschuss e.V; *No.*

**Response Summary:** There were 20 responses to this question and the majority of respondees commented that there were no other measurement issues that the IPMS Industrial Standard has not mentioned or clarified. However, a number of respondees requested further clarification on height feeling that in addition to Clear height it was also necessary to provide additional definition for Clear, Internal Height, Clear Internal Ridge Height and Eaves Height. Further respondees required additional clarification on the measurement of other areas and areas outside IPMS 1 such as yards and plant rooms.

**SSC Rationale:** The SSC considered the responses received and have included a definition for internal height within IPMS Industrial Buildings Exposure Draft. Furthermore, the SSC has engaged with stakeholders in relation to the number of height measurements required for an industrial building and will be asking a consultation question on the current definitions for Clear Height and Internal Height and the need for additional definitions such as Eaves Height. In relation to additional clarification on the measurement of other areas such as yards and plant rooms further clarification has been provided in the Exposure Draft, but much of the detail requested will be provided in the subsequent guidance issued by IPMSC members.

**Q4. Are the reasons for the Service Provider stating the tolerance clear?**

**Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global: *Whilst accepting that there is a professional duty on a Chartered Surveyor to measure as accurately as possible having regard to the circumstances and the nature of the instruction we are not prepared to offer a % measurement tolerance.*
2. CLGE - Maurice Barbieri, Global: *"We think that it should be clearly written that in normal circumstances, accuracy of dimension measurements should reach the 1 centimetre accuracy. In certain situation, if it is too hard to make such measurement (because of an activity or equipment inside but not due to the lack of time !), it should be explained that the calculated area doesn't reach the accurateness standard (but only in that case).*

*If we want to use our measurements to compare different buildings, they have to be measured by the same way. That's why we think that this tolerance, explained and given by the service provider is not a good solution. This tolerance has to be fixed by the Standard.*

*If we accept that the time could be a reason to decrease the tolerance of the results, it means that we will accept to reduce the quality of the results without real reasons and it's not acceptable.*

*Also, we have to clarify that measurements can only be done by Space Measurement Specialist and not the Service Provider."*

3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *Yes, however it would be better to provide examples.*
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *No comment.*
5. GIF - Dr. Ira Hörndler, Germany: *Although stating the tolerance is reasonable, no Service provider really does.*
6. John Lucas Limited - Joanna Yexley, UK: *Not applicable.*

7. Knight Frank - Andrew Gooding, Global: *We do not consider that it should be a requirement to state the degree of tolerance of the measurement reported. It is generally not possible to accurately quantify the degree of tolerance in measurement of this nature since there is no benchmark against which to gauge the tolerance level. Accordingly, we consider that stating tolerance could provide the user of the measurements with a misleading quantification of accuracy.*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *Yes, as they conduct the measurement.*
10. El-Seif - Mohammed Alkhalayla; , Saudi Arabia: *Yes.*
11. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *The reasons for the Service Provider stating the tolerance is clear. However, we do have concerns about the fact that it might be nearly impossible to give a working instruction for these service providers on how to determine the level of accuracy. First of all because the IPMS itself has its limits in respect of the accuracy. Besides that, every building being different, it will be very hard to estimate the level of accuracy. Moreover, we believe the percentage of accuracy the service providers are requested to report will say be a meaningless number, because neither the service provider, the user nor the third party will be able to check this percentage.*
12. Plowman Craven - Robert Ash, UK: *"This section has been further developed than was previously the case as published in IPMS: Office Buildings and IMPS: Residential Buildings and as such this might give the impression of assuming greater importance than those property types.*

*Other than underlining the fact that service providers are in the best position to report on property measurement tolerances, the reasons are not specified over and above that fundamental one of establishing and maintaining an acceptable standard for the service being provided."*

13.Prologis Europe - Pieter Ris and Mark Zulver, Europe: *Yes, but would be good to agree per country on a standard deviation per nett and gross.*

14.RICS Finland - Seppo Koponen, Finland: *Yes.*

15.RICS Portugal - Carlos Pereira, Portugal: *We think they are.*

16.RUAG Real Estate AG - H. Hauri, Switzerland: *Yes.*

17.Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *The degree of tolerance could become a significant issue in relation to the success of IPMS implementation. The General Practice Surveyor will not be in a position to "state the degree of tolerance" and therefore property owners will be requested to purchase measured surveys. This is not practical especially for more regional industrial units as the cost of a survey will be unviable.*

18.SEGRO - NICK WATSON, EUROPEAN: *Yes, but how is the service provider to calculate the percentage of accuracy?*

19.SIOR - PHIL NANAVATI, GLOBAL: *No comment.*

20.Zentraler Immobilien Ausschuss e.V; *Although stating the tolerance is reasonable, no Service provider really does. In our experience the tolerance is quite low.*

**Response Summary:** There were 20 responses to this question. The responses varied between respondees, who felt that no tolerance should be included within IPMS and others who felt that the measurement tolerance should be to the nearest centimetre. Others felt that as buildings are not heterogeneous it is not possible to state a tolerance that would apply to every type of building and furthermore some respondees were not sure how the degree of tolerance could be accurately calculated.

**SSC Rationale:** The SSC discussed the comments received and whether tolerance was necessary within IPMS and many SSC members felt that it was unnecessary as it referred to the tolerance of the equipment used. Moreover, many IPMSC SSC members felt that a professional would

always try to measure to the best of his ability and the tolerance could vary considerably according to the nature of the instruction. Furthermore, many SSC members felt from market feedback that the inclusion of tolerance within IPMS did not aid adoption and implementation. In conclusion the SSC felt that there was no need to include tolerance within IPMS Industrial Buildings and agreed to the section on tolerance in future from both IPMS Office Buildings and IPMS Retail Buildings.

**Q5. Are all other diagrams clear in demonstrating the concepts to which they apply?**

**Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global: Yes.
2. CLGE - Maurice Barbieri, Global: *See specific comments below.*
3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: Yes.
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *Yes, they are clear.*
5. GIF - Dr. Ira Hörndler, Germany: *Yes, but the drawings should be allocated directly to the text – not at the end.*
6. John Lucas Limited - Joanna Yexley, UK: Yes.
7. Knight Frank - Andrew Gooding, Global: *"We are of the opinion that the number of drawings is too numerous (it should be noted that the RICS Code of Measuring Practice has only three drawings. Diagram 4 (IDF) is still not clear with regard to the most common feature of an industrial building, namely a block work walls up to a height of 1m, 2m or 3m with steel cladding above. It should be made clear in IPMS that the IDF is to be the internal face of the blockwork. See answer to Page 26.4.3."*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *Overall yes.*
- 10.El-Seif - Mohammed Alkhalayla; , Saudi Arabia: Yes.
- 11.Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *Yes, they are.*
- 12.Plowman Craven - Robert Ash, UK: *Currently, the diagrams are presented at too small a scale. They need enlargement.*
- 13.Prologis Europe - Pieter Ris and Mark Zulver, Europe: *No comment.*

14. RICS Finland - Seppo Koponen, Finland: *Yes, however the issue of shared structural wall between units shown in diagrams 2, 3, 6, 7, 9, 10, 11, 12, 13 and 14 as well as its presentation should be once again checked over in order to assure its visual clarity, especially in diagrams 2 and 3 with no additional enlarged partial view which perhaps could be added in them.*
15. RICS Portugal - Carlos Pereira, Portugal: *We think they are.*
16. RUAG Real Estate AG - H. Hauri, Switzerland: *Yes, except diagram 4; handling of windows and roller shutter is on our view not consequent.*
17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *Yes, all the diagrams are clear however as previously stated the diagrams should also include those buildings that are also not straightforward to measure. We suggest that IPMS should consider including additional examples with more complex layouts/features.*
18. SEGRO - NICK WATSON, EUROPEAN: *IPMS1 Oblique view on page 27: it is not clear that the dominant face is behind the column and not the face of the column.*
19. SIOR - PHIL NANAVATI, GLOBAL: *No comment.*
20. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *Yes, but the drawings should be allocated directly to the text – not at the end.*

**Response Summary:** There were 20 responses to this question and though the majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondees felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications

where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the **Covered Areas, IDF**, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.



## **Q6. Are the Component Areas sufficient for industrial buildings?**

### **Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global:Yes.
2. CLGE - Maurice Barbieri, Global: OK.
3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *Yes for simple industrial buildings.*
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: Yes.
5. GIF - Dr. Ira Hörndler, Germany: Yes.
6. John Lucas Limited - Joanna Yexley, UK: Yes.
7. Knight Frank - Andrew Gooding, Global: *We are of the opinion that the Component Areas are very confusing and would appear to be a case of “over engineering” a relatively simple property type. We can understand the optional need for the division into some component areas namely Workspace, Hygiene areas and Other areas, but the remainder would appear confusing and not of relevance to occupiers or landlords. A further point to be made is that the colour coding of such areas assumes measurement is being done on a CAD or computer based system, but this is relatively rare in developed countries (except by professional measuring companies) and almost impossible in developing countries.*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *Yes, as industrial buildings are split up into different units on a regular basis.*
- 10.El-Seif - Mohammed Alkhalayla; , Saudi Arabia: Yes.
- 11.Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *Yes, they are. We in particular appreciate the component areas are in accordance with the component areas that are specified in the IPMS – Offices.*

12. Plowman Craven - Robert Ash, UK: *If the question is asking whether or not any more categories are needed, then we do not think so. But reporting on internal space type as IPMS 2 does, is open to great variation dependent upon occupant fit-outs and the use of the premises at the time of survey. Should this standard be used for retail warehouses or distribution centres, then there may be a need for a greater classification of space type.*
13. Prologis Europe - Pieter Ris and Mark Zulver, Europe: *For example, levellers we measure separately as "Transport Infrastructure". Would the expedition area be separated from the real storage area as the expedition area differ in loading capacity, height and use. Not really necessary just a question."*
14. RICS Finland - Seppo Koponen, Finland: Yes.
15. RICS Portugal - Carlos Pereira, Portugal: Yes.
16. RUAG Real Estate AG - H. Hauri, Switzerland: Yes.
17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *The paper does not adequately cover e.g. measurement of the toilet blocks, canteens etc. within industrial/warehouse spaces. It is also unclear how one is required to categorise on brochures etc. Currently this would be: Measurement Application - Gross External Warehouse (incl. canteen) 5,000 square meters  
2 Storey Office and Staff Facilities 800 square meters  
Total 5,800 square meters*
18. SEGRO - NICK WATSON, EUROPEAN: *No, Detached Garages, stores, Plant Rooms and LV/Electrical intake rooms where partially or fully enclosed should be referenced.*
19. SIOR - PHIL NANAVATI, GLOBAL: *No comment.*
20. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: Yes.

**Response Summary:** There were 20 responses to this question and the majority of respondents said that the Component Area were sufficient for IPMS Industrial Buildings. However, some respondees asked for

further Component Area Guidance on areas that may have multiple uses such as store rooms and changing room area. Further respondents felt that Component Areas were unnecessary if the User only intended to report IPMS 2.

**SSC Rationale:** The SSC considered the responses received and noted further clarification in relation to the use of Component Areas within IPMS 1 and IPMS 2. The SSC have added the following sentence *“If required IPMS 2 – Industrial may be reported on a Component-by-Component basis for each floor of a Building”* to highlight that it is not always necessary to use Component Areas when calculating IPMS 2. The SSC also accepted that additional guidance was required on Component Areas in multiple use and have added the following additional paragraph within Section 4.1:

*“If a particular portion of space may be assigned to more than one Component Area, then it is to be assigned to the Component Area that best reflects its primary design function within the larger space.”*

**Q7. IPMS Industrial Buildings differentiates between Component Area B2 – Internal Structural Elements and Component Area B3 Internal Non-Structural Elements. Is this differentiation helpful?**

**Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global: *No.*
2. CLGE - Maurice Barbieri, Global: " Q7. IPMS Industrial Buildings differentiates between Component Area B2 – Internal Structural Elements and Component Area B3 Internal Non-Structural Elements. Is this differentiation helpful? This differentiation is very helpful as we need Component Area B2 to make a direct comparison/conversion between/from IPMS 2 and SIM (internal area as defined by CLGE). Moreover, there is a strong argument for splitting Component Area B3 into two separate components:
  - B3A: internal non-structural walls which are permanent, for reasons of different use of space on either side, or for legal reasons;
  - B3B: internal non-structural walls which it is possible to remove and incorporate into adjoining workspace.

For instance, internal walls may be non-structural, but permanent, for legal reasons (joint ownership, party walls, restrictive covenants, etc.), for functional reasons (separating areas of different use), or because the wall may be owned by none of the adjoining occupiers (separate ownership by a building management company). Walls which fall fully within the ownership of a particular occupier, and where no legal or structural reason exists which could restrict their removal, are potentially workspace. This reality should be expressed in this document."

3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *Yes, it gives clearer explanation of the differentiation.*
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *It is helpful.*
5. GIF - Dr. Ira Hörndler, Germany: *Yes, definitively.*
6. John Lucas Limited - Joanna Yexley, UK: *Yes.*

7. Knight Frank - Andrew Gooding, Global: *The differentiation is not helpful as "Component Areas B2 and B3" are not even mentioned.*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *Yes.*
10. El-Seif - Mohammed Alkhalayla; , Saudi Arabia :*Yes.*
11. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *Although in our practice this differentiation would probably not be very relevant, we also believe that it could be useful. We do hope however that this differentiation will also be made in the other IPMS Standards, for the sake of uniformity.*
12. Plowman Craven - Robert Ash, UK: *No and it contributes to the confusion in the application of IPMS 1, IPMS 3A and IPMS 3B.*
13. Prologis Europe - Pieter Ris and Mark Zulver, Europe: *Yes.*
14. RICS Finland - Seppo Koponen, Finland: *Yes.*
15. RICS Portugal - Carlos Pereira, Portugal: *Given the normally low weight of those elements in the global area, we think that eventually it would be preferable to keep just one component area.*
16. RUAG Real Estate AG - H. Hauri, Switzerland: *Yes.*
17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *From our discussions with industrial agents, this is more confusing and not fully understood.*
18. SEGRO - NICK WATSON, EUROPEAN: *Yes, but there is potential for an occupier to rely upon the definition of "non-structural" and cause collapse. It would be better for an unknown wall to be placed into the "structural" category by default.*
19. SIOR - PHIL NANAVATI, GLOBAL: *No comment.*

20.Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *Yes, definitively.*

**Response Summary:** There were 20 responses to this question and the majority of respondents felt that the differentiation between Component Area B2 – Internal Structural Elements and Component Area B3 Internal Non-Structural Elements was helpful. Some respondents asked for further differentiation within B3 between permanent and impermanent non-structural walls, whereas some others felt that the distinction was not especially helpful, particularly as some practitioners may not know whether a wall is structural or non-structural.

**SSC Rationale:** The SSC considered the responses received and accepted that in some instances practitioners may not know whether a wall is structural or non-structural (i.e. B2 or B3). The SSC discussed this issue further and felt that there was no need for further guidance on this matter as Component Areas were not mandatory. Furthermore, the SSC felt that measurement practitioners should try and carry out further investigations to confirm if a wall was structural or not and were concerned that additional guidance would discourage measurement practitioners from doing this. Finally, the SSC suggested that any further guidance on this matter could be contained in the additional guidance provided by Coalition members.

**Q8. Is there sufficient information to allow you, when dual reporting, to explain a reconciliation between IPMS and another standard? If not, please state what, if any, supplementary guidance would assist your organisation or membership in adopting IPMS: Industrial Buildings?**

**Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global: *No comment.*
2. CLGE - Maurice Barbieri, Global: *See comments above and below.*
3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *Yes, it is sufficient for industrial buildings.*
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *No comment.*
5. GIF - Dr. Ira Hörndler, Germany: *Yes.*
6. John Lucas Limited - Joanna Yexley, UK: *Yes.*
7. Knight Frank - Andrew Gooding, Global: *We found it very difficult to compare the current RICS Code of Measuring Practice with the new IPMS and to ascertain the differences. It would be useful to provide supplementary guidance to assist RICS members in explaining the difference between NIA, GIA and GEA with IPMS 1, 2 and 3.*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *Yes.*
- 10.El-Seif - Mohammed Alkhalayla; , Saudi Arabia: *No.*
- 11.Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *Yes there is.*
- 12.Plowman Craven - Robert Ash, UK: *Yes.*
- 13.Prologis Europe - Pieter Ris and Mark Zulver, Europe: *No comment.*
- 14.RICS Finland - Seppo Koponen, Finland: *This matter is hard to comment at this stage of the IPMS development without any practical*

*experience. Perhaps additional guidance needs to be incorporated after certain time period and feedback.*

15.RICS Portugal - Carlos Pereira, Portugal: *We think there is sufficient information, namely because IPMS Industrial 3A is very close to what is already the norm in the Portuguese market.*

16.RUAG Real Estate AG - H. Hauri, Switzerland: *Yes, it allows a comparison with DIN 277 / SIA 416.*

17.Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *We believe to avoid confusion there should be one measurement standard.*

18.SEGRO - NICK WATSON, EUROPEAN: *A summary guide / comparison document to other standards, similar to that produced at the change of the RIBA project stages, would be useful.*

19.SIOR - PHIL NANAVATI, GLOBAL: *No comment.*

20.Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *Yes.*

**Response Summary:** There were 20 responses to this question and most of the respondents felt that the information contained within Section 2.4 on 'Adjustment between IPMS and other standards' was sufficient. Some respondees felt that IPMS Industrial Buildings should contain further guidance or a summary guide on the difference between IPMSs and other standards such as GEA, GIA and NIA.

**SSC Rationale:** The SSC considered the responses received and felt that as measurement standards and the definitions of areas such as GEA, GIA and NIA could vary on a region by region basis, any additional guidance should be provided by Coalition members as part of the adoption and implementation plan for their members. However, the SSC have included the following paragraph to provide further clarity to this section; *"The SSC is aware that there are many different measurement conventions in use. Parts of Industrial Buildings might be taken to have limited use for other reasons, such as floor loading capacity or contamination. In some markets Floor Area is measured to the wall-floor junction, in others it is taken to the centre-line of walls or the external*



*face. Other markets have adopted varying interpretations of the dominant face of an inside wall."*

## **Q9. Any Other Comments?**

### **Consultation Responses:**

1. BNP Paribas Real Estate -David Stubbs, Global: *No comment.*
2. CLGE - Maurice Barbieri, Global: *"The series of IPMS documents being prepared must be consistent between each other. Concepts and definitions which appear in one document should also apply in other documents in the series. Any improvements or amendments which have been made in IPMS-Industrial should be retrospectively applied to the same concepts and definitions in IPMS-Office and IPMS-Residential. This should be done as soon as possible and not after completing all asset classes. If this is not done, CLGE will not publish and openly support any of the standards before final completion of the full series. euREAL is continuously adapted to be compliant with IPMS but the final version will only be approved at the end of the process."*
3. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *No.*
4. Expert Invest - Petar and Kremena Andonov, Bulgaria: *No comment.*
5. GIF - Dr. Ira Hörndler, Germany: *Once again: We would strongly recommend to have only one IPMS 3, because a standard should not have versions or applications.*
6. John Lucas Limited - Joanna Yexley, UK: *None.*
7. Knight Frank - Andrew Gooding, Global: *This is too long and could all be placed in the appendix, especially the list of Coalition Members.*
8. Malcolm Hollis Limited - Tom Pugh, European: *No comment.*
9. Mathew Jennings - Mathew Jennings, UK: *Overall a useful and clear document.*
10. El-Seif - Mohammed Alkhalayla; , Saudi Arabia: *No.*

11. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *No.*
12. Plowman Craven - Robert Ash, UK: *No comment.*
13. Prologis Europe - Pieter Ris and Mark Zulver, Europe: *No comment.*
14. RICS Finland - Seppo Koponen, Finland: *No comment.*
15. RICS Portugal - Carlos Pereira, Portugal: *We have no other comments.*
16. RUAG Real Estate AG - H. Hauri, Switzerland: *No.*
17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *The current market norm for measurement of industrial buildings in the Republic of Ireland is Gross External Area (GEA), while in the UK this is Gross Internal Area (GIA). The closest to GEA under the draft IPMS is IPMS 3A except for how the floor area of stairs and lifts are dealt with at first floor level (i.e. they are excluded). In practice this would be fine and we would have to include an explanation/definition of IPMS 3A on all brochures and reports. The problems will arise in relation to the tolerance level as stated above the resistance from surveyors to be able to rely on their own measurements. Surveyors will be forced to try and get their clients to pay for measured surveys of premises, which they will resist or insist that they sign a waiver to IPMS and that the surveyor can carry on marketing/valuing the premises under the old GEA measurement definition anyway just as is happening largely with the office sector at present, other than new buildings for which there are plans providing clear accurate data sources.*
18. SEGRO - NICK WATSON, EUROPEAN: *No comment.*
19. SIOR - PHIL NANAVATI, GLOBAL: *No comment.*
20. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *Once again: We strongly suggest to have only one IPMS 3, because a standard should not have versions or applications. After our experiences with the residential standards it would be helpful to*

*discuss this in the beginning and not at the end. It would be helpful if there would be a special hearing of the coalition on that issue.*

**Response Summary:** There were 20 responses to this question and the majority of respondents had no further comment. Some respondents commented for the need for immediate harmonisation across the Building Classes and others felt that the section on tolerance did not aid adoption and implementation within markets. Further respondees commented on the variations within IPMS 3 and felt that there should be only one IPMS 3.

**SSC Rationale:** The SSC considered the responses received, particularly the need for harmonisation across the Building Classes. The SSC accepted that though there was some currently some variation within IPMS across the Building Classes the general principles and definitions were consistent across all Building Classes. Furthermore, the SSC did not think it was practical to harmonise IPMS across the Building Classes until IPMS was published for the main Building Classes (office, residential, industrial and retail), as otherwise there could be further changes, which could lead to difficulties with version control and lack of transparency and confusion within the market. In respect of IPMS Industrial Buildings containing only one variant of IPMS 3, the SSC did not feel this was possible as this does not reflect current market practices where two measurement variants (GEA and GIA) are currently used for industrial buildings. Finally, in respect to the comments raised on tolerances please refer to the SC Rationale for Question 4.

## Page 5. Introduction

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *Although the SSC considered it unrealistic to create a single standard that would immediately apply to all classes of Buildings, there is a requirement for consistency across documents (IPMS Offices, IPMS Residential, IPMS Industrial and any further IPMS standard which may be defined in future). There are discrepancies in detail between IPMS Industrial and the previous documents. These should be resolved as soon as possible to eliminate conflicts between the documents.*
2. Knight Frank - Andrew Gooding, Global: *This is too long and could all be placed in the appendix, especially the list of Coalition Members.*
3. Mathew Jennings - Mathew Jennings, UK: *Could do with the definitions first as they are used in the introduction.*
4. Plowman Craven - Robert Ash, UK: *"This appears consistent with previous standards and is still needed for document explanation. But..... Further clarification is required to identify what type of property is actually covered by the standard. Will it cover retail warehouses, distribution centres, industrial units with 'front-of-house' showrooms and perhaps sales areas? In addition, the Introduction explains the reasoning behind the international measurement reporting classification system IPMS 1 to IPMS 2 to IPMS 3 as first described within IPMS: Office Buildings. This simple categorization is unfortunately seemingly confused later in the document with talk of optional interior component area reporting included within IPMS 1!"*
5. RICS Finland - Seppo Koponen, Finland: *Presentation of the IPMSC member organisations in the beginning (pages 5 and 6) hides the actual introduction part on page 7. It is too easy to skip the whole introduction due to two-page organisation list. In our opinion organisation list could be moved to the end of this chapter. Certain matters described on page 7 should be repeated in each connection on the following pages.*

6. SIOR: 1) Page 6 - At the second line from the top “residential markets” probably should read “industrial markets.” 2) Page 7 - Given the changes to the Standard Setting Committee in terms of membership and when we expect this document to be finalized should Will Chen and Liu Hungyu names be removed from the document.

**Response Summary:** There were 6 responses to this section and the majority of respondents felt the introduction was clear and transparent, although there were a few comments in relation to editing and positioning.

**SSC Rationale:** In preparing the Exposure Draft the SSC have considered these comments and revised the standard accordingly.

## Page 9. 1.1 Definitions

### Consultation Responses:

1. BNP Paribas Real Estate -David Stubbs, Global: *"Clearance Height – the accepted description previously was Working Height and would be measured to the underside of the roof structural element (for example the haunch of a portal frame or the horizontal member of a roof truss). Ducting, gantries, pipework and sprinklers are plant and machinery and are not relevant for this purpose. Diagrams clarifying the lowest point of different roof structures would be helpful. Industrial Building – Does this include distribution warehouses? In the UK these are measured on the same basis as industrial. This requires clarification. IPMS 2 – This should read "IPMS 1-Industrial" to be consistent with Part 3 (page 16) IPMS 2 – This should read "IPMS 2-Industrial" to be consistent with Part 3 (page 16). IPMS 3 – This should be spilt into 3A and 3B and include the word Industrial. Loading Bay(s) – The cross sections and plans suggest this area is covered, in which case the definition should make it clear. Mezzanines – There are three mezzanine definitions. It would assist the reader if these were adjacent to each other."*
2. CLGE - Maurice Barbieri, Global: *"The definition of Covered Area needs further clarification. Please give some examples of "ornamental" overhangs. It would be useful if there was a fuller and unambiguous definition of the features balcony, terrace, patio, loggia, etc. and the differences between them. Please illustrate this with examples. We have noticed a mistake that appear since the first IMPS for Office: It is written that the Service Provider includes Space measurement Specialist. This is true. But, in the Part 2 of the Standard (Principles of measurements), it is written that the Service Provider is in charge of measurements. We want that all IMPS Standards to be corrected as soon as possible: Only Space measurement Specialists have to be in charge of measurements."*
3. Knight Frank - Andrew Gooding, Global: *Whilst the definition section is useful, it would be improved if the areas that are included and excluded are clearly set out next door to a diagram of the measurements. The included and excluded areas needs to be clearly shown alongside the definitions in any IPMS.*

4. Plowman Craven - Robert Ash, UK: *"Balcony - not sure that the use of the word 'balcony' to encompass the group of accessible and usable external building spaces will not confuse. Another general noun should perhaps be considered. Covered Area – perhaps the definition ought to refer to 'primary ground level (Level 0)' given 1.4's explanation. IDF – Might be useful to reference Diagram 4 with the definition. IPMS 1 – Our comments related to IPMS 1 reflect those previously submitted in respect of IPMS: Residential Buildings; i.e. why does the definition include 'which may be reported on a Component-by-Component basis for each floor of a Building'? This is IPMS 2 definition. Sheltered Area – definition needs some further explanation, we feel. If a space is open on just one side, does this constitute 'not fully enclosed' and if so, where is the limit of the area defined, away from and opposite to the open side, so as to calculate an area figure? Veranda – will examples of these features be encountered within industrial property? Vertical Section – is not included within the list of definitions but occurs (perhaps mistakenly) on Diagram 4."*
5. RICS Finland - Seppo Koponen, Finland: *Definition list is quite comprehensive and clearly larger than in previous standards. Because terms and definitions may vary from market to market definition list is very useful and none of them should be considered self-evident and therefore useless.*
6. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *"Eaves Height, Clear Internal Lowest Point and Clear Internal Highest Point should be added. There is no need for "Space Measurement Professionals."*
7. SEGRO - NICK WATSON, EUROPEAN: *Further clarity required on the definition of temporary mezzanine and permanent mezzanine. We often install mezzanines which are free standing eg with columns and foundations but not tied into the frame. We class these as permanent, part of the landlord's building, and would look to charge in the region of 50% of the market rent of the warehouse. Tenants may install similar specification of mezzanines, but because we can*

*require them to be reinstated on lease expiry we would class these as temporary.*

8. SIOR - PHIL NANAVATI, GLOBAL: 3) Page 9 - *Under the definition of Industrial Building you mention used for industrial purposes. Should there be a definition of Industrial Purposes (see SIOR's text book on Industrial Real Estate; 4) Page 9 - Under the definitions of IPMS 2 and IPMS 3, Should these headings be IPMS 2 – Industrial (Internal) and IPMS 3 – Industrial (Occupier);*

**Response Summary:** There were 8 responses to this section and the SSC noted that some respondees felt that the definitions of 'Balcony', 'Covered Area' and 'Clearance Height' required further clarification

**SSC Rationale:** The SSC considered the responses received and revised the measurement practice as follows to create further clarification; *"Balconies and internal Permanent Mezzanines are to be measured to the outer face of the balustrade, but never to exceed the outside edge of the floor. Each subcategory must be measured and stated separately."* The SSC revised the definition of Sheltered Area as follows, to provide further clarity to the definition of Covered Area; *"Sheltered Area Any part of the Covered Area that is not fully enclosed, but excluding insignificant areas under the eaves."* The SSC have also revised the IPMS 1 definition section to state that: *"In the absence of one or more External Wall(s), IPMS 1, only at ground levels, is measured to the Covered Area"* and have also included Covered Area in the 'Measurements included but stated separately' section. Finally, in relation to height the SSC have included the following revised definitions within the Exposure Draft; *"Clear Height: The maximum height within a Building or section of a Building measured from the floor to the lowest point of the structural element above, ignoring the existence of any fixtures and fittings. Internal Height: The maximum height within a Building or section of a Building measured from the floor to the lowest point of the ceiling or suspended ceiling, ignoring the existence of any fixtures and fittings."* However, the SSC accept that industrial measurements are often described in volumetric terms and therefore addition height measurements to the eaves and haunches may need to be included. The SSC have therefore decided to include a specific height related consultation question as part of the IPMS Industrial Buildings Exposure Draft consultation process to ensure the final standard is fit for purpose.





## Page 11. 1.2 Aim of the Standards

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *"The standard applies to horizontal floor space (plan area) and not to volumes. The aims should be amended to make this clear, for instance, by the insertion of the above sentence. Otherwise, we agree with the aims but feel that IPMS fails to meet the key stated aim of providing "consistent measurement of property"."*
2. RICS Finland - Seppo Koponen, Finland: *This is a really compact definition for the aim. It wouldn't be bad if the aim were described even in a bit deeper way.*

**Response Summary:** There were 2 responses to this section, both of which requested further detail in relation to this section.

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

## Page 12. 1.3 Use of the Standards

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *The wording “interface with existing measurement standards by providing a common measurement language” requires clarity.*
2. Mathew Jennings - Mathew Jennings, UK: *Could do with a bit more explanation – bit more body to the text.*

**Response Summary:** There were 2 responses to this section, both requesting further clarification.

**SSC Rationale:** In preparing the Exposure Draft the SSC have considered these comments and have added the following two initial paragraphs to provide further clarification; *“IPMS defines what is to be measured in a Building and the measurement parameters. IPMS does not dictate how measurements are to be obtained. The appropriate IPMS building class (such as office, residential, industrial, retail) to be used should be chosen according to the current or proposed designed function of the Building or part of a Building being measured.”*

## Page 12. 1.4 Floor Level Designation

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *We are aware of the different approaches in different cultures to floor level nomenclatures in a building. Provided that it is clearly stated, which system of description is being used, we see no problem.*
2. Mathew Jennings - Mathew Jennings, UK: *Could do with clarifying the primary ground level more.*

**Response Summary:** There were 2 responses to this section, both of which asked for an element of further clarification.

**SSC Rationale:** In preparing the Exposure Draft the SSC have considered these comments and have added further clarification by revising the text as follows; *“The SSC found there is no market consistency in the reference to a particular level. For all property classes IPMS has adopted Level 0 as the primary ground level. Upper and lower levels are referred to sequentially as the number of levels above or below Level 0. For example Levels 1, 2 or 3, etc. are above Level 0 and Levels -1, -2 or -3, etc. are below Level 0.”*

## Page 13. 2.1 General Principles of Measurement and Calculation

### Consultation Responses:

1. BNP Paribas Real Estate -David Stubbs, Global:"3 – *There is inconsistency in the name of the standards, some including the word Industrial and some not. All should include the word Industrial.*"

**Response Summary:** There was 1 response to this section, which largely concerned editorial matters.

**SSC Rationale:** In preparing the Exposure Draft the SSC have considered these comments and revised the text accordingly.

## Page 13. 2.2.1 General

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *"CLGE recommends the following amendments and additions to the IPMS – Office standards document: 1. The aim of the standards should be amended as follows: "IPMS will meet the requirements of Service Providers, Third Parties and Users of Property for consistency in the measurement of specified components of buildings in two dimensional horizontal space". 2. The outer face of the External Structure/Weatherproof Envelope should be more fully defined to allow an accurate and consistent measurement for IPMS1 3. The inner face of the External Structure/Weatherproof Envelope should be more fully defined to allow an accurate and consistent measurement for IPMS2 4. The definition and measurement of the internal building components, as listed, should be designated as IPMS3 5. IPMS3 as currently defined – the separation between ownerships and users within a building should be deleted as it is merely an example which can be derived from the other three standards. 6. The building component list should be amended as follows to provide a more logical, more intelligible and more measurable group of components: i. External Structure and Weatherproof envelope ii. Internal Structure iii. Full Use Workspace iv. Limited Use Workspace v. Circulation Areas vi. Technical Services vii. Hygiene Areas viii. Vertical Penetrations ix. Amenities – (to be reconsidered) x. Permanent Partitions xi. Other Internal Areas xii. External Building Areas 7. Workspace should be separately designated as Full Use Workspace and Limited Use Workspace. Areas should only be designated as Full Use Workspace if it is legal, in the particular jurisdiction where the industrial building is located, to use such space as habitable, working, industrial workspace. 8. The concept of Limited Use Workspace should be introduced for industrial workspace, which because of height, daylight, floor area, shape, ventilation or other similar restriction, does not meet the requirements for Full Use Workspace, but is nonetheless usable for industrial related work functions. 9. The concept of Internal Dominant Face should be abandoned, because of the anomalies and inconsistencies it introduces to area values. 10. Internal partitions should be classified as a separate component, if their function renders them permanent. 11. Survey methods should be carefully documented and the degree*

of precision indicated. This documentation and the floor areas derived from it should be certified and dated by the person carrying out the survey. 12. The component Amenity Space should be redefined. It is unnecessary, unless it contains fittings of fixtures which preclude its use as Workspace, or it is legally precluded from being used as Workspace. 13. Balconies, galleries, terraces, etc. which are an integral part of the building should form an External Building Areas component and should be included as part of the standard." Title and Scope: It is not clear why the standard is being confined solely to industrial buildings as the definitions and procedures being set out in the standard are equally applicable to a range of other buildings and there seems no reason why their application should be confined only to office buildings. In this case, the document could simply be entitled: *International Property Measurement Standards for Buildings*. Aims of the Standards states that "IPMS will meet the requirements of Service Providers, Third Parties and Users of Property for consistency in measurement and reporting". The sentence following this indicates that it is the "stated area of floor space in identical buildings" which requires standardisation and consistency. In the main body of the Consultation Document, the areas which are to be defined and whose measurement is to be standardised is set out. It is clear that this measurement is intended to apply only to horizontal surfaces and that volumes are not to be taken into consideration. To achieve a clearer and more correct definition, the aims should read – "IPMS will meet the requirements of Service Providers, Third Parties and Users of Property for consistency in the measurement of specified components of buildings in two-dimensional horizontal space". The standard should apply in two areas:

1. What is to be measured? – defining the boundaries or limits of areas of a building to which area values should apply and applying standard nomenclature to these defined areas.
2. How is it to be measured? – defining the precision and methodology to be used in carrying out the measurement."

What is to be measured? In the Consultation Document there are a number of distinct entities defined to which measurement should apply:

1. The area within the external face of the building, described in the Consultation Document as IPMS1, in the euREAL document as SEM and more generally as the Gross External Area.

2. *The area within the inner face of the external structural components and the permanent weatherproofing components of a building, described in the Consultation Document as IPMS2, in the euREAL document as SIM and more generally as the Gross Internal Area.*

3. *The areas of various internal building components allowing for a more analytical and focussed understanding of usability of areas within a building. A fourth level has been defined as IPMS3, identifying ownership or occupation areas within a building. This is merely a specific application or combination of areas already defined in 1-3 above. It is superfluous and should be deleted. In defining the 3 sets of components outlined above there is inconsistency in the Consultation Draft."*

2. EXSIM Development Sdn. Bhd. Malaysia - Norman Tai, Malaysia: *Exism are extremely supportive of the standard and their only comment was as follows: "Any specific limit of opening sizes for core/services openings need to be excluded in the area measurement? It seems that no deduction for the IPMS for core/services openings."*
3. Expert Invest - Petar and Kremena Andonov, Bulgaria: *Expert Invest are extremely supportive of the standard and their only comment was as follows: "Measurements for IPMS 2 – Industrial are to be taken to the Internal Dominant Face for external construction features and otherwise to the Finished Surface. The same applies to the shared walls between units. Measurements are not to be taken to the centre line of the shared walls between units. The diagram should be corrected."*
4. GIF - Dr. Ira Hörndler, Germany: *GIF are extremely supportive of IPMS Industrial Buildings, but in relation to IPMS 3 have commented as follows; "We only use IPMS 1 for calculation or transaction purposes for Industrial. We are strict against various IPMS 3 alternatives. Reason: a standard should not have versions or applications."*
5. John Lucas Limited - Joanna Yexley, UK: *John Lucas Limited are extremely supportive of IPMS Industrial Buildings and have no further comments to make.*



6. Knight Frank - Andrew Gooding, Global:*In our opinion the document is convoluted, overtly complex and simply too long. It is not clear as to the purpose of IPMS 3A and 3B. From a UK perspective, at the moment the public are clear as to what basis of measurement is to be used, but this IPMS will provide 4 choices with no guidance as to what basis is suitable for what purpose. We feel strongly that the “Component by Component” element is too complex (as well as time consuming) for the industrial market, with no appreciable benefit (except to measuring companies). Computer generated drawings are too expensive and time consuming to prepare for many properties and will be even more so in developing countries (see answer to Q6.) We are of the opinion that the Component Areas are very confusing and would appear to be a case of “over engineering” a relatively simple property type. We can understand the optional need for the division into some component areas namely Workspace, Hygiene areas and Other areas, but the remainder would appear confusing and not of relevance to occupiers or landlords. A further point to be made is that the colour coding of such areas assumes measurement is being done on a CAD or computer based system, but this is relatively rare in developed countries (except by professional measuring companies) and almost impossible in developing countries.*
7. Malcolm Hollis Limited - Tom Pugh, European: *Overall I think that the document follow the principles set out by the preceding Office and Residential Standards, it is well presented and I do not think that there are any elements that could cause major issues.*
8. Mathew Jennings - Mathew Jennings, UK: *Overall a useful and clear document.*
9. El-Seif - Mohammed Alkhalayla - Saudi Arabia: *El Seif are extremely supportive of IPMS Industrial Buildings and have no further comments to make.*
10. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *In general, the standard is clear. We see that compared with previous standards, much work has been done to achieve a good level of detail. We hope both new standards and the existing ones will follow this example. We call on you to ensure the IPMS – Office will be*

*updated on those points where the IPMS – industrial deviates or has a higher level of accuracy.*

11. Plowman Craven - Robert Ash, UK: *"There are certain key issues; just listed here as headings and then described in more detail further into this response document.*

1. *We believe that there is a contradiction (inconsistency) within the interpretation of the IPMS 1, 2 and 3 standards between the written definitions and the representation of these definitions within the relevant plans.*
2. *The range of the type of buildings classified as 'Industrial' (and therefore under consideration here) requires clarification.*
3. *In respect of IDF and industrial properties, we feel greater clarification is required when assessing perimeter wall elevations that frequently extend vertically through more than one storey to high levels.*
4. *Generally, apart from a couple of exceptions, we feel that the diagrams are informative but if hard copy document presentation is being considered, the plans need to be enlarged to make full use of available space within the A4 format."*

12. Prologis Europe - Pieter Ris and Mark Zulver, Europe: *Would be good if the reporting template for measurements will be fixed so that it is easy for everyone where to see total where to see sq.m of individual components etc.*

13. RICS Finland - Seppo Koponen, Finland: *"There are a few new specified areas in this standard not familiar from previous standards (office and residential) like loading bays and docks as well as unenclosed and external areas listed on page 25. Special attention needs to be focused to them in order to make sure they are clearly described and defined and whether they are included in IPMS 1 or not. In addition, Covered Area in this standard has a special meaning in cases where there is no external physical wall like shown in diagram 1. This needs to be explained clearly. Definition for extent of IDF concerning Roller Shutter differs from that of Glazing i.e. that 50 % rule used with windows seems not to be used with shutter rollers when defining IDF. All said above does not mean mentioned matters wouldn't be clearly described in the draft standard but we just want to highlight elements which might include risks of misunderstanding*

*in various markets. Background for having more than one IPMS 3 should be communicated even more clearly. In IPMS Residential there were 3A, 3B and 3C which caused slight confusion and in IPMS Industrial situation is the same especially when IPMS 1 and IPMS 3A in practice are equal and having the same situation with IPMS 2 and IPMS 3B. Above similarity is mentioned but should be highlighted to avoid unnecessary confusion. Treatment of Vertical Penetrations is a bit complicated especially with closed shafts where it is quite hard to define on spot whether they represent area larger or smaller than 0.25 m2."*

14. RICS Finland - Seppo Koponen, Finland: *The last sentence "It is highly recommended that where possible measurements are verified on site" is very important in order to support accuracy of IPMS because there is a true threat that if IPMS measurements are conducted on desk top basis only the quality of results is poor which again might weaken the status of the new standard in countries where an existing standard is already in place. See also the comment concerning Page 16. 3.1.2 – IPMS 1 Definition.*
15. RICS Portugal - Carlos Pereira, Portugal: *We are of the opinion that the document is clear and unambiguous.*
16. RUAG Real Estate AG - H. Hauri, Switzerland: *We are of the opinion that the document is clear enough.*
17. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *Some concerns have been expressed by members following the introduction of IPMS Offices and similar type issues are echoed in the consultation draft. As you will be aware, the industrial market is a high volume, low margin sector and additional costs for measurements will be a difficult sell for owners and commercial agents. In some cases, like pharmaceutical manufacturing, industrial buildings can have complex layouts and there are concerns that the current draft paper does not adequately provide for examples to cater for more complex measurement requirements. Ireland may also differ to other countries, as some property agents are not Chartered Surveyors and therefore are not bound by IPMS requirements. This can mean that standards only apply to one cohort of the market place, and the measurement of many buildings continue under the existing system.*

*With this in mind, SCSI is concerned that many clients will use the opt out provision to resist measurement survey requirements. This will be particularly prevalent, in our view, in low value, provincial locations, where it is unlikely that owners will be prepared to pay for a certified measurement survey. IPMS is an initiative that we believe applies principally to portfolio investment grade property, and for occupiers with properties in multi-global locations. However, its value to property classes, which are below a certain size, generally traded and occupied locally is not as demonstrable.*

*18.SEGRO; Yes, generally, we are supportive of IPMS Industrial Buildings, however some fine tuning is required for example a definition of the principal external perimeter line – is this the face of an external roller shutter or the face of the cladding above, which may project from the shutter.*

*19.SIOR - PHIL NANAVATI, GLOBAL: "1) Page 6 - At the second line from the top "residential markets" probably should read "industrial markets"; 2) Page 7 - Given the changes to the Standard Setting Committee in terms of membership and when we expect this document to be finalized should Will Chen and Liu Hungyu names be removed from the document; 3) Page 9 - Under the definition of Industrial Building you mention used for industrial purposes. Should there be a definition of Industrial Purposes (see SIOR's text book on Industrial Real Estate; 4) Page 9 - Under the definitions of IPMS 2 and IPMS 3, Should these headings be IPMS 2 – Industrial (Internal) and IPMS 3 – Industrial (Occupier); 5) Page 17- IPMS 3A – Industrial refers to perimeter (should there be a definition of perimeter.)"*

*20.Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: ZIA generally comment that all diagrams are clear and understandable, though they have some specific comments in relation to various sections, particularly IPMS 3 where they feel there should only be one variation.*

**Response Summary:** There were 20 responses to this section and a range of different opinions.

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



## Page 13. 2.2.2 Unit of Measurement

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *It would be helpful if IPMS was to provide a country by country fact sheet of what the relevant unit is in that jurisdiction, for consistency purposes.*
2. RICS Finland - Seppo Koponen, Finland: *This is important guidance, however it might be good to highlight that areas must always be presented by using the local unit of measurement, even in cases where a client asks areas to be presented in another unit. Above means that Space Measurement Professional 1) always provides areas based on local unit of measurement, 2) describes and shows the conversion including the factor and 3) represents areas based on another unit. This should be the requirement because only this way the IPMS result can be checked against the local standard when needed.*

**Response Summary:** There were 2 responses to this section.

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

## Page 13. 2.2.3 Tolerance

### Consultation Responses:

1. BNP Paribas Real Estate -David Stubbs, Global: *“Whilst accepting that there is a duty on Chartered Surveyors to measure as accurately as possible having regard to the circumstances and nature of the instruction we are not prepared to offer a % tolerance. There is no accepted industry bench mark or court guidance to which the industry can refer.”*
2. Knight Frank - Andrew Gooding, Global: *See answer to Question 4. We do not consider that it should be a requirement to state the degree of tolerance of the measurement reported. It is generally not possible to accurately quantify the degree of tolerance in measurement of this nature since there is no benchmark against which to gauge the tolerance level. Accordingly, we consider that stating tolerance could provide the user of the measurements with a misleading quantification of accuracy.*
3. SEGRO - NICK WATSON, EUROPEAN: *We understand that intent of this provision, but consider there should be further clarity on levels of tolerance that might be acceptable before alternative steps/methods are adopted to improve perceived accuracy of the report.*

**Response Summary:** There were 3 responses to the section on measurement tolerance and a further 20 responses in relation to question four, which asked; *“Are the reasons for the Service Provider stating the tolerance clear?”*

**SSC Rationale:** The SSC discussed the comments received and whether tolerance was necessary within IPMS and many SSC members felt that it was unnecessary as it referred to the tolerance of the equipment used. Moreover, many IPMSC SSC members felt that a professional would always try to measure to the best of his ability and the tolerance could vary considerably according to the nature of the instruction. Furthermore, many SSC members felt from market feedback that the inclusion of tolerance within IPMS did not aid adoption and implementation. In conclusion, the SSC felt that there was no need to include tolerance within IPMS Industrial Buildings and agreed to the

section on tolerance in future from both IPMS Office Buildings and IPMS Retail Buildings.



## Page 14. 2.2.4 Measurement Reporting

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *We do not think it appropriate or relevant within the UK, to split out the Component Areas as this is too time consuming and complex. Also see answer to 2.2.1 above.*
2. RICS Finland - Seppo Koponen, Finland: *Dual reporting is most probably the case in markets where a local well-established standard exists. It should be supported and not discriminated because parallel use benefits IPMS in a long run thanks to publicity it gets beside the local standard.*

**Response Summary:** There were 2 responses to the section on measurement reporting.

**SSC Rationale:** In preparing the Exposure Draft the SSC have considered these comments and would point out that the use of Component Areas is voluntary and that IPMS 2 Measurement Practice state that; *“If required IPMS 2 – Industrial may be reported on a Component-by-Component basis for each floor of a Building.”*

## Page 14. 2.3 Limited Use Areas

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *A range of limitations on use are alluded to, but the document makes no effort to deal with these matters. These matters are critical to the aim of allowing the data to be used with confidence for property financing and dealing with inconsistencies in measurement practice between countries and sometimes within the same country. Unless this matter is dealt with in detail the standard will be seriously deficient and of limited use. euREAL will anyway implement this differentiation.*
2. Knight Frank - Andrew Gooding, Global: *IPMS will need to clearly spell out on a Country by Country Factsheet what "Limited Use Areas" are in each jurisdiction if they want a common and universally adopted measurement basis on a country by country basis.*
3. Plowman Craven - Robert Ash, UK: *"Example 1: General comment With areas measured to the face of the building cladding (identified as the IDF), there will generally be a 'strip' of LUA along most (if not all) building perimeter walls. Under the COMP, GIA measurements would be taken to the inside face of the structural wall elements (frame or floor level plinth), so the LUA associated with IDF in these industrial premises is going to be quite significant. Example 5: We feel that the description 'not functional for primary use' requires some further explanation and an example as to when it would apply."*
4. RICS Finland - Seppo Koponen, Finland: *This is quite important section due to differentiated practice and legislation in various markets. It is said that "Such areas and their limitations are to be identified, measured and stated separately within IPMS reported areas" and there is a clear place for each limited area in Sample spreadsheet on page 24 as well. Would it still be beneficial to include a diagram showing the situation e. g. with limited high to create a visual remark of this Limited Use Areas matter?*

**Response Summary:** There were 4 responses on Limited Use Area and some of the responses required further clarification.

**SSC Rationale:** In preparing the Exposure Draft the SSC have considered these comments and have added further clarification on Covered Area, which forms part of Limited Use Area Example 5. The SSC would also point out that further guidance on the use of Limited Use Areas within countries or regions will be provided in additional guidance issued by members of the IPMSC.

## Page 15. 2.4 Adjustment between IPMS and other standards

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *This is too complicated for the average user to explain. IPMS and/or the RICS will need to provide guidance.*
2. RICS Finland - Seppo Koponen, Finland: *OK and taking into account what said above in Page 13. 2.2.2 Unit of Measurement*

**Response Summary:** There were 2 responses to this section and a further 20 responses to question 8, where most of the respondents felt that the information contained within Section 2.4 on 'Adjustment between IPMS and other standards' was sufficient. Some respondents felt that IPMS Industrial Buildings should contain further guidance or a summary guide on the difference between IPMSs and other standards such as GEA, GIA and NIA.

**SSC Rationale:** The SSC considered the responses received and felt that as measurement standards and the definitions of areas such as GEA, GIA and NIA could vary on a region by region basis, any additional guidance should be provided by Coalition members as part of the adoption and implementation plan for their members. However, the SSC have included the following paragraph to provide further clarity to this section; *"The SSC is aware that there are many different measurement conventions in use. Parts of Industrial Buildings might be taken to have limited use for other reasons, such as floor loading capacity or contamination. In some markets Floor Area is measured to the wall-floor junction, in others it is taken to the centre-line of walls or the external face. Other markets have adopted varying interpretations of the dominant face of an inside wall."*

## Page 16. Part 3.1 IPMS 1 (External)

### Consultation Responses:

1. Malcolm Hollis Limited - Tom Pugh, European: *My first observation is that I am unclear as to why it looks like that IPMS1 and IPMS2 has basically been duplicated for IPMS3A and IPMS3B. Under 5.3.1 it is stated that IPMS3-Industrial is not directly related to IPMS1 or IPMS2 however it may cause confusion when you read 3.1.1 and it states that in some instances IPMS1 maybe the same as IPMS3A.*
2. Society of Chartered Surveyors Ireland: *This and IPMS 3A is the closest to the Gross External Area (GEA).*

**Response Summary:** There were 2 responses to this section and a range of different opinions.

**SSC Rationale:** The SSC considered the responses received and have provided further clarification within the Exposure Draft.

## Page 16. 3.1.1 – IPMS 1 Use

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *This will not be very relevant to the UK market, although used by one major landlord (SEGRO).*
2. Malcolm Hollis Limited - Tom Pugh, European: *My first observation is that I am unclear as to why it looks like that IPMS1 and IPMS2 has basically been duplicated for IPMS3A and IPMS3B. Under 5.3.1 it is stated that IPMS3-Industrial is not directly related to IPMS1 or IPMS2 however it may cause confusion when you read 3.1.1 and it states that in some instances IPMS1 maybe the same as IPMS3A.*
3. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *Proposed that it is used for planning and development costings.*

**Response Summary:** There were 3 responses to this section and a range of different opinions.

**SSC Rationale:** The SSC considered the responses received and have provided further clarification within the Exposure Draft.

## Page 16. 3.1.2 – IPMS 1 Definition

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *Under Measurement Practice the statement “Areas for IPMS 1 are to be taken from drawings or on site” is problematical. All measurement used in IPMS 1 (or indeed any of the other IPMS standards) should be derived from actual physical measurements. Whether these measurements can be computed directly into areas will depend on the size and complexity of the building plan shape. Complex buildings will require the physical measurements to be computed and propagated errors to be distributed, before a drawing can be generated and area values generated. In the case of existing structures, all area values should be based on “as built” measurements, properly measured and computed, with the methodology of derivation fully described as per section 2.1.3 of this document. Only in the case of buildings not yet constructed, or where the nature of the transaction does not require accuracy of a high level, may areas be derived from design drawings, but this must be clearly stated in the accompanying documentation.*
2. Knight Frank - Andrew Gooding, Global: *The definition needs to be linked to three simple columns of items: included, excluded separately stated.*
3. Malcolm Hollis Limited - Tom Pugh, European: *"I think that it should be clearer that areas for IPMS1 are to be taken from drawings or measurements taken on site. This comment needs to be stated for IPMS2 and IPMS3 definitions or should be included in the standard as a standard note in Part 2 of the document. I think that a diagram to show what is meant by taking the measurement to the principal external perimeter line, should be included."*
4. Plowman Craven - Robert Ash, UK: *"Measurement practice: We don't understand why reporting of IPMS 1 on a Component-by-component basis has ever been contemplated and not left under IPMS 2, as in IPMS: Office Buildings. IPMS 1 (like GEA before) addresses the overall extents (footprints) of buildings, measured along the exterior faces of perimeter structures and duly calculated. It is intended to be the constant standard for all property types. Measurements to the*

extents of Covered Areas only applies for open sided buildings as otherwise all perimeter external eaves would define the area limits and not the external wall faces. Loading Zones are not mentioned under IPMS 1 as either being included and/or stated separately, but we think this to be the case in Diagram 6, where the loading zone, comprising loading bay and loading dock areas, (hatched) appears to coincide with 'Sheltered Area' in that example. (Further on there is reference to 'internal Loading Bays' that begs the question, how is an 'external Loading bay' defined?) Diagrams Our feeling is that the diagrams relating to IPMS 1 (Diagrams 5, 6 and 7) ought to follow the text for IPMS 1, thereby avoiding the duplication of text and descriptions in Part 5 and reducing the overall size of the document. And Diagram 6 and 7. We think that these diagrams could be interpreted in different ways as a result of the categorisation of structural walls. Interpretation 1 We can understand why the classification of the central dividing structural wall is classified as B1 (Exterior Wall) in Diagram 2 and therefore included within IPMS 1 reporting, (as indicated by the inset on Diagram 6). There is a precedent for this within RICS Code of Measuring Practice where adjacent units 'share' the party wall. We don't know quite how to get over the fact that it is clearly an internal wall (B2) but classified as an external one. We reason therefore, that the same half of the central wall (as an exterior wall) should not be included as part of the overall reported area in IPMS 2 and IPMS 3B, Diagrams 9, 10, and 13. In this case, IMPS 2 and IPMS 3B measurements should be taken to the face of that central wall and not to its centre-line. Interpretation 2 Some might question whether or not IPMS 1 area reporting (sand coloured area) of the building portrayed should not extend over the entire building as shown at that level, in the same way that IPMS 1- Office did? The use of internal structural walls as defining area extents (in place of any external perimeter walls) should only apply to upper floor extents in Diagram 7 and not to the central dividing wall in Diagram 6. This wall is annotated B1 in Diagram 2 but is clearly not an Exterior Wall and should be re-labelled B2. By confirming that IPMS 1 should cover the entire building, there is then some distinction between IPMS 1 and IPMS 3A i.e. each floor of an industrial building could have several IPMS 3A reports (extending to centre-lines of tenancy dividing walls) but only one IPMS 1 report, as was the situation described in IPMS: Office Buildings."



5. RICS Finland - Seppo Koponen, Finland: *It is said that "Areas for IPMS 1 are to be taken from drawings or on site". Should it be stated in a bit more emphatically way that it is a responsibility of a Space Measurement Professional to assure that in case drawings include a risk of inaccuracy a measurement on site is to be conducted, or the larger tolerance and its basis highlighted? See also the comment concerning Page 13. 2.2.1. General.*
6. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *Proposed that it this is the format to be used for marketing - too complicated.*

**Response Summary:** There were 6 responses to this section and a range of different opinions.

**SSC Rationale:** The SSC considered the responses received and have provided further clarification within the Exposure Draft.

## Page 17. 3.2.1 – IPMS 2 – Industrial (External), Use

### Consultation Responses:

1. GIF - Dr. Ira Hörndler, Germany: *2nd paragraph states the equality of IPMS 2 and IPMS 3 B – this is superfluous for a standard - see comment to Q2.*
2. Knight Frank: *It would be more helpful if the drawing was with the text.*
3. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *Although the title above states it is the IPMS 2 – Industrial (external) in the draft it seems to be the IPMS – industrial (Internal). We expect the latter to be the correct one.*
4. SEGRO - NICK WATSON, EUROPEAN: *We have occasion where attached and detached structures for plant and storage, both covered and partially covered are demised to tenants and these might be considered to be excluded as they are beyond the Covered Area, while these may be measured and stated separately the Standard could make provision for these more simply with further definition.*
5. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *2nd paragraph states the equality of IPMS 2 and IPMS 3 B – this is superfluous for a standard - see comment to Q2.*

**Response Summary:** There were 5 responses to this section and a range of different opinions.

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

## Page 17. 3.2.2 – IPMS 2 – Industrial (External), Definition

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *Under Measurement Practice the statement “If there are no External Walls there is no IPMS 2 – Industrial” is a little bit strange. Is a structure without external walls still a building? Please show this with an example.*
2. GIF - Dr. Ira Hörndler, Germany: *Measurements included, but stated separately: “Internal catwalks” do not form a part of the internal area, because their structure typically is not comparable to structural floors. Please delete or explain and if necessary visualize in the drawings.*
3. Knight Frank - Andrew Gooding, Global: *The definition needs to be linked to three simple columns of items: included, excluded separately stated.*
4. Malcolm Hollis Limited - Tom Pugh, European: *In diagram 9/10 for IPMS2 the area goes to the centre line of the party wall however this is not stated in the text. However, this goes against the principles laid out in the IPMS standards for Office and Residential where the measurement of IPMS2 is taken to the internal extents of the (see page 32 of Residential Standard).*
5. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *We agree on the fact that a sheltered area is being stated separately. We suggest to exclude the area of balconies, just like the sheltered area and the car parking area.*
6. Plowman Craven - Robert Ash, UK: *"Typo in the question wording. Definition: We foresee confusion in terms of identifying IDF for industrial properties with very high ceilings (roofs) where there may be blockwork perimeter walls at ground floor level, giving way to and supporting higher level cladding, the internal face of which is recessed beyond the supporting walls (and sometimes even beyond the external face of perimeter walls so that it ‘overhangs’ the ground level (building footprint) but extends vertically more than 50% of the floor to ceiling overall height. Are there any issues in spaces typically with*

*pitched, sloping or arched roofs? For gable ends with pitched internal roof lines, which is the controlling height for IDF, the ends or the underside the central ridge? Measurement practice: Not sure what 'If there are no external walls, there is no IPMS 2 – Industrial' means. And how does this statement relate to the statement under Measurement included but stated separately that states that 'generally accessible rooftop terraces are to be included'? Exclusions: Measurement for IPMS 2 – Industrial is not to include areas outside the external wall', (nor actually external walls themselves). Loading Zone: Presumably, the loading bay in Diagram 9 is an external loading bay? Does this distinction need to be made? Does the exclusion of this hatched area result from the fact that it is a 'Sheltered Area' or that it is an 'external loading bay'? Diagrams: Our feeling is that the diagrams relating to IPMS 2 (Diagrams 8, 9 and 10) ought to follow the text for IPMS 2, thereby avoiding the duplication of text and descriptions in Part 5 and reducing the size of the document."*

7. RICS Finland - Seppo Koponen, Finland: *"There seems to be some kind of inconsistency in this section. It is stated that "The aggregate of the Component Areas minus Component Areas B1 (External Wall) must equal IPMS 2 – Industrial". The internal partition structural wall (B1) against neighbouring unit is divided 50/50 among those two units as shown in diagram 2. However, that 50 % of above internal partition defined as component area B1 is included both in IPMS 1 as shown in diagram 6 as well as in IPMS 2 as shown in diagram 9. In addition, the different approach between roller shutters and windows concerning 50/50 rule already commented above in Q1 might need additional clarification here."*
8. SEGRO - NICK WATSON, EUROPEAN: *We have occasion where attached and detached structures for plant and storage, both covered and partially covered are demised to tenants and these might be considered to be excluded as they are beyond the Covered Area, while these may be measured and stated separately the Standard could make provision for these more simply with further definition.*
9. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *Measurements included, but stated separately: "Internal catwalks" do not form a part of the internal area, because their structure typically*

*is not comparable to structural floors. Please delete or explain and if necessary visualize in the drawings.*

**Response Summary:** There were 9 responses to this section and a range of different opinions.

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

## Page 18. 3.3.1 – IPMS 3 – Industrial (Occupier), Use

### Consultation Responses:

1. BNP Paribas Real Estate -David Stubbs, Global: *"It would assist an understanding of this basis if the words "in multiple occupied buildings" were added at the end of line 1. Neither IPMS 3A or 3B would be appropriate for a detached building in exclusive use, as confirmed by 3.3.3/4 when reference is made to IPMS ½."*
2. GIF - DR. IRA HÖRNDLER, GERMANY: *We only use IPMS 1 for calculation or try GIF - Dr. Ira Hörndler, Germany: transaction purposes for Industrial. We are strict against various IPMS 3 alternatives. Reason: a standard should not have versions or applications.*
3. Knight Frank - Andrew Gooding, Global: *It would be helpful to know what is the purpose of this Measurement basis and why it is included.*
4. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *We only use IPMS 1 for calculation or transaction purposes for Industrial buildings. We are strongly against the idea of different standards of Level 3 (3A and 3B). In our view this would counteract the idea of one standard for the whole world. If investor A decides to measure its property by standard 3A and then wants to sell it to investor B which chooses 3B they can't compare the results. This would be also true for different valuer. We therefore assume that IPMS coalition can't reach its own ambitious aim. A quite good alternative would be to provide only one Standard 3 and guidance to combine the different components to create national differences but to represent in every case IPMS 3.*

**Response Summary:** There were 4 responses to this section and a range of different opinions.

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

## Page 18. 3.3.2 – IPMS 3 – Industrial (Occupier), Definition

### Consultation Responses:

1. GIF - Dr. Ira Hörndler, Germany: *"Measurement practice, Paragraph 2: add "internal" to "catwalk" to provide consistency to the definitions under 1.3 Paragraph 4: replace "IPMS Industrial 3 A and IPMS Industrial 3 B" with "IPMS Industrial 3 A or IPMS Industrial 3 B."*
2. Knight Frank - Andrew Gooding, Global: *It would be helpful to know what is the purpose of this Measurement basis and why it is included.*
3. Malcolm Hollis Limited - Tom Pugh, European: *It is normal for a single tenant to occupy the whole of an industrial building, unlike Offices. I think that the inclusion of IPMS3A and IPMS3B which are similar but not the same as IPMS1 and IPMS2 may cause confusion to users. I note that vertical penetrations greater than 0.25 sq. m. are excluded from IPMS3, can the SSC explain the reasoning behind this? Do we take the Vertical Penetration in this definition to be the same as Component Area A? Should this be stated?*
4. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *We do not think the difference between IPMS 3A and IPMS 3B is entirely clear. Perhaps it would help if more clearly is stated that the IPMS 3A includes outer walls. We suggest to, just like IPMS 2, exclude the sheltered area from the IPMS 3. This would improve uniformity within the standard.*
5. Plowman Craven - Robert Ash, UK: *"Reference to vertical penetrations needs checking as it contradicts IPMS 3 Residential: 'Any vertical penetrations that are greater than 0.25 m<sup>2</sup>, including the enclosing wall are to be included within the Floor Area measurement'. Whereas in IPMS 3 – Residential we have; 'Any vertical penetrations that are greater than 0.25 m<sup>2</sup>, including the enclosing wall are to be excluded within the Floor Area measurement'."*
6. Zentraler Immobilien Ausschuss e.V - Sabine Georgi, Germany: *"Measurement practice, Paragraph 2: add "internal" to "catwalk" to provide consistency to the definitions under 1.3 Paragraph 4: replace*

*“IPMS Industrial 3 A and IPMS Industrial 3 B” with “IPMS Industrial 3 A or IPMS Industrial 3 B”*

**Response Summary:** There were 6 responses to this section and a range of different opinions.

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



## Page 18. 3.3.3 – IPMS 3A – Industrial

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *The definition needs to be linked to three simple columns of items: included, excluded separately stated.*
2. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann , Netherlands: *We agree to the decision to measure to the central line of the shared walls between units.*
3. Plowman Craven - Robert Ash, UK: *"The introduction of two bases of measurement, 3A and 3B within IPMS 3 has led to some inconsistency here that is also related to the definition of IPMS 1, as discussed earlier, and the matter of internal dividing structural walls. We think that this might be resolved by:*
  - *Defining IPMS 1 Industrial as pertaining to the entire building and not accommodating reporting of interior component areas.*
  - *IPMS 2 Industrial reporting of component areas applied to entire buildings or individual units (part buildings) under sole occupancy.*
  - *Defining IPMS 3A Industrial (as currently defined) combining the occupied areas with their enclosing structural walls areas, and where necessary, half wall widths of shared walls between occupants.*
  - *Defining IPMS 3B Industrial as occupied areas without any perimeter structural elements, measuring to IDF for perimeter structure and to the face of any shared walls between occupants."*

**Response Summary:** There were 3 responses to this section and a further 20 responses question 2 on which of the IPMS standards would be relevant to your market. Some respondees also felt that IPMS 3 A and IPMS 3B were irrelevant in many instances they produced the same measurement as IPMS 1 and IPMS 2.

**SSC Rationale:** The SSC considered the responses received particularly those in relation to the similarity between IPMS 1 and the current IPMS 3A and between IPMS 2 and IPMS 3B. The SSC discussed this matter in detail and felt that the distinction between IPMS 1 and 2 and IPMS 3 A and IPMS 3B was still necessary. Firstly, because across all the IPMS standards IPMS 1 measures the external area, IPMS 2 measures the

internal area and IPMS 3A and IPMS 3B measures the area in exclusive occupation. Secondly although in many instances these areas will be equivalent, in some instances there will be a variance between IPMS 1 and IPMS – 2 Industrial and IPMS 3A – Industrial and IPMS 3B Industrial as measurements are taken to the centre line of adjoining walls for multi units. Furthermore, the SSC felt that the existence of IPMS 3A and IPMS 3B would provide greater transparency with the market over current measurement practices.

## Page 18. 3.3.4 – IPMS 3B – Industrial

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *The definition needs to be linked to three simple columns of items: included, excluded separately stated.*
2. Malcolm Hollis Limited - Tom Pugh, European: *I presume that the measurement of the area is taken to the centre line of shared walls between occupants when they are in the same building and not between neighbouring properties.*
3. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann , Netherlands: *We agree to the decision to measure to the central line of the shared walls between units.*
4. Plowman Craven - Robert Ash, UK: *"We don't think that areas should include half of shared walls between occupants. Diagrams 13 and 14 would need to be revised in this respect."*

**Response Summary:** There were 4 responses to this section and a further 20 responses question 2 on which of the IPMS standards would be relevant to your market. Some respondees also felt that IPMS 3 A and IPMS 3B were irrelevant in many instances they produced the same measurement as IPMS 1 and IPMS 2.

**SSC Rationale:** The SSC considered the responses received particularly those in relation to the similarity between IPMS 1 and the current IPMS 3A and between IPMS 2 and IPMS 3B. The SSC discussed this matter in detail and felt that the distinction between IPMS 1 and 2 and IPMS 3 A and IPMS 3B was still necessary. Firstly, because across all the IPMS standards IPMS 1 measures the external area, IPMS 2 measures the internal area and IPMS 3A and IPMS 3B measures the area in exclusive occupation. Secondly although in many instances these areas will be equivalent, in some instances there will be a variance between IPMS 1 and IPMS – 2 Industrial and IPMS 3A – Industrial and IPMS 3B Industrial as measurements are taken to the centre line of adjoining walls for multi units. Furthermore, the SSC felt that the existence of IPMS 3A and IPMS

3B would provide greater transparency with the market over current measurement practices.

## Page 20. 4.1 – IPMS Industrial Component Areas

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *Page 20. 4.1 – IPMS Industrial Component Areas "Component area G should be split into two separate component areas:  
- Fully Usable Workspace  
- Restricted use workspace  
Component area B3 should be split into two separate component areas:  
- internal non-structural walls which are permanent, for reasons of different use of space on either side, or for legal reasons;  
- internal non-structural walls which it is possible to remove and incorporate into adjoining workspace."*
2. Knight Frank - Andrew Gooding, Global: *Page 20. 4.1 – IPMS Industrial Component Areas. Please refer to the answer to Q6 above. We are of the opinion that the Component Areas are very confusing and would appear to be a case of "over engineering" a relatively simple property type. We can understand the optional need for the division into some component areas namely Workspace, Hygiene areas and Other areas, but the remainder would appear confusing and not of relevance to occupiers or landlords. A further point to be made is that the colour coding of such areas assumes measurement is being done on a CAD or computer based system, but this is relatively rare in developed countries (except by professional measuring companies) and almost impossible in developing countries.*
3. Plowman Craven - Robert Ash, UK: *Page 20. 4.1 – IPMS Industrial Component Areas. We don't think that this ought to apply to IPMS 1.*
4. Prologis Europe - Pieter Ris and Mark Zulver, Europe: *Page 20. 4.1 – IPMS Industrial Component Areas. Why is office not separately mentioned, as commercially we break it down in three categories like office, mezzanine and warehouse. Also would be good to know what to do when the mezzanine is fitted out as office , is that mezzanine then office?*

5. RICS Portugal - Carlos Pereira, Portugal: Page 20. 4.1 – IPMS Industrial Component Areas. *"It is very common that industrial buildings include office areas. In the component areas structure it is not defined how to treat such cases, and we think it should important to clarify this point."*

**Response Summary:** There were 5 responses to this section and a further 20 responses to question 5 on whether the Component Areas are sufficient for industrial buildings. The majority of respondents said that the Component Area were sufficient for IPMS Industrial Buildings. However, some respondees asked for further Component Area Guidance on areas that may have multiple uses such as store rooms and changing room area. Further respondees felt that Component Areas were unnecessary if the User only intended to report IPMS 2.

**SSC Rationale:** The SSC considered the responses received and noted further clarification in relation to the use of Component Areas within IPMS 1 and IPMS 2. The SSC have added the following sentence "If required IPMS 2 – Industrial may be reported on a Component-by-Component basis for each floor of a Building" to highlight that it is not always necessary to use Component Areas when calculating IPMS 2. The SSC also accepted that additional guidance was required on Component Areas in multiple use and have added the following additional paragraph within Section 4.1: "If a particular portion of space may be assigned to more than one Component Area, then it is to be assigned to the Component Area that best reflects its primary design function within the larger space."

## Page 21. Diagram 1: IPMS – Industrial Buildings – Cross Section

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *It is not clear in this diagram that the covered area has not to be included in IMPS1 but has to be measured and stated separately.*
2. Knight Frank - Andrew Gooding, Global: *It would be more useful if Diagram 1, Diagram 2 and Diagram 3 were all on the same page (which could be achieved by minimising the second half of the building in Diagrams 2 and 3).*
3. Mathew Jennings - Mathew Jennings, UK: *Maybe include the same image but from different angles to give a clearer picture.*
4. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann , Netherlands: *This diagram clarifies a lot. Perhaps adding in more of these for different sorts of buildings and with different sorts of construction elements will help improve the clarity of the standard.*
5. Plowman Craven - Robert Ash, UK: *This diagram, by its inclusion at this point, should be illustrating Limited Use Areas and does not.*

**Response Summary:** There were 5 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the

placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.



## Page 22. Diagram 2: IPMS – Industrial Buildings Ground Floor (Level 0) – Component Areas

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *In some cases, the areas under door thresholds are shown as part of the adjoining internal wall component while in other cases they are not. This is inconsistent. A consistent rule should be decided and applied.*
2. Knight Frank - Andrew Gooding, Global: *It would be more useful if Diagram 1, Diagram 2 and Diagram 3 were all on the same page (which could be achieved by minimising the second half of the building in Diagrams 2 and 3).*
3. Malcolm Hollis Limited - Tom Pugh, European: *It does not appear that the two columns in the bottom right hand corner do not appear to be coloured the same as the other columns. Would it be worth showing a magnification of the party wall between the two properties and how the measurement of B1 is taken to the centre line?*
4. Netherlands Council for Real Estate Assessment - Ruud M. Kathmann, Netherlands: *When looking at the diagram and comparing it with the diagram on page 34 it is unclear why the showroom is determined as "amenities".*
5. Plowman Craven - Robert Ash, UK: *"Annotate bottom perimeter wall as B1. The background colour tint for Component Area H appears to be the wrong colour. It should be a light yellow according to the schedule and not to be confused with the sand colour tint that is generally used to indicate included areas elsewhere."*
6. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *Greater variety of examples needed.*

**Response Summary:** There were 6 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondees

felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 23. Diagram 3: IPMS – Industrial Buildings Ground Floor (Level 1) – Component Areas

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *It would be more useful if Diagram 1, Diagram 2 and Diagram 3 were all on the same page (which could be achieved by minimising the second half of the building in Diagrams 2 and 3).*

**Response Summary:** There was 1 response to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 24. Sample Spreadsheet for Component Areas

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *This spreadsheet is very confusing, especially with the negative numbers along the top and as set out in Q6 above, will be time consuming and therefore expensive to produce.*
2. Mathew Jennings - Mathew Jennings, UK: *Could do with being a bit clearer. Maybe have more than one example related to an actual measurement.*
3. Plowman Craven - Robert Ash, UK: *" We feel that this schedule should remain as part of IPMS 2 reporting. 'Total IPMS 1' (page 25) needs to revert to 'Total IPMS 2'. The use of the term 'unenclosed' in 'Additional areas outside of IPMS 1' (page 25) is confusing not just because of the reference to IPMS 1 but also in relation to 'loading docks'. Should the consideration be to Loading Zones that comprise loading docks and loading bays? And should the term be 'uncovered' (i.e. not roofed) rather than 'unenclosed'?"*
4. RICS Finland - Seppo Koponen, Finland: *Content of "Additional areas outside IPMS 1" would be clearer also for users of IPMS outside Anglo-Saxon countries if there were one illustrative picture showing them in practice.*
5. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *Needs to be simplified.*

**Response Summary:** There were 5 responses to this section and a further 20 responses to question 6 on whether the Component Areas are sufficient for industrial buildings. The majority of respondents said that the Component Area were sufficient for IPMS Industrial Buildings. However, some respondees asked for further Component Area Guidance on areas that may have multiple uses such as store rooms and changing room area. Further respondees felt that Component Areas were unnecessary if the User only intended to report IPMS 2.

**SSC Rationale:** The SSC considered the responses received and noted further clarification in relation to the use of Component Areas within IPMS 1 and IPMS 2. The SSC have added the following sentence “If required IPMS 2 – Industrial may be reported on a Component-by-Component basis for each floor of a Building” to highlight that it is not always necessary to use Component Areas when calculating IPMS 2. The SSC also accepted that additional guidance was required on Component Areas in multiple use and have added the following additional paragraph within Section 4.1: “If a particular portion of space may be assigned to more than one Component Area, then it is to be assigned to the Component Area that best reflects its primary design function within the larger space.”

## Page 26. 4.3 Internal Dominant Face

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *A similar issue occurs with regard to the measurement of IPMS2. The concept of Internal Dominant Face introduces anomalies which render the standard less than useful as a basis of comparison between buildings. Let us examine a number of situations: A building contains an internal space which is square and measures 10m by 10m on plan to the inner face of an external masonry wall. The glazed inner faces of the external wall is 0.5m closer to the exterior than the inner face of the masonry wall. We will now examine 3 different possibilities in relation to this space.*

*1. In this example the inner surface of the external masonry wall is the Internal Dominant Face. The glazed area reaches to the floor surface allowing the floor to project outwards into the window space. The total length of the masonry wall at floor level is very slightly over 5m. The total length of the glazed surface at floor level is very slightly under 5m. Using the concept of Internal Dominant Face the floor area of this space is  $10\text{m} \times 10\text{m} = 100\text{m}^2$ .*

*2. In the second case the glazed surface is the Internal Dominant Face. The glazed area still reaches to the floor surface allowing the floor to project outwards into the window space. The total length of the masonry wall at floor level is very slightly less than 5m and the masonry very slightly more than 5m. Here when using the concept of Dominant Face the floor area of the space is  $10\text{m} \times 10.5\text{m} = 105\text{m}^2$ .*

*In both these cases the actual usable floor area, i.e. the floor area that is a fully continuous surface that can be accessed, and on which workspace items such as chairs, desks etc. can be placed and on which people can stand is  $102.5\text{m}^2$ .*

*3. The third example is where the glazed surface is also the Internal Dominant Face. The glazing is 9m wide, stretching almost the full width of the workspace area but it does not reach to the floor. Below this window, whose cill level is 1m above floor level, there is masonry walling whose inner face is flush with the full height masonry walling at both sides. In this case the concept of Internal Dominant Face give a floor area of  $104.5\text{m}^2$  where the actual usable floor space is  $100\text{m}^2$ . Internal Dominant Face give an under value of 2.5% in the case of example 1, an over value of 2.5% in the case of example 2 and an over value of 4.5% in the case of example 3.*

*Because of the existence of these anomalies, it is recommended that the concept of dominant face be abandoned and measurements be taken of actual floor area as measured immediately above skirting board level to the inner face of the permanent external structural and weatherproofing envelope of a building."Also the definition states "comprising 50% or more". To be changed in "more than 50%" (as in the definitions part on page 9-10).*

2. Knight Frank - Andrew Gooding, Global: *The definition of IDF is not as clear as it could be as it misses the key factor in industrial buildings – being the existence of a blockwork wall rising from the floor up to a height of 1m, 2m or 3m and then giving way to external metal cladding above. The difference between these two internal surfaces is circa 0.3 – 0.5m and thus making a huge difference to floor area measurements. The RICS Code of Measuring Practice is also unclear on this issue and therefore IPMS Industrial should take the opportunity to clarify. It should be clarified that the IDF should be to the internal face of the blockwork wall, notwithstanding that there may be extensive cladding to a greater distance above. This could be done by way of an additional drawing in Diagram 4.*
3. RUAG Real Estate AG; *Handling of windows clear; handling of roller shutter doesn't match with the windows solution.*

**Response Summary:** There were 3 responses to this section.

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

## Page 27. Diagram 4: Internal Dominant Face

### Consultation Responses:

1. BNP Paribas Real Estate -David Stubbs, Global: *"It is likely that any industrial buildings with >50% glazing, the lower third is more than likely to be block/cladding. Market practice would then be to measure to the inside of that block/cladding when measuring to IPMS 2, not to the glazing. This interpretation of the IDF does not accord with market practice."*
2. Plowman Craven - Robert Ash, UK: *"This example used previously for IPMS Office and Residential, does not reflect the typical wall construction of an industrial unit and needs amending. Most purpose-built industrial buildings comprise steel frames, with internal tracking and external cladding. The 'Vertical Section' label needs replacing. The red line is missing from the plan view, as per previous standards."*
3. RUAG Real Estate AG; *See 4.3 roller shutter not consequent to the windows.*

**Response Summary:** There were 3 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.



## Page 28. 5.1 – IPMS 1 (External)

### Consultation Responses:

1. Plowman Craven - Robert Ash, UK: *With the diagrams separated from the related text as they are currently in this Part 5, there is the need for repeated text to help with diagram interpretation but this could be avoided.*

**Response Summary:** There was 1 response to this section.

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

## Page 28. Diagram 5: IPMS 1 – Industrial – Cross Section

### Consultation Responses:

1. CLGE - Maurice Barbieri, Global: *Please show the extent of IPMS 1 and not the maximum extent of Covered Area as this diagram is about IPMS 1.*
2. Mathew Jennings - Mathew Jennings, UK: *Again maybe a few more images from different angles.*
3. Prologis Europe - Pieter Ris and Mark Zulver , Europe: *A covered rail siding would qualify as well as IPMS 1 right?*
4. Society of Chartered Surveyors Ireland - Aine Myler, Ireland: *More examples required.*

**Response Summary:** There were 4 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 29. Diagram 6: IPMS 1 - Industrial Ground Floor (Level 0)

### Consultation Responses:

1. Malcolm Hollis Limited - Tom Pugh, European: *Should the base diagram show engaged columns on the external façade of the building? (like the extract of Diagram 4 on p27) so that people can see how these are treated?*

**Response Summary:** There was 1 response to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 30. Diagram 7: IPMS 1 - Industrial First Floor (Level 1)

### Consultation Responses:

1. Malcolm Hollis Limited - Tom Pugh, European: *Should the base diagram show engaged columns on the external façade of the building? (like the extract of Diagram 4 on p27) so that people can see how these are treated?*

**Response Summary:** There was 1 response to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 31. 5.2 – IPMS 2 (Internal)

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *It is confusing to the user to state “may be reported on a Component – by – Component basis for each floor of a building”. It would also be more helpful to have a drawing alongside the text and then to have the definition linked to three simple columns of items: Included, excluded and separately stated items.*
2. Plowman Craven - Robert Ash, UK: *With the diagrams separated from the related text as they are currently in this Part 5, there is the need for repeated text to help with diagram interpretation but this could be avoided.*

**Response Summary:** There were 2 responses to this section.

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

## Page 31. Diagram 8: IPMS 2 – Industrial – Cross Section

### Consultation Responses:

1. Mathew Jennings - Mathew Jennings, UK: *Few more images from different angles.*
2. RICS Finland - Seppo Koponen, Finland: *When an additional text describing the extent of the area is missing (unlike on Diagram 5) mere colour is not enough to illustrate the meaning sufficiently.*

**Response Summary:** There were 2 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 32. Diagram 9: IPMS 2 - Industrial Ground Floor (Level 0)

### Consultation Responses:

1. Expert Invest - Petar and Kremena Andonov, Bulgaria: *Measurements for IPMS 2 – Industrial are to be taken to the Internal Dominant Face for external construction features and otherwise to the Finished Surface. The same applies to the shared walls between units. Measurements are not to be taken to the centre line of the shared walls between units. The diagram should be corrected.*
2. Knight Frank - Andrew Gooding, Global: *We would question why IPMS 2 would measure to the centre line of a shared wall between shared units. As has been mentioned on IPMS Office and IMPS Residential consultations, the measuring to a centre line of a wall is nonsensical and impossible to accurately assess. Therefore, the measurement should be to the IDF. The consequences of not making this change will be that rents will be inflated for all tenants.*
3. Malcolm Hollis Limited - Tom Pugh, European: *The measurement of the area to the centre line of the party wall goes against the principles laid out in Office and Residential standard as mentioned previously.*

**Response Summary:** There were 3 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its

own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.



## Page 33. Diagram 10: IPMS 2 - Industrial Upper Floor (Level 1)

### Consultation Responses:

1. Expert Invest - Petar and Kremena Andonov, Bulgaria: *Measurements for IPMS 2 – Industrial are to be taken to the Internal Dominant Face for external construction features and otherwise to the Finished Surface. The same applies to the shared walls between units. The diagram should be corrected.*
2. Knight Frank - Andrew Gooding, Global: *See answer to Page 32, Diagram 9. We would question why IPMS 2 would measure to the centre line of a shared wall between shared units. As has been mentioned on IPMS Office and IMPS Residential consultations, the measuring to a centre line of a wall is nonsensical and impossible to accurately assess. Therefore, the measurement should be to the IDF. The consequences of not making this change will be that rents will be inflated for all tenants.*
3. Malcolm Hollis Limited - Tom Pugh, European: *The measurement of the area to the centre line of the party wall goes against the principles laid out in Office and Residential standard as mentioned previously. The arrow demonstrating the IDF of the window and the bottom of the diagram needs to be moved and extended to the correct position.*

**Response Summary:** There were 3 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared

structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 34. 5.3.1: IPMS 3A – industrial

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *It is confusing to the user to state “may be reported on a Component–by–Component basis for each floor of a building”. It would also be more helpful to have a drawing alongside the text and then to have the definition linked to three simple columns of items: Included, excluded and separately stated items.*
2. Malcolm Hollis Limited - Tom Pugh, European: *There is some inconsistency regarding the vertical penetrations greater than 0.25 sq. m. In the text of paragraph 4 on p34 it states that stairs are only measured at the lowest level and the any vertical penetration greater than 0.25 sq. m. is to be included. The diagram 12 shows the lift and ducts excluded but I cannot see how either of these are less than 0.25 sq. m. (0.5m by 0.5m).*
3. Plowman Craven - Robert Ash, UK: *With the diagrams separated from the related text as they are currently in this Part 5, there is the need for repeated text to help with diagram interpretation but this could be avoided.*

**Response Summary:** There were 3 responses to this section.

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

## Page 34. Diagram 11: IPMS 3A – Industrial Ground Floor (Level 0)

### Consultation Responses:

1. Knight Frank - Andrew Gooding, Global: *It is confusing to the user to state “may be reported on a Component-by-Component basis for each floor of a building”. It would also be more helpful to have a drawing alongside the text and then to have the definition linked to three simple columns of items: Included, excluded and separately stated items.*
2. Malcolm Hollis Limited - Tom Pugh, European: *There is some inconsistency regarding the vertical penetrations greater than 0.25 sq. m. In the text of paragraph 4 on p34 it states that stairs are only measured at the lowest level and the any vertical penetration greater than 0.25 sq. m. is to be included. The diagram 12 shows the lift and ducts excluded but I cannot see how either of these are less than 0.25 sq. m. (0.5m by 0.5m).*
3. Plowman Craven - Robert Ash, UK: *With the diagrams separated from the related text as they are currently in this Part 5, there is the need for repeated text to help with diagram interpretation but this could be avoided.*

**Response Summary:** There were 3 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the

placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 35. Diagram 12: IPMS 3A – Industrial First Floor (Level 1)

### Consultation Responses:

1. Malcolm Hollis Limited - Tom Pugh, European: *There is some inconsistency regarding the vertical penetrations greater than 0.25 sq. m. In the text of paragraph 4 on p34 it states that stairs are only measured at the lowest level and the any vertical penetration greater than 0.25 sq. m. is to be included. The diagram 12 shows the lift and ducts excluded but I cannot see how either of these are less than 0.25 sq. m. (0.5m by 0.5m).*

**Response Summary:** There was 1 response to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.

## Page 36. IPMS 3B – Industrial

### Consultation Responses:

1. Expert Invest - Petar and Kremena Andonov, Bulgaria: *IPMS 3B – Industrial: That part of the Building in exclusive occupation measured to the Internal Dominant Face of external construction features and otherwise to the Finished Surface. The same applies to the shared walls between units.*
2. Knight Frank - Andrew Gooding, Global: *It is confusing to the user to state “may be reported on a Component–by–Component basis for each floor of a building”. It would also be more helpful to have a drawing alongside the text and then to have the definition linked to three simple columns of items: Included, excluded and separately stated items.*

**Response Summary:** There were 2 responses to this section.

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

## Page 36. Diagram 13: IPMS 3B - Industrial Ground Floor (Level 0)

### Consultation Responses:

1. Expert Invest - Petar and Kremena Andonov, Bulgaria: *IPMS 3B – Industrial: That part of the Building in exclusive occupation measured to the Internal Dominant Face of external construction features and otherwise to the Finished Surface. The same applies to the shared walls between units.*
2. Knight Frank - Andrew Gooding, Global: *We are unclear as to the purpose of this valuation.*
3. Malcolm Hollis Limited - Tom Pugh, European: *There is some inconsistency regarding the vertical penetrations greater than 0.25 sq. m. In the text of paragraph 4 on p34 it states that stairs are only measured at the lowest level and the any vertical penetration greater than 0.25 sq. m. is to be included. The diagram 12 shows the lift and ducts excluded but I ca not see how either of these are less than 0.25 sq. m. (0.5m by 0.5m).*

**Response Summary:** There were 3 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondees felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.



## Page 37. Diagram 14: IPMS 3B - Industrial First Floor (Level 1)

### Consultation Responses:

1. Expert Invest - Petar and Kremena Andonov, Bulgaria: *IPMS 3B – Industrial: That part of the Building in exclusive occupation measured to the Internal Dominant Face of external construction features and otherwise to the Finished Surface. The same applies to the shared walls between units.*
2. Knight Frank - Andrew Gooding, Global: *We are unclear as to the purpose of this valuation.*
3. Malcolm Hollis Limited - Tom Pugh, European: *The arrow demonstrating the IDF of the window and the bottom of the diagram needs to be moved and extended to the correct position. There is also some inconsistency regarding the vertical penetrations greater than 0.25 sq. m. In the text of paragraph 4 on p34 it states that stairs are only measured at the lowest level and the any vertical penetration greater than 0.25 sq. m. is to be included. The diagram 12 shows the lift and ducts excluded but I ca not see how either of these are less than 0.25 sq. m. (0.5m by 0.5m).*

**Response Summary:** There were 3 responses to this section and a further 20 responses on question 5 asking whether the diagrams were clear in demonstrating the concepts to which they apply. The majority of responses felt that diagrams clear in demonstrating the concepts to which they apply, others required further clarification. Some respondents felt that there were too many diagrams whereas others requested more, some felt the diagrams were wrongly positioned and should be contained within the text and others requested larger scale drawings or further clarification on windows, roller shutters and IDF.

**SSC Rationale:** The SSC considered the responses received and have increased the scale of the diagram and added additional magnifications where relevant. The SSC have also revised some of the existing drawings or added additional diagrams where necessary to further highlight measurement practice in relation to the Covered Areas, IDF, shared structural walls and roller shutters. The SSC also discussed the placement of the floorplans and felt that containing the Floorplans in its

own section (Part 5) with some text repeated made IPMS Industrial Buildings more user friendly.