

**INTERNATIONAL**

**PROPERTY**

**MEASUREMENT**

**STANDARDS:**

**INDUSTRIAL**

**BUILDINGS**

**SSC Response to Exposure Draft Feedback**

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## Introduction

The International Property Measurement Standards for Residential Buildings Exposure Draft was in consultation between Thursday 30th March until Friday 2nd June. During this second industrial consultation period there were numerous downloads of the Exposure Draft and the responses were received from the 19 organisations or individuals listed below. The IPMS Standards Setting Committee has considered all the comments received before completing the IPMS – Industrial 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*

*CBRE*

*CLGE*

*EXPERT INVEST*

*GIF*

*HATFIELD WHITE*

*HYPZERT*

*KNIGHT FRANK*

*MALCOM HOLLIS LIMITED*

*PANOTTONI DEVELOPMENT COMPANY*

*PLOWMAN CRAVEN*

*PROLOGIS EUROPE*

*RICS FINLAND*

*ROYAL INSTITUTION OF SURVEYORS MALAYSIA (RISM)*

*SOCIETY OF CHARTERED SURVEYORS IRELAND*

*SEGRO*

*SHEPHERD CHARTERED SURVEYORS*

*SIOR*

*ZENTRALER IMMOBILIEN AUSSCHUSS e.V.*

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

We are aware that a number of other responses such as those prepared by CLGE, GIF, 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 industrial and retail, are drafted by the SSC. Obviously these will need to be consistent as another building class is mixed use, which will incorporate several IPMS standards. The objective is that there will be no 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 has underlined the need for IPMS Standards.

## Executive Summary

In respect to the Exposure Draft consultation process a consultation response form was issued and respondees were asked the following seven questions in relation to the Exposure Draft. 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. If you are measuring an Industrial Building for sale purposes which IPMS would you would use?**

**Response Summary:** *There were 19 responses to this question and a range of different responses. Overall, the majority respondees said that they would use either IPMS 1 or IPMS 2 - Industrial. However, some respondents have said that this varies according to the nature of instruction and on the whole, they would use IPMS 1 or IPMS 2 - Industrial for single occupiers and IPMS 3A Industrial or IPMS 3B Industrial for multi tenanted industrial buildings. Other respondents commented that this depended on whether the measurement instruction was for sales or letting purposes.*

**SSC Rationale:** *The SSC considered the responses received and would remind Users that though they are free to use IPMS Industrial Buildings as required the initial research showed that the IPMS Industrial Standards were needed for the following reasons; "Our research found there was a need to measure the external area of a Building, for planning purposes or the summary costing of development proposals. The SSC decided to refer to this as IPMS 1 and apply it to all classes of Buildings. IPMS 2 – Industrial was developed to measure the internal area of a Building and, with the use of Component Areas, will assist the Property Industry in making efficient use of space and in benchmarking data. It was also important to measure areas in exclusive occupation for transactions and other purposes. The SSC identified two different measurement bases, IPMS 3A – Industrial and IPMS 3B – Industrial, that were required to meet global market needs for measuring areas in exclusive occupation. Some markets require only one of these measurement bases, but others may use both for different purposes (IPMS Introduction – page 3-4). "*

**Q2. If you are measuring an Industrial Building for leasing purposes which IPMS would you use?**

**Response Summary:** *There were 19 responses to this question and a range of different responses. Overall, the majority respondees said that they would use either IPMS 1 or IPMS 2 - Industrial. However, some respondents have said that this varies according to the nature of instruction and on the whole, they would use IPMS 1 or IPMS 2 - Industrial for single occupiers and IPMS 3A Industrial or IPMS 3B Industrial for multi tenanted industrial buildings. Other respondents commented that this depended on whether the measurement instruction was for sales or letting purposes.*

**SSC Rationale:** *The SSC considered the responses received and would remind Users that though they are free to use IPMS Industrial Buildings as required the initial research showed that the IPMS Industrial Standards were needed for the following reasons; **“Our research found there was a need to measure the external area of a Building, for planning purposes or the summary costing of development proposals. The SSC decided to refer to this as IPMS 1 and apply it to all classes of Buildings. IPMS 2 – Industrial was developed to measure the internal area of a Building and, with the use of Component Areas, will assist the Property Industry in making efficient use of space and in benchmarking data. It was also important to measure areas in exclusive occupation for transactions and other purposes. The SSC identified two different measurement bases, IPMS 3A – Industrial and IPMS 3B – Industrial, that were required to meet global market needs for measuring areas in exclusive occupation. Some markets require only one of these measurement bases, but others may use both for different purposes (IPMS Introduction – page 3-4).”***

**Q3. Are the definitions of Clear Height and Internal Height unambiguous and are the circumstances apparent where each should be used?**

**Response Summary:** *There were 19 responses to this question and the majority of respondees felt that definitions of Clear Height and Internal Height unambiguous and the circumstances were apparent where each should be used. However, several respondents felt that additional definitions were required including definitions for external eaves height, internal ridge heights, maximum height. Other respondents requested*



*further detail on measurement practice and additional magnifications within the floorplans.*

**SSC Rationale:** *The SSC considered the responses received and have made some revisions to “Section 4.4 on Clear Height and Internal Height” and “Diagram 4: IPMS – Industrial – Cross Section” to provide additional clarification. In respect of the additional height measurement definitions suggested, which included definitions for external eaves height, internal ridge heights, maximum height, the SSC felt that these were too specific for an international standard at this stage.*

**Q4. Do you think there is a need for volumetric measurement to be detailed in cubic area even if it is simply IPMS 3B – Industrial times the Clear Height?**

**Response Summary:** *There were 19 responses to this question and the majority of respondents felt that there was no need for volumetric measurements to be detailed in cubic area, particularly if measurements for Clear Height and Internal Height are taken. Other respondents commented that: “Whilst we support the idea for a volumetric measurement, without a detailed methodology, this has the potential to be more confusing than helpful, owing to differing heights (and the likes of barrel roofs). This needs very clear guidance.”*

**SSC Rationale:** *The SSC considered the responses received and agreed that there was no further need for volumetric measurements to be detailed in cubic area, particularly if measurements for Clear Height and Internal Height are taken. Furthermore, the SSC agreed that any volumetric measurement needed clear guidance and felt that the volumetric measurement requirements could vary according to local market needs. In this respect, the SSC felt that this was more of a guidance note issue and additional guidance on IPMS and volumetric measurements could be issued by Coalition members if required. Finally, the SSC felt that most space measurement professionals would use Building Information Modelling (BIM), if 3D measurements were required.*

**Q5. Please consider the Component Areas? Is this aspect of IPMS Industrial of use to you and if so are the Components, as defined, appropriate? If not what changes do you suggest?**

**Response Summary:** There were 19 responses to this question and the majority of respondents felt that “the system of component areas is clear and unambiguous”. However, some respondents felt that there were perhaps too many components for an industrial standard, where the main component breakdown would be office vs warehouse. Additional comments included that the component areas are *“adequate but we wouldn’t want this to be mandatory”* and that *“the components follow through from the other standards and are relevant in the same way. It may well be sensible to inform users that Component G (workspace) could be sub divided into warehouse space and ancillary office.”*

**SSC Rationale:** The SSC considered the responses received and agree that the component areas should not be mandatory as in many instances users may only require the overall IMS 1 and IPMS 2 – Industrial measurements. The SSC have also revised “Component Area G – Workspace” within the sample spreadsheet so users understand that this component can be further subdivided into other relevant areas such as factory, warehouse, office, laboratory, showroom and enclosed loading docks. SSC have also slightly revised *“Diagram 1: IPMS – Industrial – Ground Floor (Level 0) – Component Areas”* and *“Diagram 2: IPMS – Industrial – Upper Floor (Level 1) – Component Areas”* to provide additional clarity.

**Q6. Please consider whether, on your reading of the document, aspects are ambiguous or incomplete in detail? If so please identify the ambiguity or concern and, if you have a solution, please provide details?**

**Response Summary:**

**Response Summary:** There were 19 responses to this question and the majority of respondents felt that IPMS Industrial Buildings was not ambiguous or incomplete in detail. However, one respondent felt that the scope of IPMS was not clear and several respondents felt that the floorplans should be contained within the text to provide additional clarity. Further respondents felt that IPMS 1 and IPMS 2 floorplans could be clarified further to highlight the measurement practice for adjoining units. Finally, some respondents felt that IDF could benefit from clarification.

**SSC Rationale:** The SSC considered the responses received and feel that the definition of an Industrial Building as *“a building mainly used for industrial purposes such as manufacturing and warehousing, whether or not part of the Building is used for other purposes”* is sufficient. The SSC have also revised IPMS Industrial Building so the floorplans are included both in the text and in a separate part 5 titled *“Floorplans and Sections”*. Finally the SSC have provided additional clarification in relation to the measurement of adjoining units and have added the following sentence; *“In the case of attached or partially attached Buildings measurement is taken to the centre-line of shared walls between occupants”*. Finally, *“Diagram 3: Internal Dominant Face”* has been revised to provide additional clarification.

#### **Q7. Do you perceive there are any inconsistencies within IPMS Industrial Buildings Exposure Draft?**

**Response Summary:** There were 19 responses to this question and the majority of respondees felt that weren't any inconsistencies within IPMS Industrial Buildings Exposure Draft. However, one respondent commented that there were some inconsistencies within Part 5 Floorplans and Sections and another respondent commented on inconsistencies and lack of detail on feature areas within IPMS 1, IPMS 2 – Industrial and IPMS 3 – Industrial.

**SSC Rationale:** The SSC considered the responses received and have reviewed Part 5 Floorplans and Sections to ensure consistency. The SSC have also reviewed and revised the measurement practice sections for IPMS, though have not included feature details as the measurement practice for these will be included in a revised FAQ and within guidance issued by IPMSC members.

**Q1. If you are measuring an Industrial Building for sale purposes which IPMS would you use?**

**Consultation Responses:**

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *IPMS2.*
3. CLGE - Maurice Barbieri, European; *IPMS 1 and IPMS 2 seem to be the most appropriate.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *IPMS 1 and IPMS 3A.*
5. GIF - Dr. Ira Hörndler, Germany; *In Germany, most of the Industrial Buildings are to be measured in accordance to IPMS 1.*
6. Hatfield White - Nigel Hatfield, UK; *Preferably none – I would use the method that the consumer will best understand in the market in which the service is being provided.*
7. Hypzert - Matthias Fischer, Germany; *In Germany, most of the Industrial Buildings are to be measured in accordance to IPMS 1.*
8. Knight Frank, Harry Morten, Global; *IPMS 2.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *I would use IPMS1 or IPMS2 as they are closest to GEA and GIA as used in the UK market at present.*
10. Panattoni Development Company - Michał Pluciński, CEE; *For sale purposes, I would use IPMS 1 or 3A. The IPMS 1 would rather stand for single occupier building while IPMS 3A would be applicable in case of multi-tenant building. The IPMS 1 and 3A are similar in a way the structural elements are measured. For the purpose of sales of industrial buildings, the IPMS 1 and 3A seems to be a correct choice as the common parts / structural component within the building is relatively low.*

11. Plowman Craven - Robert Ash, UK; *We would measure as instructed. We probably would advise that we report in IPMS 3A - Industrial and IPMS-3B terms that can be summed to give IPMS 1/IPMS 2 (with upper level vertical penetrations added) if necessary.*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No comment.*
13. RICS Finland - Seppo Koponen, Finland; *No comment.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *IPMS1.*
15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *The current market norm for measuring industrial building in Ireland is Gross External Area.*
16. SEGRO - Nick Watson, European; *IPMS1.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *IPMS 2.*
18. SIOR - Alexis Fermanis, Global; *No comment.*
19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *In Germany, most of the Industrial Buildings are to be measured in accordance to IPMS 1.*

**Response Summary:** There were 19 responses to this question and a range of different responses. Overall, the majority respondees said that they would use either IPMS 1 or IPMS 2 - Industrial. However, some respondents have said that this varies according to the nature of instruction and on the whole, they would use IPMS 1 or IPMS 2 - Industrial for single occupiers and IPMS 3A Industrial or IPMS 3B Industrial for multi tenanted industrial buildings. Other respondents commented that this depended on whether the measurement instruction was for sales or letting purposes.

**SSC Rationale:** The SSC considered the responses received and would remind Users that though they are free to use IPMS Industrial Buildings as required the initial research showed that the IPMS Industrial Standards were needed for the following reasons; *“Our research found there was a*

*need to measure the external area of a Building, for planning purposes or the summary costing of development proposals. The SSC decided to refer to this as IPMS 1 and apply it to all classes of Buildings. IPMS 2 – Industrial was developed to measure the internal area of a Building and, with the use of Component Areas, will assist the Property Industry in making efficient use of space and in benchmarking data. It was also important to measure areas in exclusive occupation for transactions and other purposes. The SSC identified two different measurement bases, IPMS 3A – Industrial and IPMS 3B – Industrial, that were required to meet global market needs for measuring areas in exclusive occupation. Some markets require only one of these measurement bases, but others may use both for different purposes (IPMS Introduction – page 3-4).”*

**Q2. If you are measuring an Industrial Building for leasing purposes which IPMS would you use?**

**Consultation Responses:**

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *IPMS2 or IPMS3.*
3. CLGE - Maurice Barbieri, European; *IPMS 2 and IMPS 3b seem to be the most appropriate but why the IPMS3c isn't available for Industrial Buildings? It will be necessary to do it when all the standards will have to be merged.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *IPMS 2 and IPMS 3B.*
5. GIF - Dr. Ira Hörndler, Germany; *In Germany, most of the Industrial Buildings are to be measured in accordance to IPMS 1.*
6. Hatfield White - Nigel Hatfield, UK; *Preferably none – I would use the method that the consumer will best understand in the market in which the service is being provided.*
7. Hypzert - Matthias Fischer, Germany; *In Germany, most of the Industrial Buildings are to be measured in accordance to IPMS 1.*
8. Knight Frank, Harry Morten, Global; *IPMS 2.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *IPMS1 or IPMS2.*
10. Panattoni Development Company - Michał Pluciński, CEE; *For single occupier, I would use IPMS 1, while IPMS 3A would suit multi-tenant buildings. My personal view is that IPMS 2 and 3B methodology works for offices and retail, however not necessarily for industrial / warehousing. This is mainly due to the fact that structural elements are marginal as well as due to standards being currently widely used for warehouses / industrial.*

11. Plowman Craven - Robert Ash, UK; *We would measure as instructed. We probably would advise that we report in IPMS 3A - Industrial or IPMS -3B terms.*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No comment.*
13. RICS Finland - Seppo Koponen, Finland; *No comment.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *IPMS2.*
15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *Gross External Area.*
16. SEGRO - Nick Watson, European; *IPMS1.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *IPMS 2.*
18. SIOR - Alexis Fermanis, Global; *No comment.*
19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *In Germany most of the Industrial Buildings are to be measured in accordance to IPMS 1.*

**Response Summary:** There were 19 responses to this question and a range of different responses. Overall, the majority of respondents said that they would use either IPMS 1 or IPMS 2 - Industrial. However, some respondents have said that this varies according to the nature of instruction and on the whole, they would use IPMS 1 or IPMS 2 - Industrial for single occupiers and IPMS 3A Industrial or IPMS 3B Industrial for multi-tenanted industrial buildings. Other respondents commented that this depended on whether the measurement instruction was for sales or letting purposes.

**SSC Rationale:** The SSC considered the responses received and would remind Users that though they are free to use IPMS Industrial Buildings as required, the initial research showed that the IPMS Industrial Standards were needed for the following reasons; *“Our research found there was a need to measure the external area of a Building, for planning purposes or the summary costing of development proposals. The SSC decided to refer*



*to this as IPMS 1 and apply it to all classes of Buildings. IPMS 2 – Industrial was developed to measure the internal area of a Building and, with the use of Component Areas, will assist the Property Industry in making efficient use of space and in benchmarking data. It was also important to measure areas in exclusive occupation for transactions and other purposes. The SSC identified two different measurement bases, IPMS 3A – Industrial and IPMS 3B – Industrial, that were required to meet global market needs for measuring areas in exclusive occupation. Some markets require only one of these measurement bases, but others may use both for different purposes (IPMS Introduction – page 3-4).”*

**Q3. Are the definitions of Clear Height and Internal Height unambiguous and are the circumstances apparent where each should be used?**

**Consultation Responses:**

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *6th Edition made no mention of heights so this is an obvious improvement. No ambiguity. Based on Client requirements, Geomatics surveyors would ideally take further height measurements including internal ridge and eaves, external eaves and canopies, roller shutter clearance.*
3. CLGE - Maurice Barbieri, European; *There are still difficulties to be sure which height has to be measured in specific cases. We propose to:*
  - *Add A magnified zone for internal height on the left part,*
  - *Add a diagram with a slope in the roof or explain what should be measured in this case,*
  - *Add lines in the spreadsheet for component areas with different space areas categorized by different specific height for category G,*
  - *Add a component area to differentiate Office area (work space) and split to : industrial area, storage area, others and office.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *The definitions of Clear Height and Internal Height are unambiguous and the circumstances are apparent where each should be used.*
5. GIF - Dr. Ira Hörndler, Germany: *Yes.*
6. Hatfield White - Nigel Hatfield, UK; *No.*
7. Hypzert - Matthias Fischer, Germany; *Yes.*
8. Knight Frank, Harry Morten, Global; *Yes.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *They are unambiguous although it may be worth defining a Maximum Height.*

10. Panattoni Development Company - Michał Pluciński, CEE; *Not quite – the clear height refers to the lowest point of the structural element while internal height takes reference to the lower point of internal element – those can be suspended ceiling, etc. My comment in here would be that this may be unified in order to have a single definition. The clear height can give reference not only to structural elements but also to any elements which could harm the high storage within the building.*
11. Plowman Craven - Robert Ash, UK; *Yes. But we would advocate that additional heights (External eaves height, Internal ridge heights) are defined for use, if necessary.*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No comment.*
13. RICS Finland - Seppo Koponen, Finland; *No comment.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Clear height definition is comprehensible unlike Internal height which should refer to examples such as floor loading slabs whether concrete or steel structures.*
15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *The exposure draft is clear in terms of clear height and internal height definitions.*
16. SEGRO - Nick Watson, European; *No – we think there is ambiguity. We think there is an underside of ridge, underside of haunch and then clear height (where there might be something below the haunch). The diagrams provided are not helpful for a barrel roof or steep pitched roof.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *Yes, concerns that this could cause confusion to end users.*
18. SIOR - Alexis Fermanis, Global; *No comment.*
19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *Yes.*

**Response Summary:** There were 19 responses to this question and the majority of respondees felt that definitions of Clear Height and Internal Height unambiguous and the circumstances were apparent where each should be used. However, several respondents felt that additional definitions were required including definitions for external eaves height, internal ridge heights, maximum height. Other respondents requested further detail on measurement practice and additional magnifications within the floorplans.

**SSC Rationale:** The SSC considered the responses received and have made some revisions to “*Section 4.4 on Clear Height and Internal Height*” and “*Diagram 4: IPMS – Industrial – Cross Section*” to provide additional clarification. In respect of the additional height measurement definitions suggested, which included definitions for external eaves height, internal ridge heights, maximum height, the SSC felt that these were too specific for an international standard at this stage.

**Q4. Do you think there is a need for volumetric measurement to be detailed in cubic area even if it is simply IPMS 3B – Industrial times the Clear Height?**

**Consultation Responses:**

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *I have never had volume as a requirement.*
3. CLGE - Maurice Barbieri, European; *Not especially if the height information is added to the different areas specificities of the workspace.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *There is not a need for volumetric measurement to be detailed in cubic area.*
5. GIF - Dr. Ira Hörndler, Germany; *No, if Internal and Clear Height are stated.*
6. Hatfield White - Nigel Hatfield, UK; *No, the consumer should will have its own method to calculate usability based on its own needs. To dictate such a method will add confusion and not value.*
7. Hypzert - Matthias Fischer, Germany; *No, if Internal and Clear Height are stated.*
8. Knight Frank, Harry Morten, Global; *No.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *Volumetric measurements are important to some people so they know how much stock they can fit into a unit. It is not a clear cut as just multiplying IPMS measure by the clear height as the roof may be pitched and therefore items can be stacked higher than the Clear Height.*
10. Panattoni Development Company - Michał Pluciński, CEE; *From my perspective, there is no point of measuring volume for letting / sale and purchase purposes. This normally does not give any more information than what can be measured through IPMS 1/2/3A/3B and the height itself.*

11. Plowman Craven - Robert Ash, UK; *No pressing need.*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No comment.*
13. RICS Finland - Seppo Koponen, Finland; *No comment.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Not necessary as building value is a function of floor area and building value per square metre, the latter is derived from the analysis of costs and profit of similarly constructed building.*
15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *SCSI sees no difficulty if IPMS 3B times clear height is used for volumetric measurement. We do not see the need for 'Space Measurement Professionals' to be included in the Service Provider definitions. We do believe that there should be only one measurement standard as many options adds considerable confusion in the marketplace and with surveyors.*
16. SEGRO - Nick Watson, European; *Whilst we support the idea for a volumetric measurement, without a detailed methodology, this has the potential to be more confusing than helpful, owing to differing heights (and the likes of barrel roofs). This needs very clear guidance.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *No.*
18. SIOR - Alexis Fermanis, Global; *No comment.*
19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *No, if Internal and Clear Height are stated.*

**Response Summary:** There were 19 responses to this question and the majority of respondents felt that there was no need for volumetric measurements to be detailed in cubic area, particularly if measurements for Clear Height and Internal Height are taken. Other respondents commented that: *"Whilst we support the idea for a volumetric measurement, without a detailed methodology, this has the potential to be more confusing than helpful, owing to differing heights (and the likes of barrel roofs). This needs very clear guidance."*

**SSC Rationale:** The SSC considered the responses received and agreed that there was no further need for volumetric measurements to be detailed in cubic area, particularly if measurements for Clear Height and Internal Height are taken. Furthermore, the SSC agreed that any volumetric measurement needed clear guidance and felt that the volumetric measurement requirements could vary according to local market needs. In this respect, the SSC felt that this was more of a guidance note issue and additional guidance on IPMS and volumetric measurements could be issued by Coalition members if required. Finally, the SSC felt that most space measurement professional would use Building Information Modelling (BIM), if 3D measurements were required.

**Q5. Please consider the Component Areas? Is this aspect of IPMS Industrial of use to you and if so are the Components, as defined, appropriate? If not what changes do you suggest?**

**Consultation Responses:**

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *Perhaps too many 'components'? In my experience, the only area breakdowns would be office v warehouse.*
3. CLGE - Maurice Barbieri, European; *It should be great to add lines for each category in which there will be a specific height defining each specific area. Subcategories for workspaces (industrial, storage, office, others) should be created to make the spreadsheet clearer.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *The Components, as defined, are appropriate.*
5. GIF - Dr. Ira Hörndler, Germany; *The system of component areas is clear and unambiguous.*
6. Hatfield White - Nigel Hatfield, UK; *Not necessary in most cases. If a breakdown of component areas is of value to the consumer, the service provider should give the information and explain its basis clearly.*
7. Hypzert - Matthias Fischer, Germany; *The system of component areas is clear and unambiguous.*
8. Knight Frank, Harry Morten, Global; *We acknowledge that some component areas will be useful but consider that the approach taken within the proposed standard to be overcomplicated and impractical to use from a cost/time perspective.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *The components follow through from the other standards and are relevant in the same way. It may well be sensible to be able to inform users that Component G (workspace) could be subdivided into warehouse space and ancillary office.*



10. Panattoni Development Company - Michał Pluciński, CEE; *The component areas are useful to see and compare what is the percentage of each function within the building. This however would only be applicable for office blocks which normally constitute up to 20% of the building. This can give a nice overview on whether an office component within the building is standard in terms of internal functionality /divisibility / possibility to re-let at lease expiry. I would keep the categories as they are right now, however would not make them mandatory to measure under the principal standards as those would only make sense for statistics reasons.*
11. Plowman Craven - Robert Ash, UK; *It's difficult to comment on the degree to which the reporting of Component Areas within industrial buildings will be taken up around the world. We do not expect that there will be much call for reporting component areas in UK and so the current categorization is unlikely to be used much here.*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No comment.*
13. RICS Finland - Seppo Koponen, Finland; *No comment.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Should not consider ancillary area (referred to as "sheltered area" as main floor area when it is not. Refer diagram 6: IPMS1-Industrial Floor Area (Level 0).*
15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *The Component areas of helpful and appear to cover all areas / scenarios.*
16. SEGRO - Nick Watson, European; *This is adequate but we wouldn't want this to be mandatory. It is of use in certain circumstances but too much detail for leasing and valuation situations.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *Yes.*
18. SIOR - Alexis Fermanis, Global; *No comment.*
19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *The system of component areas is clear and unambiguous.*

**Response Summary:** There were 19 responses to this question and the majority of respondents felt that “the system of component areas is clear and unambiguous”. However, some respondents felt that there were perhaps too many components for an industrial standard, where the main component breakdown would be office vs warehouse. Additional comments included that the component areas are *“adequate but we wouldn’t want this to be mandatory”* and that *“the components follow through from the other standards and are relevant in the same way. It may well be sensible to inform users that Component G (workspace) could be sub divided into warehouse space and ancillary office.”*

**SSC Rationale:** The SSC considered the responses received and agree that the component areas should not be mandatory as in many instances users may only require the overall IMS 1 and IPMS 2 – Industrial measurements. The SSC have also revised “Component Area G – Workspace” within the sample spreadsheet so users understand that this component can be further subdivided into other relevant areas such as factory, warehouse, office, laboratory, showroom and enclosed loading docks. SSC have also slightly revised *“Diagram 1: IPMS – Industrial – Ground Floor (Level 0) – Component Areas”* and *“Diagram 2: IPMS – Industrial – Upper Floor (Level 1) – Component Areas”* to provide additional clarity.

**Q6. Please consider whether, on your reading of the document, aspects are ambiguous or incomplete in detail? If so please identify the ambiguity or concern and, if you have a solution, please provide details?**

**Consultation Responses:**

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *IPMS documents are, in general, far more succinct and informative than 6th Edition.*
3. CLGE - Maurice Barbieri, European; *The notion of clear height should be expressed by clear diagrams with magnified zones and representing specific cases (slopes, beams, technical equipment attached to the ceiling or to the walls (air shafts or gantry). In general, diagrams in IPMS are representing a real building, with a real scale. The problem with this solution is that there are a lot of details not really interesting but some parts of the drawing should be magnified to explain clearly what has to be measured or not. We suggest the SSC to see what CLGE has done for its diagrams for EUREAL. We use schematic diagrams that seemed to us to be clearer.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *We consider aspects are not ambiguous or incomplete in detail.*
5. GIF - Dr. Ira Hörndler, Germany; *The drawings should be allocated directly to the text – not at the end.*
6. Hatfield White - Nigel Hatfield, UK; *No comment.*
7. Hypzert - Matthias Fischer, Germany; *The drawings should be allocated directly to the text – not at the end.*
8. Knight Frank, Harry Morten, Global; *No comment.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *The treatment of loading bay doors should be clearer. In particular where the door sits on the internal aspect of the building. I think that the plans for IPMS1 and*

*IPMS2 needed to be clearer to show how to treat them as two separate units. In the UK units like this are in a terrace and we are required to show the GEA (IPMS1) or GIA (IPMS2) on a unit by unit basis. I think that the definition of the particular measurement should be accompanied by the relevant diagrams to avoid people flicking back and forth through the document. I do not think that there is any need for IPMS3a or 3B. A tenant will usually occupy a single unit in its entirety so why add confusion when IPMS3a will be the same as IPMS1 at ground level but not at upper levels. I really don't understand why the staircase would be excluded at 1st floor level, this was also shown in IPMS3 A, B and C for residential, and perhaps the SSC can provide the logic and rationale for excluding this space.*

10. Panattoni Development Company - Michał Pluciński, CEE; *The document itself is very nice as it is quite compact and to the point. The only thing that was lacking after reading it through was an example at the very end of the document. It would make sense to have a complex case study at the end of the document showing the way of measurement using complex 3D model – this should be a one pager.*
11. Plowman Craven - Robert Ash, UK; *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!*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No comment.*
13. RICS Finland - Seppo Koponen, Finland; *No comment.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Should be clearer definition, too many references and jargons being used leading to ambiguity. Our standards of measurements are much simpler but we are in the process of updating*

*it (Refer: Uniform Method of Measurement of Buildings issued by RISM).*

15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *No comment.*
16. SEGRO - Nick Watson, European; *We have concern over the internal face and whether this has been overcomplicated. The diagram on page 25 shows a window of >50% being treated differently to a roller shutter door which itself could be more than 50% (owing to the roller mechanism at the top). This is overcomplicating it. We suggest that all go to the internal dominant face. If there is a reason to measure to glazing then technically this should be the frame (this level of complexity makes us think it should be internal dominant wall) The diagrams, whilst helpful, tend to show a general old warehouse, and doesn't depict a more modern facility as are developed today and as such may age the document more quickly.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *N/A.*
18. SIOR - Alexis Fermanis, Global; *No comment.*
19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *The drawings should be allocated directly to the text – not at the end.*

**Response Summary:** There were 19 responses to this question and the majority of respondents felt that IPMS Industrial Buildings was not ambiguous or incomplete in detail. However, one respondent felt that the scope of IPMS was not clear and several respondents felt that the floorplans should be contained within the text to provide additional clarity. Further respondents felt that IPMS 1 and IPMS 2 floorplans could be clarified further to highlight the measurement practice for adjoining units. Finally, some respondents felt that IDF could benefit from clarification.

**SSC Rationale:** The SSC considered the responses received and feel that the definition of an Industrial Building as *“a building mainly used for industrial purposes such as manufacturing and warehousing, whether or not part of the Building is used for other purposes”* is sufficient. The SSC have also revised IPMS Industrial Building so the floorplans are included

both in the text and in a separate part 5 titled *“Floorplans and Sections”*. Finally, the SSC have provided additional clarification in relation to the measurement of adjoining units and have added the following sentence; *“In the case of attached or partially attached Buildings measurement is taken to the centre-line of shared walls between occupants”*. Finally, *“Diagram 3: Internal Dominant Face”* was revised to provide additional clarification.

**Q7. Do you perceive there are any inconsistencies within IPMS Industrial Buildings Exposure Draft?**

**Consultation Responses:**

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *No.*
3. CLGE - Maurice Barbieri, European; *No.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *We do not.*
5. GIF - Dr. Ira Hörndler, Germany; *No.*
6. Hatfield White - Nigel Hatfield, UK; *No comment.*
7. Hypzert - Matthias Fischer, Germany; *No.*
8. Knight Frank, Harry Morten, Global; *No comment.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *There is no consistency in identifying the diagrams for each of the measurement standards, similarly on p36, it appears that a large section is missing. Also it appears that part of the definitions from p13-16 are included on the pages next to the diagrams.*
10. Panattoni Development Company - Michał Pluciński, CEE; *To be honest I haven't picked any inconsistencies in a draft document itself.*
11. Plowman Craven - Robert Ash, UK; *There is duplication in instruction in the way in which Section 3 is addressed. Details included for IPMS 1, IPMS 2 and IPMS 3 under the common headings of; Measurement practice / Inclusions / Measurements included but stated separately / Measurements excluded but stated separately; are not sufficiently exclusive and require simplification. By our reckoning, details covered under these four headings amount to a requirement to measure all areas of a building floor, all of the time! Feature areas mentioned under 'Measurement practice' need to be also listed as either included areas*

*or excluded areas, for completeness. Feature areas identified as being included within the overall total figures that need to be listed could go under other headings of 'Inclusions' with a 'stated separately' in parenthesis, thereby removing the need for the 'Measurements included but stated separately' paragraph. Feature areas identified as excluded areas may be listed for the sake of complete clarity but should not require measuring or reporting*

12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No further comment.*

13. RICS Finland - Seppo Koponen, Finland; *No comment.*

14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Yes, we can get lost along the way.*

15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *No comment.*

16. SEGRO - Nick Watson, European; *No.*

17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *No.*

18. SIOR - Alexis Fermanis, Global; *No comment.*

19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *No.*

**Response Summary:** There were 19 responses to this question and the majority of respondents felt that weren't any inconsistencies within IPMS Industrial Buildings Exposure Draft. However, one respondent commented that there were some inconsistencies within Part 5 Floorplans and Sections and another respondent commented on inconsistencies and lack of detail on feature areas within IPMS 1, IPMS 2 – Industrial and IPMS 3 – Industrial.

**SSC Rationale:** The SSC considered the responses received and have reviewed Part 5 Floorplans and Sections to ensure consistency. The SSC have also reviewed and revised the measurement practice sections for IPMS, though have not included feature details as the measurement



practice for these will be included in a revised FAQ and within guidance issued by IPMSC members.

## Other General Comments?

### Consultation Responses:

1. BNP Paribas Real estate - David Stubbs, Global; *BNP are generally supportive of IPMS Industrial Buildings though do not agree with measuring to the IDF.*
2. CBRE - Alex Gunn, Global; *CBRE are generally supportive of IPMS Industrial Buildings though feel that there are too many component areas and don't feel that these are particularly useful for industrial buildings*
3. CLGE - Maurice Barbieri, European; *CLGE would also like IPMS 3 for industrial Buildings for the sake of uniformity and would like additional height measurements included and would also like the height defined for separate Component Areas. CLGE also believe that it would be useful to include a section on tolerance and measurement accuracy and feel that the concept of the covered area is confusing. They also feel that it would be useful if the diagrams were replaced with schematics of real buildings.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *Expert Invest are extremely supportive of the standard and feel the standard is neither unambiguous or incomplete in detail. They also do not feel there is a need for volumetric detail in IPMS.*
5. GIF - Dr. Ira Hörndler, Germany; *GIF commented that in German most buildings are measured to IPMS 1 and feel that there is no need for volumetric measurement if clear and internal height are included.*
6. Hatfield White - Nigel Hatfield, UK; *Hatfield White are not supportive of IPMS and have commented as follows; "The aim of the standard is misguided. There is an overarching inconsistency between the draft and the view of its need from professionals. There is no need to have international standards that dictate what service providers do in their local markets. It is ironic that this response form must be completed in English when that is not the native language of all of the areas affected by it. In other words, we all successfully translate from one language to another when we need to but enjoy our native tongue most of the*

*time. The same should be the case for measurement. I believe that you have all wasted a lot of time on this!*

7. Hypzert - Matthias Fischer, Germany; *Hypzert are extremely supportive of IPMS and feel that the drawings and the text should be kept together.*
8. Knight Frank, Harry Morten, Global; *Knight Frank are generally in support of the standard but fell some elements such as Component Areas and IDF are unnecessary and overcomplicated.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *Malcolm Hollis are extremely supportive of IPMS Industrial Buildings though also feel that it may be worth including a definition for maximum height and further subdivision for Component G - workspace (ie office, warehouse etc). They also have a number of comments in relation to the level of detail required.*
10. Panattoni Development Company - Michał Pluciński, CEE; *Panattoni Development Company feel that overall IPMS is a clear and useful document, though would prefer one definition for height and a BIM example towards the end of the document.*
11. Plowman Craven - Robert Ash, UK; *Plowman Craven would recommend that additional heights are included and are not sure of the need or usage of Component Areas within a UK context.*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *Prologis are happy with the changes made and have no further comments in relation to the standards.*
13. RICS Finland - Seppo Koponen, Finland; *RICS Finland are happy with the changes made and have no further comments in relation to the standards.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *RISM are generally in support of the standard but feel some additional clarification should be added.*

15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *SCSI feel that there should be only one option for IPMS 1, IPMS 2 and IPMS 3 as many options adds considerable confusion in the marketplace and with surveyors. SCSI are also glad that tolerance is no longer included in IPMS.*
16. SEGRO - Nick Watson, European; *SEGRO feel that there is ambiguity within the height definitions where there is an underside of ridge, underside of haunch and then clear height (where there might be something below the haunch). SEGRO also commented that the diagrams provided are not helpful for a barrel roof or steep pitched roof. SEGRO also commented that whilst they support the idea for a volumetric measurement, without a detailed methodology, this has the potential to be more confusing than helpful, owing to differing heights (and the likes of barrel roofs). This needs very clear guidance. They also feel that the concept of IDF needs some revision.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *Shepherd Commercial are concerned that the height definitions could be confusing for end users.*
18. SIOR - Alexis Fermanis, Global; *SIOR would like further information on the use of IPMS 1 and IPMS 2 and also feel that docks and patios should not be included in different Components as they find this confusing. They also feel that further responses should be sort from End Users.*
19. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *ZIA feel that IPMS Industrial Buildings is clear and unambiguous though question the wisdom of separating the diagrams from the text.*

**Response Summary:** There were 19 responses to this question and a wide variety of responses and the majority of respondees were very supportive of the changes made to IPMS Industrial Buildings Exposure Draft. Some respondents were not supportive of the concept of IDF or the number of the component areas for industrial buildings. Other respondents felt that additional height measurement was required together with additional details on height measurement practice. Further respondees commented that the floorplans should also be contained within the text.

**SSC Rationale:** The SSC considered the responses received and have revised IPMS Industrial Building so the floorplans are included both in the text and in a separate part 5 titled *“Floorplans and Sections”*. The SSC have kept the concept of IDF within IPMS Industrial Buildings as this not only provides consistency across the IPMS standards, but also allows IPMS to work in conjunction with other specialisms such as architecture and engineering. *“Component Area G – Workspace”* within the sample spreadsheet has also been revised so users understand that this component can be further subdivided into other relevant areas such as factory, warehouse, office, laboratory, showroom and enclosed loading docks. Finally, the SSC have also made some revisions to *“Section 4.4 on Clear Height and Internal Height”* and *“Diagram 4: IPMS – Industrial – Cross Section”* to provide additional clarification. In respect of the additional height measurement definitions suggested, which included definitions for external eaves height, internal ridge heights, maximum height, the SSC felt that these were too specific for an international standard at this stage.

## Page 2. Introduction

### Consultation Responses:

1. BNP Paribas Real estate - David Stubbs, Global; *No comment.*
2. CBRE - Alex Gunn, Global; *No comment.*
3. CLGE - Maurice Barbieri, European; *No comment.*
4. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *No comment.*
5. GIF - Dr. Ira Hörndler, Germany; *No comment.*
6. Hatfield White - Nigel Hatfield, UK; *No comment.*
7. Hypzert - Matthias Fischer, Germany; *No comment.*
8. Knight Frank, Harry Morten, Global; *No comment.*
9. Malcolm Hollis Limited - Tom Pugh, Global; *No comment.*
10. Panattoni Development Company - Michał Pluciński, CEE; *No comment.*
11. Plowman Craven - Robert Ash, UK; *No comment.*
12. Prologis Europe - Pieter Ris and Mark Zulver, European; *No comment.*
13. RICS Finland - Seppo Koponen, Finland *No comment.*
14. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *No comment.*
15. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *No comment.*
16. SEGRO - Nick Watson, European; *No comment.*
17. Shepherd Chartered Surveyors - Ronald Dalley, UK; *No comment.*

18.SIOR - Alexis Fermanis, Global; *No comment.*

19.Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *No comment.*

**Response Summary:** There were no comments in relation to this section.

**SSC Rationale:** As there were no comments in relation to this section the SSC consider that no further action is necessary.

## Page 6. 1.1 Definitions

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *CLGE have commented on the definition of Space Measurement Professional, which is defined as “a Service Provider qualified by experience or training to measure Buildings in accordance with IPMS.” CLGE still think that such measurements should be done by measurement specialists but not service providers who do not have technical knowledge and equipment permitting to have a result with a sufficient accuracy*
2. Panattoni Development Company - Michał Pluciński, CEE; *Panattoni Development Company commented that “the definitions itself were fine. I would only try to make the split of IPMS 3 into 3A and 3B – this may be confusing.”*
3. Plowman Craven - Robert Ash, UK; *Plowman Craven have repeated former suggestion: that for IPMS 1, you delete the reference to reporting on a component-by-component basis.*
4. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *RISM have asked the SSC to review the definitions of “Ancillary area”, “Covered Area”, “External Wall”, as these references do not relate to Component Area*

**Response Summary:** There were 4 responses to this question and the SSC noted that some respondees felt that some of the definitions required further clarification

**SSC Rationale:** The SSC considered the responses received and have revised the definitions as necessary to provide further clarification.



## Page 8. 1.2 Aim of the Standards

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. Hatfield White - Nigel Hatfield, UK; *The aim of the standard is misguided. There is an overarching inconsistency between the draft and the view of its need from professionals. There is no need to have international standards that dictate what service providers do in their local markets. It is ironic that this response form must be completed in English when that is not the native language of all of the areas affected by it. In other words, we all successfully translate from one language to another when we need to but enjoy our native tongue most of the time. The same should be the case for measurement. I believe that you have all wasted a lot of time on this!*
3. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, exactly the way it should be.*
4. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *We are supportive of the aim of the standards, however we urge caution in respect of the application of this standard and any introduction of tolerance levels.*

**Response Summary:** There were 4 responses to this question and the majority of respondees were in agreement with the aim of the standards, though a few respondees recommended caution.

**SSC Rationale:** In Finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 9. 1.3 Use of the Standards

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It has been understood by our working group that this standard defines what has to be measured but not how to proceed. Nevertheless, we would appreciate to add the fact that the result has to be secure and that means measurements has to be done with a certain accuracy, such as 1 centimetre accuracy, as it is written in EUREAL. We can also accept a notion of % of error acceptable for the area calculated.*
2. Knight Frank, Harry Morten, Global; *We still consider 'interface with existing measurement standards by providing a common measurement language' needs to be rewritten into plain English.*
3. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, exactly the way it should be.*
4. Society of Chartered Surveyors Ireland - Edward McAuley, Ireland; *We recommend that there should be one measurement standard used to avoid confusion in the market. Real estate professionals in Ireland will not all be bound to this Practice Statement (when published) and the measurement code will only reflect a portion of the market. If tolerance levels are introduced, then surveyors will be at a competitive disadvantage as they will be required to re-risk and advise clients to get certified measurements of buildings. This is unrealistic especially with smaller units and those located in the regions.*

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

**SSC Rationale:** **SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 9. 1.4 Floor Level Designation

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *A diagram explaining above and below ground should be added in the case of a field with a slope.*
2. Panattoni Development Company - Michał Pluciński, CEE; *I was wondering why this is being provided as a separate section of the document. It can also constitute a part of section 2.1. In principal, I think that all assumptions should be kept in one place within the document.*

**Response Summary:** There were two wide ranging responses to this question.

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary. In respect of the comment regarding the addition of an above and below ground diagram the SSC felt that this was more a guidance note issue as the definitions of above and below ground may be written into legislation and could be subject to regional variation.

## Page 10. 2.1 General Principles of Measurement and Calculation

### Consultation Responses:

1. CBRE - Alex Gunn, Global; *This section gives more kudos to Geomatics Surveyors and, hopefully, gives the industry cause to understand the importance of having professional measurements undertaken.*
2. CLGE - Maurice Barbieri, European; *A notion of accuracy should be added to this paragraph. We also think that the person or company who (which) did the measurement has to be clearly identified – A signature should be necessary.*
3. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, exactly the way it should be – subject to comment on point 1.4 (above).*
4. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Item 5 is irrelevant. What is the point of a standard when it becomes subjective at the end and defeats the whole purpose of Section 1.2?*

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

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary. In terms of the comment in relation to the identification and signature of the Space Measurement Professional the SSC feel this is a more of a guidance note issue and as such this requirement should be included in the subsequent guidance issued by IPMSC members.

## Page 10. 2.2.1 General

### Consultation Responses:

1. BNP Paribas Real estate - David Stubbs, Global; *The removal of the requirement to state the degree of tolerance (2.2.3 in first draft) is welcomed.*
2. CBRE - Alex Gunn, Global; *This section gives more kudos to Geomatics Surveyors and, hopefully, gives the industry cause to understand the importance of having professional measurements undertaken.*
3. CLGE - Maurice Barbieri, European; *A notion of accuracy should be added to this paragraph. We also think that the person or company who (which) did the measurement has to be clearly identified – A signature should be necessary.*
4. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, exactly the way it should be.*
5. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Item 5 is irrelevant. What is the point of a standard when it becomes subjective at the end and defeats the whole purpose of Section 1.2?*

**Response Summary:** There were 5 responses to this section.

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary. The SSC have also shied away from making a specific statement in relation to measurement tolerance as this can vary according to the nature of the instruction. In terms of the comment in relation to the identification and signature of the Space Measurement Professional the SSC feel this is a more of a guidance note issue and as such this requirement should be included in the subsequent guidance issued by IPMSC members.

## Page 10. 2.2.2 Unit of Measurement

### Consultation Responses:

1. CBRE - Alex Gunn, Global; *This section gives more kudos to Geomatics Surveyors and, hopefully, gives the industry cause to understand the importance of having professional measurements undertaken.*
2. CLGE - Maurice Barbieri, European; *The meter unit should be used in most of cases because of the international standard system. Adopting another unit for a measurement should be an exception for which reasons why should be developed.*
3. Knight Frank, Harry Morten, Global; *We maintain that it would be helpful if the IPMS was to provide a fact sheet of what the relevant unit is in each jurisdiction / country.*
4. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, exactly the way it should be.*

**Response Summary:** There were 4 responses to the section on unit of measurement and some respondents felt that all measurements should be in meters.

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary. In respect of the universal adoption of the meter unit the SSC could respond that different markets use different units of measurement (i.e. UK and USA) and as measurements can easily be converted from imperial to metric or vice-a-versa the SSC did not feel it would help adoption and implementation to be too prescriptive on this part.

## Page 11. 2.2.3 Measurement Reporting

### Consultation Responses:

1. CBRE - Alex Gunn, Global; *This section gives more kudos to Geomatics Surveyors and, hopefully, gives the industry cause to understand the importance of having professional measurements undertaken.*
2. CLGE - Maurice Barbieri, European; *OK except the fact that it should be measurement specialist who should be in charge of it.*
3. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, exactly the way it should be.*

**Response Summary:** There were 3 responses to the section on measurement reporting.

**SSC Rationale: SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 11. 2.3 Limited Use Areas

### Consultation Responses:

1. CBRE - Alex Gunn, Global; *Ok.*
2. Knight Frank, Harry Morten, Global; *We consider that in addition to 'local and national legislation', areas can be limited in use in a number of other ways, many of them subjective. This requires clarification at a local level if the aim of consistency of measuring is to be achieved.*
3. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, exactly the way it should be.*

**Response Summary:** There were 3 responses to the section on Limited Use Areas.

**SSC Rationale: SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.



## Page 12. 2.4 Adjustment between IPMS and other standards

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. Knight Frank, Harry Morten, Global; *A comment that guidance is to be provided by the market coalition member / RICS should be added.*
3. Panattoni Development Company - Michał Pluciński, CEE; *That's fine, no further comments to this section.*

**Response Summary:** There were 3 responses to this section on "Adjustment between IPMS and other standards."

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 13. 3.1.1. Use

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. GIF - Dr. Ira Hörndler, Germany; *2nd paragraph states the equality of IPMS 1 and IPMS 3 A – this is superfluous for a standard - see comment from our first consultation response.*
3. Hypzert - Matthias Fischer, Germany; *2nd paragraph states the equality of IPMS 1 and IPMS 3 A – this is superfluous for a standard - see comment from our first consultation response.*
4. Malcolm Hollis Limited - Tom Pugh, Global; *Would be helpful to add a note directing users to which diagrams the text refers to. Like the SSC have used in 3.3.2.*
5. Panattoni Development Company - Michał Pluciński, CEE; *I would expand this section a bit giving a direct reference / suggestions to particular actions on the market – such as sales / letting, etc.*
6. Plowman Craven - Robert Ash, UK; *Feel that some rewording needed here, to perhaps: ‘The IPMS standards (and their applications) are:’ As a final sentence, insert a reference to see Diags 6 and 7 (to be consistent with IPMS 2 – Industrial, 3.2.1).*
7. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *2nd paragraph states the equality of IPMS 1 and IPMS 3 A – this is superfluous for a standard - see comment from our first consultation response.*

**Response Summary:** There were 7 responses to this section on “IPMS 1 Use.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 13. 3.1.2 Definition

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. Knight Frank, Harry Morten, Global; *Definitions should be linked to three simple columns of items: included, excluded and separately stated.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
4. Plowman Craven - Robert Ash, UK; *Does 'total' need to be emphasised? Repeat former suggestion: that for IPMS 1, you delete the reference to reporting on a component-by-component basis as this is covered by IPMS 2 – Industrial for consideration of internal areas.*

**Response Summary:** There were 4 responses to this section on "Definition."

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 14. 3.2.1 Use

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. 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 from our first consultation response.*
3. Hypzert - Matthias Fischer, Germany; *2nd paragraph states the equality of IPMS 2 and IPMS 3 B – this is superfluous for a standard - see comment from our first consultation response.*
4. Panattoni Development Company - Michał Pluciński, CEE; *I would expand this section a bit giving a direct reference / suggestions to particular actions on the market – such as sales / letting, etc.*
5. Plowman Craven - Robert Ash, UK; *Repeat former suggestion: that for IPMS 1, you delete the reference to reporting on a component-by-component basis as this is covered by IPMS 2 – Industrial that addresses internal areas.*
6. 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 from our first consultation response.*

**Response Summary:** There were 6 responses to this section on “Use.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 14. 3.2.2 Definition

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. Knight Frank, Harry Morten, Global; *Definitions should be linked to three simple columns of items: included, excluded and separately stated.*
3. Malcolm Hollis Limited - Tom Pugh, Global; *Roller shutters should be used, they are loading bay doors, they may not be roller shutters and they could be dock levellers. I think that the SSC should be wary with the way Roller Shutters are treated. The way that these are measured contradicts both the IDF definition and the diagram.*
4. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
5. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *It appears the definition refers to single structure (individual) industrial building rather than shared wall such as terraced or semi-detached factory.*
6. SEGRO - Nick Watson, European; *We believe there is greater clarity needed regarding 'overhangs'. For instance, the approach to a covered canopy over loading doors is different to an entrance canopy over the front door. Both might be structurally similar but in terms of perception of value etc they would be different. Similarly, a brise soleil is different again.*

**Response Summary:** There were 6 responses to this section on "Definition."

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 15. 3.3.1 Use

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *OK but we should add IMPS3c as it is done for residential buildings.*
2. GIF - Dr. Ira Hörndler, Germany: *We only use IPMS 1 for calculation or transaction purposes for Industrial. We are against various IPMS 3 alternatives. Reason: a standard should not have versions or applications.*
3. Hypzert - Matthias Fischer, Germany; *We only use IPMS 1 for calculation or transaction purposes for Industrial. We are against various IPMS 3 alternatives. Reason: a standard should not have versions or applications.*
4. Knight Frank, Harry Morten, Global; *It would be helpful to know why it is necessary to include this.*
5. Malcolm Hollis Limited - Tom Pugh, Global; *I am still unsure about the logic behind IPMS3A and 3B. I understand that they look at occupation, but why do they need to exclude staircases and lifts at higher levels. Please could the SSC provide their thought process behind this as many people I advise will not see the logic behind it. Also needs to detail which diagrams should be referred to for consistency throughout the document.*
6. Panattoni Development Company - Michał Pluciński, CEE; *I would expand this section a bit giving a direct reference / suggestions to particular actions on the market – such as sales / letting, etc.*
7. Plowman Craven - Robert Ash, UK; *What does this mean? ‘Each unit in a multi-occupied Building must be measured separately, but if consistent may be reported as an aggregate of IPMS 3A – Industrial or IPMS 3B – Industrial’. Insert reference: See Diagrams 11–12 (pages 34 and 35).*

8. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *It is stated that IPMS 3 is the floor area available on an exclusive basis to an occupier. Our query in relation to this is that why do we need to ascribe different measure for occupier and another for rented? Industrial properties, whether owner occupied or rented, are investment grade properties and valuation-wise, we should be referring all properties as investment grade properties with same floor measurement, nevertheless, as the basis of valuation is Market Value which is synonymous with Fair Value definition under the Financial Reporting Standards. What constitute “exclusive use” that separate measurements are required (IPMS 3A cf. IPMS 3B)?*
9. Zentraler Immobilien Ausschuss e.V. - Sabine Georgi, Germany; *We only use IPMS 1 for calculation or transaction purposes for Industrial. We are against various IPMS 3 alternatives. Reason: a standard should not have versions or applications.*

**Response Summary:** There were 9 responses to this section on “Use.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 15. 3.3.2 IPMS 3A – Industrial

### Consultation Responses:

1. CLGE - Maurice Barbieri, European ; *Ok.*
2. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *We think the Floor Area occupied by stairs is to be included at every level because it is in exclusive use and it is included in the IPMS 1 and IPMS 2. The text 'The Floor Area occupied by stairs is only to be included at the lowest level' should be dropped. The diagram should be corrected.*
3. Malcolm Hollis Limited - Tom Pugh, Global; *There are no comments about the upper parts of stairs being excluded from the measurement It is stated that vertical penetrations less than 0.25m<sup>2</sup> should be excluded at upper levels. The diagram shows a lift as excluded. In my experience lifts are greater in size that 0.25m<sup>2</sup>.*
4. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
5. Plowman Craven - Robert Ash, UK; *Details can be edited to give greater clarity and avoid duplication using bullets (unless bullets are not preferable) e.g. Measurements included:*
  - *Ancillary Areas, Mezzanines and Catwalks (stated separately),*
  - *The Floor Area occupied by stairs at the lowest level,*
  - *Vertical penetrations less than 0.25m<sup>2</sup>/2.69ft<sup>2</sup>, including the enclosing wall, are disregarded and included in the Floor Area measurement.**Measurements excluded:*
  - *The Floor Area occupied by stairs at all levels above the lowest level,*
  - *Vertical penetrations greater than 0.25m<sup>2</sup>/2.69ft<sup>2</sup>, including the enclosing wall,*
  - *Temporary Structures,*
  - *Open light wells or the upper level voids of an atrium,*
  - *Open external stairways that are not an integral part of the Building, for example, an open framework fire escape,*



- *External areas such as external vehicle parking, external Catwalks, vehicle circulation and other areas or Structures (such as equipment yards, cooling equipment, refuse areas), and Patios and decks at ground level (Level 0),*
- *Other ground level areas or Structures beyond the Covered Area. Such areas may be measured and stated separately,*
- *Sheltered Areas (measured to the outer perimeter of the Covered Area and stated individually and separately).*

6. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *It is stated that IPMS 3 is the floor area available on an exclusive basis to an occupier. Our query in relation to this is that why do we need to ascribe different measure for occupier and another for rented? Industrial properties, whether owner occupied or rented, are investment grade properties and valuation-wise, we should be referring all properties as investment grade properties with same floor measurement, nevertheless, as the basis of valuation is Market Value which is synonymous with Fair Value definition under the Financial Reporting Standards. What constitute “exclusive use” that separate measurements are required (IPMS 3A cf. IPMS 3B)?*

**Response Summary:** There were 7 responses to this section on “IPMS 3A - Industrial.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 16. 3.3.3 IPMS 3B – Industrial

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *We think the Floor Area occupied by stairs is to be included at every level because it is in exclusive use and it is included in the IPMS 1 and IPMS 2. The text 'The Floor Area occupied by stairs is only to be included at the lowest level' should be dropped. The diagram should be corrected.*
3. Knight Frank, Harry Morten, Global; *Definitions should be linked to three simple columns of items: included, excluded and separately stated.*
4. Malcolm Hollis Limited - Tom Pugh, Global; *There are no comments about the upper parts of stairs being excluded from the measurement It is stated that vertical penetrations less than 0.25m<sup>2</sup> should be excluded at upper levels. The diagram shows a lift as excluded. In my experience lifts are greater in size that 0.25m<sup>2</sup>.*
5. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
6. Plowman Craven - Robert Ash, UK; *Edit details for a more succinct presentation. Merge 'Inclusions' and 'Measurements included but stated separately' under one heading. Insert reference: See Diagrams 13–14 (pages 37 and 38).*
7. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *It is stated that IPMS 3 is the floor area available on an exclusive basis to an occupier. Our query in relation to this is that why do we need to ascribe different measure for occupier and another for rented? Industrial properties, whether owner occupied or rented, are investment grade properties and valuation-wise, we should be referring all properties as investment grade properties with same floor measurement, nevertheless, as the basis of valuation is Market Value*

*which is synonymous with Fair Value definition under the Financial Reporting Standards. What constitute “exclusive use” that separate measurements are required (IPMS 3A cf. IPMS 3B)?*

**Response Summary:** There were 7 responses to this section on “IPMS 3B - Industrial.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 18. 4.1 IPMS Industrial Component Areas

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Ok.*
2. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *We think the Floor Area occupied by stairs is to be included at the every level because it is in exclusive use and it is included in the IPMS 1 and IPMS 2. The text 'The Floor Area occupied by stairs is only to be included at the lowest level' should be dropped. The diagram should be corrected.*
3. Knight Frank, Harry Morten, Global; *Definitions should be linked to three simple columns of items: included, excluded and separately stated.*
4. Malcolm Hollis Limited - Tom Pugh, Global; *There are no comments about the upper parts of stairs being excluded from the measurement It is stated that vertical penetrations less than 0.25m<sup>2</sup> should be excluded at upper levels. The diagram shows a lift as excluded. In my experience lifts are greater in size that 0.25m<sup>2</sup>.*
5. Panattoni Development Company - Michał Pluciński, CEE; *Edit details for a more succinct presentation. Merge 'Inclusions' and 'Measurements included but stated separately' under one heading. Insert reference: See Diagrams 13–14 (pages 37 and 38).*
6. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *It is stated that IPMS 3 is the floor area available on an exclusive basis to an occupier. Our query in relation to this is that why do we need to ascribe different measure for occupier and another for rented? Industrial properties, whether owner occupied or rented, are investment grade properties and valuation-wise, we should be referring all properties as investment grade properties with same floor measurement, nevertheless, as the basis of valuation is Market Value which is synonymous with Fair Value definition under the Financial Reporting Standards. What constitute "exclusive use" that separate measurements are required (IPMS 3A cf. IPMS 3B)?*

**Response Summary:** There were 7 responses to this question 19 responses to question 5 on component areas and the majority of respondees felt that “The system of component areas is clear and unambiguous. However, some respondents felt that there were perhaps too many components for an industrial standard, where the main component breakdown would be office vs warehouse. Additional comments included that the component areas are *“adequate but we wouldn’t want this to be mandatory”* and that *“the components follow through from the other standards and a relevant in the same way. It may well be sensible to be able inform users that Component G (workspace) could be sub divided into warehouse space and ancillary office.”*

**SSC Rationale:** The SSC considered the responses received and agree that the component areas should not be mandatory as in many instances users may only require the overall IMS 1 and IPMS 2 – Industrial measurements. The SSC have also revised “Component Area G – Workspace” within the sample spreadsheet so users understand that this component can be further subdivided into other relevant areas such as factory, warehouse, office, laboratory, showroom and enclosed loading docks. SSC have also slightly revised “Diagram 1: IPMS – Industrial – Ground Floor (Level 0) – Component Areas” and “Diagram 2: IPMS – Industrial – Upper Floor (Level 1) – Component Areas” to provide additional clarity.

## Page 20. Diagram 1 - IPMS - Industrial – Ground Floor (Level 0) - Component Areas

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Add magnified zones or the size of the building should be reduced – See what has been done with EUREAL.*
2. Malcolm Hollis Limited - Tom Pugh, Global; *The walls surrounding the lifts and the riser are shown in B3 colour when they should be in B2 to be consistent with Residential.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
4. Plowman Craven - Robert Ash, UK; *We think that the classification of the central dividing structural wall as B1 (Exterior Wall) in Diagram 1 is incorrect and should be B2. As this diagram is now totally coloured (i.e. both halves of the building), it demonstrates that IPMS 1 reporting is intended to extend over the entire building at this ground floor level. As such, the central dividing wall should be B2 and coloured scarlet. (It is quite difficult to distinguish between the two colours – burgundy and scarlet – at the scale of presentation for A4. Easier in PDF with a computer zooming facility) Move the B1 label to a perimeter wall. In both Diag 1 and Diag 2, move the 'B' labels away from the wall lines to avoid over-writing and aid legibility.*
5. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Please state Component H as Ancillary Area if it is covered area.*

**Response Summary:** There were 5 responses to “Diagram 1 - IPMS - Industrial – Ground Floor (Level 0) - Component Areas.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

**Page 21. Diagram 2 - IPMS - Industrial – Upper Floor (Level 1) - Component Areas**

**Consultation Responses:**

1. CLGE - Maurice Barbieri, European; *Add magnified zones or the size of the building should be reduced – See what has been done with EUREAL.*
2. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
3. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Suggest to include scale and measurement for better illustration.*

**Response Summary:** There were 3 responses to “*Diagram 2 - IPMS - Industrial – Upper Floor (Level 1) - Component Areas.*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 22. Sample spreadsheet for Component Areas

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Add a line for each component areas in which there will be a specific internal height.*
2. Knight Frank, Harry Morten, Global; *This will be time-consuming and therefore expensive to produce which may deter its use. Also see answer to Q5.*
3. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Suggest that you include the approximate measurements based on your diagrams presented earlier as example of calculation of the floor areas.*

**Response Summary:** There were 3 responses to this question 19 responses to question 5 on component areas and the majority of respondees felt that “The system of component areas is clear and unambiguous. However, some respondents felt that there were perhaps too many components for an industrial standard, where the main component breakdown would be office vs warehouse. Additional comments included that the component areas are *“adequate but we wouldn’t want this to be mandatory”* and that *“the components follow through from the other standards and a relevant in the same way. It may well be sensible to be able inform users that Component G (workspace) could be sub divided into warehouse space and ancillary office.”*

**SSC Rationale:** The SSC considered the responses received and agree that the component areas should not be mandatory as in many instances users may only require the overall IMS 1 and IPMS 2 – Industrial measurements. The SSC have also revised “Component Area G – Workspace” within the sample spreadsheet so users understand that this component can be further subdivided into other relevant areas such as factory, warehouse, office, laboratory, showroom and enclosed loading docks. SSC have also slightly revised “Diagram 1: IPMS – Industrial – Ground Floor (Level 0) – Component Areas” and “Diagram 2: IPMS – Industrial – Upper Floor (Level 1) – Component Areas” to provide additional clarity.



## Page 24. 4.3 Internal Dominant Face

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *We think that in some cases, it's not so easy to know if a column is integrated or not to an external wall. The example of the roller shutter is confusing because it seems that the principle of the internal dominant face is not applied for it!. We also still think that it is very hard to use this principle in a region where it never happens. Why could not we use the same principle of the measuring unit that can be chosen for each case ? The coalition decided to accept to have measurements explained in feet or in meters or what ever because of regional uses. We could also adapt the Standard for such regional specificities.*
2. Knight Frank, Harry Morten, Global; *Your clarification of IDF is appreciated however;*
  1. *it does not accord with current UK practice*
  2. *It will require a far greater number of measurements and calculations, making the process of calculating floors areas more expensive and labour intensive.*
  3. *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.*
  4. *This could be done by way of an additional section in Diagram 3.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
4. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Why 50% of the floor to ceiling height? How was this percentage derived was not explained as additional notes.*

**Response Summary:** There were 4 responses to this section on “IDF.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 25. Diagram 3 - Internal Dominant Face

### Consultation Responses:

1. BNP Paribas Real estate - David Stubbs, Global; *Measurement to the glazing where the Internal Dominant face is >50% glazing does not in our experience represent market practice in the UK. In the context of industrial/warehouse buildings the area represented by the internal sill does not represent useable space. Whilst in theory this could be measured and identified as a Limited Use Area this has no practical application in the UK market and would simply add to the cost of the measuring exercise whilst adding no value for the client.*
2. CLGE - Maurice Barbieri, European; *We think that in some cases, it's not so easy to know if a column is integrated or not to an external wall. The example of the roller shutter is confusing because it seems that the principle of the internal dominant face is not applied for it!*
3. Malcolm Hollis Limited - Tom Pugh, Global; *I don't think you can class the measurement line in front of the roller shutter doors as the IDF as in the oblique view it clearly is the dominant face. This needs to tie in with comments made above.*
4. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 3 responses to “Diagram 3 - Internal Dominant Face.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 26. 4.4 Clear Height and Internal Height

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Add an example with a slope but also with technical equipment fixed to the ceiling (air shafts or gantry). What should be measured in the case of a curved ceiling? (See picture also supplied in response).*

**Response Summary:** There was 1 response to this section and 19 responses to question 3 on Clear Height and Internal Height. The majority of respondents felt that definitions of Clear Height and Internal Height unambiguous and the circumstances were apparent where each should be used. However, several respondents felt that additional definitions were required including definitions for external eaves height, internal ridge heights, maximum height. Other respondents requested further detail on measurement practice and additional magnifications within the floorplans.

**SSC Rationale:** The SSC considered the responses received and have made some revisions to “*Section 4.4 on Clear Height and Internal Height*” and “*Diagram 4: IPMS – Industrial – Cross Section*” to provide additional clarification. In respect of the additional height measurement definitions suggested, which included definitions for external eaves height, internal ridge heights, maximum height, the SSC felt that these were too specific for an international standard at this stage.

## Page 26. Diagram 4 - IPMS Industrial – Clear Height and Internal Height

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Add an example with a slope but also with technical equipment fixed to the ceiling (air shafts or gantry). What should be measured in the case of a curved ceiling or arched buildings? (See picture also supplied in response).*
2. Malcolm Hollis Limited - Tom Pugh, Global; *In my view the lowest part is just that, I don't think you need to note that it is to the lowest point of the structural elements. It may also be better to show with a more pronounced pitched to demonstrate.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 3 responses to “Diagram 4 - IPMS Industrial – Clear Height and Internal Height.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 27. 5.1 IPMS (External)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Adding the covered areas in this area is confusing because the principle is that it has to be measured to the external perimeter of the external wall.*
2. Malcolm Hollis Limited - Tom Pugh, Global; *The document states “each sub-category must be measured and stated separately”. I am unsure what this refers to? The components or the balconies and internal mezzanines? Should also remind users that IPMS1 can be reported on a component basis and that all the components added together should equal IPMS1.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 4 responses to this section on “IPMS External.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 27. Diagram 5 - IPMS 1 – Industrial – Cross Section – Covered Area

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *Adding the covered areas in this area is confusing because the principle is that it has to be measured to the external perimeter of the external wall.*
2. Malcolm Hollis Limited - Tom Pugh, Global; *The document states “each sub-category must be measured and stated separately”. I am unsure what this refers to? The components or the balconies and internal mezzanines? Should also remind users that IPMS1 can be reported on a component basis and that all the components added together should equal IPMS1.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 3 responses to “*Diagram 5 - IPMS 1 – Industrial – Cross Section – Covered Area.*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 28. Diagram 6 - IPMS 1 – Industrial – Ground Floor (Level 0)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Malcolm Hollis Limited - Tom Pugh, Global; *No mention of party walls and how to treat these.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
4. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Why is loading dock coloured yellow? It is not wholly sheltered.*

**Response Summary:** There were 4 responses to “*Diagram 6 - IPMS 1 – Industrial – Ground Floor (Level 0).*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.



## Page 29. Diagram 7 - IPMS 1 – Industrial – Upper Floor (Level 1)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 2 responses to “*Diagram 7 - IPMS 1 – Industrial – Upper Floor (Level 1).*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 30. 5.2 IPMS 2 – Industrial (Internal)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Knight Frank, Harry Morten, Global; *We maintain it is still confusing to state 'may be reported on a component-by-component basis for each floor of a building'. There should be a drawing with definitions alongside linked to three simple columns of items: included, excluded and separately stated.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 3 responses to this section on “IPMS 2 – Industrial (Internal).”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 30. Diagram 8 - IPMS 2 – Industrial – Cross Section

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real cross section of a building (to make it clearer).*
2. Malcolm Hollis Limited - Tom Pugh, Global; *As above for IPMS1 page 28 and 29.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 3 responses to “*Diagram 8 - IPMS 2 – Industrial – Cross Section.*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 31. Diagram 9 - IPMS 2 – Industrial – Ground Floor (Level 0)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *[It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Malcolm Hollis Limited - Tom Pugh, Global; *No mention of party wall measurement – to the face or the centre line?*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
4. Plowman Craven - Robert Ash, UK; *As Diagram 9 and Diag 10 are now totally coloured (i.e. both halves of the building) we interpret that as meaning that IPMS 2 – Industrial reporting is intended to extend over the entire building at each floor level. This now gives clarity and distinguishes it from IPMS 3B – Industrial.*

**Response Summary:** There were 4 responses to “*Diagram 9 - IPMS 2 – Industrial – Ground Floor (Level 0).*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 32. Diagram 10 - IPMS 2 – Industrial – Upper Floor (Level 1)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*

**Response Summary:** There were 4 responses to “*Diagram 10 - IPMS 2 – Industrial – Upper Floor (Level 1).*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 33. 5.3.1 - IPMS 3A – Industrial

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
3. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *It is stated that IPMS 3 is the floor area available on an exclusive basis to an occupier. Our query in relation to this is that why do we need to ascribe different measure for occupier and another for rented? Industrial properties, whether owner occupied or rented, are investment grade properties and valuation-wise, we should be referring all properties as investment grade properties with same floor measurement, nevertheless, as the basis of valuation is Market Value which is synonymous with Fair Value definition under the Financial Reporting Standards. What constitute “exclusive use” that separate measurements are required (IPMS 3A cf. IPMS 3B)?*

**Response Summary:** There were 3 responses to this section on “IPMS 3A – Industrial.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

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

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
3. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Illustration shows a diagram of two semi-detached industrial units. But the definition of industrial buildings does not clearly defined shared wall between units. Please address this properly.*

**Response Summary:** There were 4 responses to “*Diagram 11 - IPMS 3A – Industrial – Ground Floor (Level 0).*”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

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

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *We think the Floor Area occupied by stairs is to be included at the every level because it is in exclusive use and it is included in the IPMS 1 and IPMS 2. The diagram should be corrected.*
3. Malcolm Hollis Limited - Tom Pugh, Global; *There is no statement to show that the stairs at upper level should be excluded. The riser and lift look larger than 0.25m<sup>2</sup>.*
4. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
5. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Illustration shows a diagram of two semi-detached industrial units. But the definition of industrial buildings does not clearly defined shared wall between units. Please address this properly.*

**Response Summary:** There were 5 responses to “Diagram 12 - IPMS 3A – Industrial – Upper Floor (Level 1).”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.



## Page 36. 5.3.2 - IPMS 3B – Industrial

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Knight Frank, Harry Morten, Global; *We maintain it is still confusing to state 'may be reported on a component-by-component basis for each floor of a building'. There should be a drawing with definitions alongside linked to three simple columns of items: included, excluded and separately stated.*
3. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
4. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Illustration shows a diagram of two semi-detached industrial units. But the definition of industrial buildings does not clearly defined shared wall between units. Please address this properly.*

**Response Summary:** There were 3 responses to this section on “IPMS 3B – Industrial.”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and made revisions where necessary.

## Page 37. Diagram 13 - IPMS 3B – Industrial – Ground Floor (Level 0)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Knight Frank, Harry Morten, Global; *We are unclear of the purpose of this valuation.*
3. Malcolm Hollis Limited - Tom Pugh, Global; *There is no statement to show that the stairs at upper level should be excluded. The riser and lift look larger than 0.25m<sup>2</sup>.*
4. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
5. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Illustration shows a diagram of two semi-detached industrial units. But the definition of industrial buildings does not clearly defined shared wall between units. Please address this properly.*

**Response Summary:** There were 5 responses to “Diagram 13 - IPMS 3B – Industrial – Ground Floor (Level 0).”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.

## Page 38. Diagram 14 - IPMS 3B – Industrial – Upper Floor (Level 1)

### Consultation Responses:

1. CLGE - Maurice Barbieri, European; *It should be better to use a schematic diagram instead of a real building plan (to make it clearer).*
2. Expert Invest - Petar Andonov MSc, MRICS and Kremena Andonova March, Bulgaria; *We think the Floor Area occupied by stairs is to be included at the every level because it is in exclusive use and it is included in the IPMS 1 and IPMS 2. The diagram should be corrected.*
3. Malcolm Hollis Limited - Tom Pugh, Global; *There is no statement to show that the stairs at upper level should be excluded. The riser and lift look larger than 0.25m<sup>2</sup>.*
4. Panattoni Development Company - Michał Pluciński, CEE; *This is fine, no further comments.*
5. Royal Institution of Surveyors Malaysia (RISM) - Aziah Mohd Yusoff, Malaysia; *Illustration shows a diagram of two semi-detached industrial units. But the definition of industrial buildings does not clearly defined shared wall between units. Please address this properly.*
6. SEGRO - Nick Watson, European; *On barrel roof / high bay properties, plant may be placed on top of the 2 storey offices. This may be a single boiler on a large floor plate. Technically this should be measured in accordance with IPMS and GEA but needs to be considered carefully as it is very different space and connotations to other areas.*

**Response Summary:** There were 6 responses to “Diagram 14 - IPMS 3B – Industrial – Upper Floor (Level 1).”

**SSC Rationale:** In finalising IPMS Industrial Buildings the SSC have considered these comments and revised the diagram where necessary to provide additional clarification.