

# Best practice guide

SmartScore v1.2



# Preface

## **An introduction to SmartScore certification**

SmartScore is a global smart building certification, helping landlords understand, improve, and communicate their buildings' user functionality and technological foundations. A smart building is one that delivers outstanding outcomes for all users, through digital technology, to exceed their evolving expectations.

SmartScore champions cutting-edge technology in real estate and by providing a global standard, identifies best in class smart buildings that deliver an exceptional user experience, drive cost efficiency, meet high standards of sustainability and are fully future-proof.

## **An overview of the Best Practice Guide**

The SmartScore Best Practice Guide provides a comprehensive overview of the SmartScore certification. The guide is designed to be utilized by all stakeholders involved in the design, implementation, and provision of smart building services.

The guide outlines SmartScore certification criteria and best practices that should be incorporated into buildings to meet the needs and expectations of smart building owners, operators and occupiers.

This guide is not intended to compete with or replace the existing standards bodies or local building codes that are referenced throughout. The guide is intended to complement existing standards while honing in on the smart technology features that are most important to the broad user base of the building.

## **How to use the Best Practice Guide**

This guide outlines all ScoreScore features, broken down into two core sections:

- User functionality
- Technological foundations

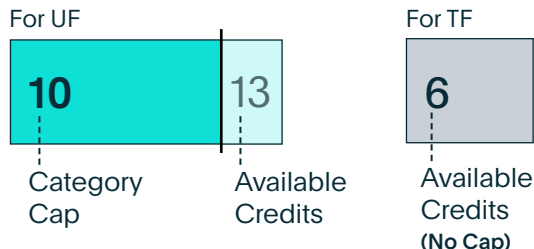
These features should be evaluated when undertaking any smart building project. Smart building project stakeholders should reference this guide throughout the certification process to best understand the purpose, requirements and specification of each criteria in the scorecard.

# What we measure

Section	Category	Criteria
<b>User Functionality</b> Assessing to what extent the building delivers the outstanding outcomes users expect.	Individual and Collaborative Productivity	10 / 13
	Health and Wellbeing	10 / 14
	Sustainability	14 / 19
	Communities and Services	10 / 14
	Maintenance and Operations	14 / 18
	Safety and Security	9 / 13
<b>Technological Foundation</b> Assessing to what extent the technology, processes and procedures are robust and future-proof.	Tenant Digital Connectivity	3
	Building Systems	8
	Landlord Integration Network	6
	Governance	5
	Cybersecurity	5
	Data Sharing	6
<b>Innovation Credits</b>	5	There are 5 credits available for clients to demonstrate innovation beyond what is included within SmartScore certification.

Every building is unique. The SmartScore certification has a credits cap for each User Functionality category. A building does not need to implement every criteria to gain the maximum credits within a category.

### How to read



# How we measure

## User Functionality

UF credits are achieved through a combination of 1. Functionality level and 2. Tenant Enablement

Credits will always round up at the category level.

### Functionality Level

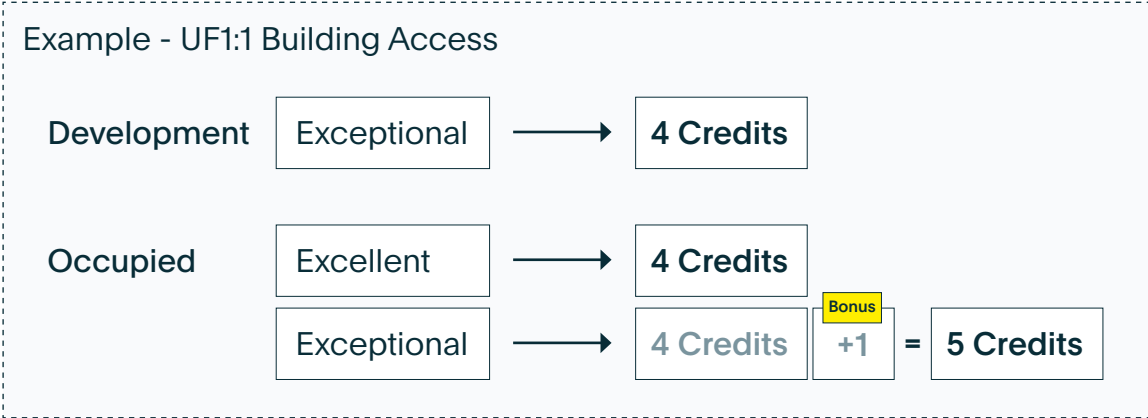
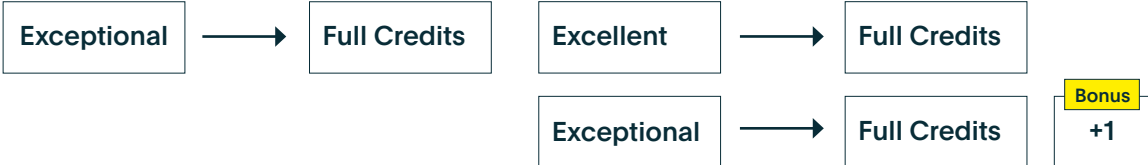
Development and Occupied buildings have different scoring considerations.

#### Development Buildings

Full credits are awarded for meeting an Exceptional level of functionality.

#### Occupied Buildings

Full credits are awarded for meeting an Excellent level of functionality. Occupied buildings that deliver Exceptional levels of functionality receive a bonus credit.



## Tenant Enablement

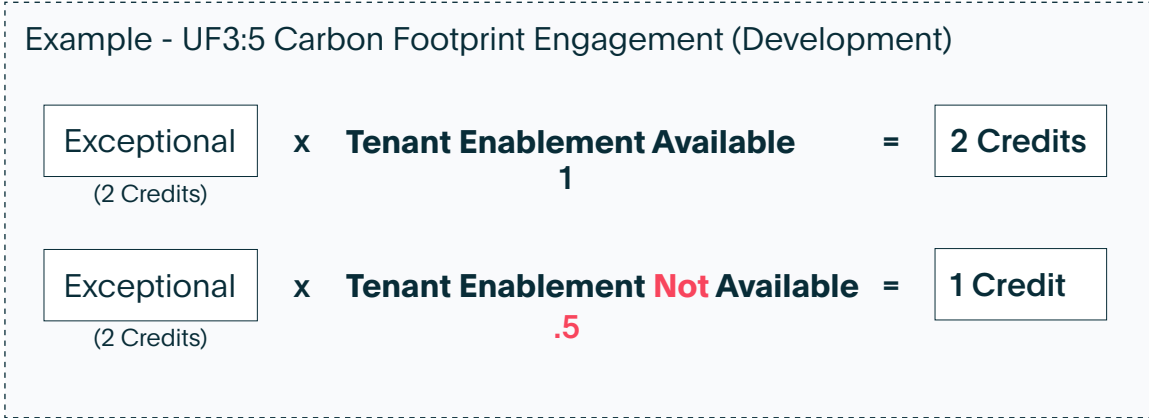
Tenant enablement reflects how far the functionality has been enabled for tenants to extend into their areas of the building.

#### Tenant Enablement Available

Full credits are awarded for the correlated functionality level

#### Tenant Enablement Not Available

Half credits are awarded for the correlated functionality level



## Technological Foundation

There are two types of scoring considerations for TF criteria:

- Not Met / Met
- Not Met / Partially Met / Met

The credit allocation section within the technological foundation pages detail the scoring considerations that are applicable to each TF criteria.

# Certification Levels

Certification Level	Credits Required	Minimum Requirements
 <b>SmartScore</b> CERTIFIED	45/100	<b>User Functionality</b> Functionality delivered across 3 Categories  <b>Technological Foundation</b> 1:2 2:1
 <b>SmartScore</b> SILVER	63/100	<b>User Functionality</b> Functionality delivered across 4 Categories  <b>Technological Foundation</b> 1:2 2:1 3:1 3:2
 <b>SmartScore</b> GOLD	77/100	<b>User Functionality</b> Functionality delivered across 5 Categories  <b>Technological Foundation</b> 1:2 2:1 3:1 4:1 5:1 2:3 3:2
 <b>SmartScore</b> PLATINUM	90/100	<b>User Functionality</b> Functionality delivered across 6 Categories  <b>Technological Foundation</b> 1:1 2:1 3:1 4:1 5:1 6:3 1:2 2:3 3:2 2:5

# Navigating criteria sections

01

**UF1:1**  
Building Access

Individual and Collaborative Productivity Credits 4

02

**Criteria Description**  
The landlord has delivered a simple to use and intuitive solution for tenants to access the building.  
The landlord has enabled tenants to integrate the solution into their own workplace solutions and extend it to include their own space.

**Benefit to Users**  
As a Tenant Employee, I want a simple way to access the building.

**Purpose**  
Provide tenants with a simple to use and intuitive solution to access the building.

**Problem**

- time wasted finding keys or pass
- no easy way to be provided access to different areas of the building
- concerns that unauthorized people could access the building

**User Story**

- streamlined process to access the building
- sense of security

03

WiredScore

04

**Functionality**

**Good** **Excellent** **Exceptional**

Tenant employees can securely enter the building without having to engage with security or reception staff.

As good. Additionally, tenant employees do not require a dedicated access control device e.g. fob / card.

As excellent. Additionally, tenant employees are able to securely pass through to their area using the same solution.

**Requirements for Tenant Enablement**

**Good** **Excellent** **Exceptional**

Landlord delivered only. Award full implementation as standard.

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specifications covering the relevant systems and describing the functionality level targeted.
- Drawings from manufacturers/designers covering the access control solution verifying that it is installed in tenant areas for exceptional functionality.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, access control providers, and app providers.

**Recommended evidence for occupied projects:**

- Pictures and / or screenshots of the mobile application clearly showing the ability to access a smart key for use with the access control system.
- Pictures of the access control technologies in place e.g. NFC / BLE readers on turnstiles, facial recognition cameras for biometrics.
- Videos or voiceovers of the functionality in use at the building in question.

05

06

**07**

**Delivery**

Tenant Portal, Operations Portal, Enterprise Portal, Digital Signage, Kiosk, Room Controller

**Application**

Visitor Management, Health & Wellbeing Analytics, Sustainability Analytics, Maintenance & Operations Analytics, Occupancy Analytics, Video Analytics, Content Management System

Access Control, Work Order Management, Feedback / Surveys, Wayfinding / RTLS, Amenity Booking, Asset Information Model, Document Management

**Platform**

Common Data Platform

**Network**

Wired, Wireless, Gateways

**Device**

Parking, E-mobility Charging, HVAC, Shading, Lighting, Metering, Elevator, Access Hardware, Onsite Electrical Generation

Fire Alarm, Cameras, Air Quality Sensing, Environmental Sensing, Occupancy Sensing, Real Time Location Hardware, Leak / Vibration Sensing, Smart Lockers, Smart Waste Sensing

IoT

**How to read**

Related System

Functionality level: Good, Excellent, Exceptional

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation**

INI:1

08

## 01 Criteria Name & Code

Information on the criteria code, criteria name, criteria category, and the number of credits available.

## 02 Criteria Overview

Provides an overview of the criteria including a description, benefits to users, purpose, problems the criteria solves, and user story.

## 03 Main Navigation

Click the logo to go back to the main criteria navigation map.

## 04 Credit Allocation

Credit Allocation for UF is a combination of Functionality and Tenant Enablement. Credit Allocation for TF provides details within the scoring considerations.

## 05 Evidence Requirements

Provides guidance on the types of evidence expected to successfully demonstrate the criteria.

## 06 Systems Mapping

Maps out the technology layers and systems that are related to the criteria across functionality levels.

## 07 System Layer Navigation (UF only)

Click on any category section to learn about that layer.

## 08 Criteria Navigation

Click a criteria code to navigate to that criteria page.

## How to read

Red = Content Overview

Blue = Navigable Area

# Explore certification criteria

Click on any of the criteria to navigate directly to that page.

## User Functionality

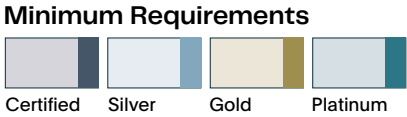
Individual & Collaborative Productivity	Health & Wellbeing	Sustainability	Communities & Services	Maintenance & Operations	Safety & Security
UF1:1 Building Access	UF2:1 Air Quality	UF3:1 Energy Reporting	UF4:1 Events and Services	UF5:1 Building Cleaning	UF6:1 Building Security
UF1:2 Visitor Experience	UF2:2 Disease Risk Mitigation	UF3:2 Energy Optimization	UF4:2 Access Local Information	UF5:2 Maintenance Cost Reporting	UF6:2 Building Utilization
UF1:3 Wayfinding	UF2:3 Wellbeing Reporting	UF3:3 Water Reporting	UF4:3 Delivery Management	UF5:3 System Alarms	UF6:3 Building Compliance Management
UF1:4 Person Locating	UF2:4 Tenant Comfort Control	UF3:4 Waste Reporting	UF4:4 Amenity Space Booking	UF5:4 Work Order Management	UF6:4 Emergency Alerts
UF1:5 Lift Optimization	UF2:5 Comfort Optimization	UF3:5 Carbon Footprint Engagement	UF4:5 Feedback Collection	UF5:5 Fault Detection and Diagnosis	UF6:5 Third Party Access
		UF3:6 e-Mobility Charging		UF5:6 Predictive Maintenance	

## Technological Foundation

Tenant Digital Connectivity	Building Systems	Landlord Integration Network	Governance	Cybersecurity	Data Sharing
TF1:1 Physical Diversity of Tenant Connectivity Routes	TF2:1 Building Automation and Control System	TF3:1 Network Infrastructure	TF4:1 Smart Building Strategy	TF5:1 Cybersecurity Policy	TF6:1 Data Ontology
TF1:2 Choice of Fiber and Fixed Wireless Service Providers	TF2:2 Tenant Software Platform	TF3:2 Building Systems Internet Connection	TF4:2 Tenant Smart Functionality Integration Guide	TF5:2 Cybersecurity Policy Implementation	TF6:2 Data Aggregation and Accessibility
TF1:3 User Wi-Fi in Common Areas	TF2:3 Operations Software Platform	TF3:3 Open Protocols	TF4:3 Smart Functionality Effectiveness	TF5:3 Ongoing Cybersecurity Assessments	TF6:3 Data Sharing
	TF2:4 Extended Systems Integrated into the Operations Platform	TF3:4 Wireless Networks			
	TF2:5 Asset Information Model				

## Digital Innovation

IN1:1 Innovation Credits
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\*Projects must meet all minimum requirements up to the level targeted. For example, if a project is targeting Gold, it would need to achieve the minimum requirements for Certified, Silver, and Gold.



**Criteria Description**

The landlord has delivered a simple to use and intuitive solution for tenants to access the building.

The landlord has enabled tenants to integrate the solution into their own workplace solutions and extend it to include their own space.

**User Story**

As a Tenant Employee, I want a simple way to access the building.

**Purpose**

Provide tenants with a simple to use and intuitive solution to access the building.

**Problem**

- time wasted finding keys or pass
- no easy way to be provided access to different areas of the building
- concerns that unauthorized people could access the building

**Benefits to Users**

- streamlined process to access the building
- sense of security

**Functionality**

**Good**

Tenant employees can securely enter the building without having to engage with security or reception staff.

**Excellent**

As good. Additionally, tenant employees do not require a dedicated access control device e.g. fob / card.

**Exceptional**

As excellent. Additionally, tenant employees are able to securely pass through to their area using the same solution.

**Requirements for Tenant Enablement**

**Good**

**Excellent**

**Exceptional**

Landlord delivered only. Award full implementation as standard.

**Evidence Requirements**

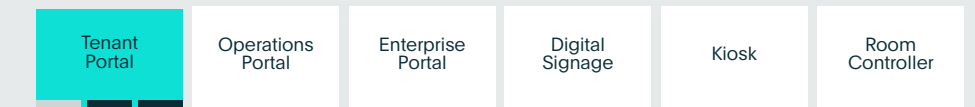
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specifications covering the relevant systems and describing the functionality level targeted.
- Drawings from manufacturers/designers covering the access control solution verifying that it is installed in tenant areas for exceptional functionality.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, access control providers, and app providers.

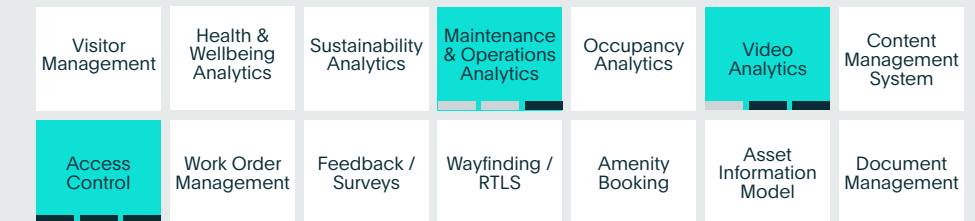
**Recommended evidence for occupied projects:**

- Pictures and / or screenshots of the mobile application clearly showing the ability to access a smart key for use with the access control system.
- Pictures of the access control technologies in place e.g. NFC / BLE readers on turnstiles, facial recognition cameras for biometrics.
- Videos or voiceovers of the functionality in use at the building in question.

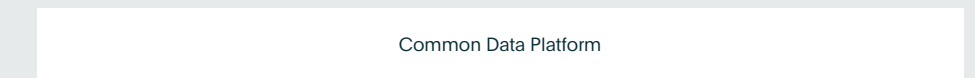
**Delivery**



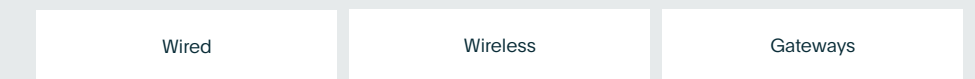
**Application**



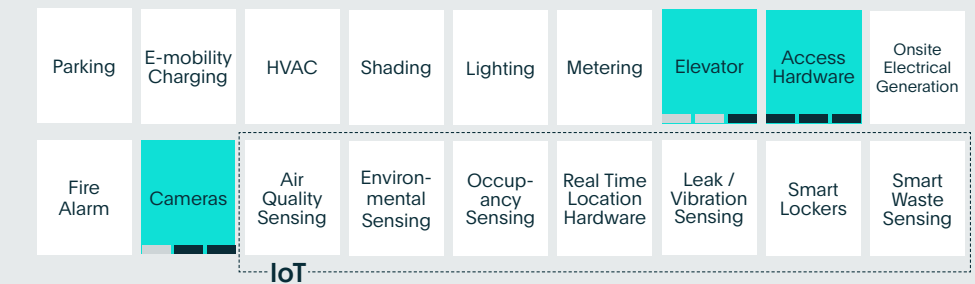
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

The landlord has delivered a solution for tenants to manage visitor arrival and deliver a streamlined and welcoming visitor experience.

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

**User Story**

As a Tenant Real Estate Team, I want visitors to my business to have a streamlined and welcoming visitor experience.

**Purpose**

Provide tenants with a centralized solution to manage their visitors, which ensures a streamlined and welcoming visitor experience.

**Problem**

- unsure when visitors will arrive
- difficult to prepare for meetings (meeting, documents, etc..)
- time wasted between expected arrival time and actual arrival time of visitors

**Benefits to Users**

- reduce effort in preparing for meeting visitors
- better information on actual visitor arrival time so can be more productive

**Functionality**

**Good**

Visitors check in to the building on arrival. Checking in notifies the issuer of the invitation of their arrival.

**Excellent**

Visitors can obtain digital access credentials prior to, or upon, arrival to the building and seamlessly pass through building security without speaking to a member of building staff. Checking in notifies the issuer of the invitation of their arrival.

**Exceptional**

As excellent. Additionally, Visitors are presented with at least two of the following options upon arrival:

- Credentials to access Free Building WIFI
- Access to Building Wayfinding
- Food & Beverage Ordering while they wait
- Access to Complimentary Reading while they wait
- Valet Services for Car or other Mobility

**Requirements for Tenant Enablement**

**Good**

Landlord has provided a central method whereby tenant employees can access the visitor experience functionality.

**Excellent**

The landlord has provided an API for the tenant to integrate the visitor experience functionality into their own workplace solutions.

**Exceptional**

**Evidence Requirements**

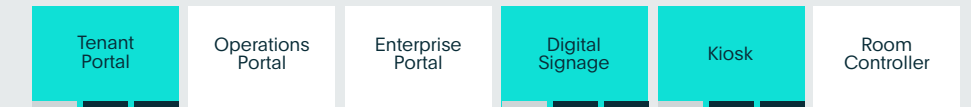
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely sources include smart building integrators, access control providers, visitor management system providers, app providers, and other software providers.
- Implementation level: Documentation and / or screenshots describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

**Recommended evidence for occupied projects:**

- Functional description and/or screenshot of the notifications received and medium it was received on.
- Videos or voiceovers of the functionality in use at the building in question.

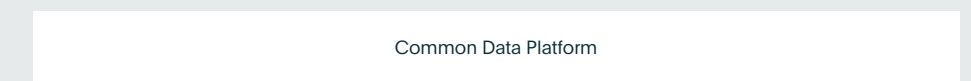
**Delivery**



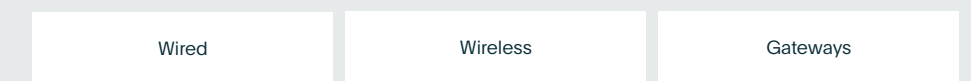
**Application**



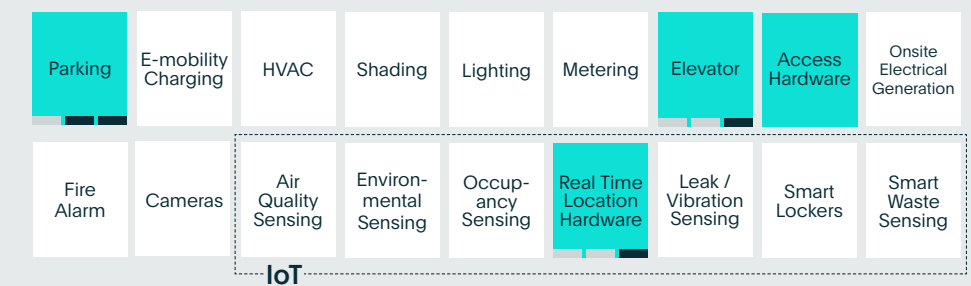
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

The landlord has delivered a solution for tenants and building operators to navigate the building.

The landlord has enabled tenants to integrate the wayfinding solution into their own workplace solutions and extend the functionality to include their own space.

**User Story**

As a Tenant employee, or member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to find my way around the building.

**Purpose**

Provide tenants, visitors and building operators with a solution to facilitate navigation in the building.

**Problem**

- time wasted finding meeting rooms, building amenities, offices
- confusion caused by unfamiliar or complicated directions
- repetitive task of providing directions

**Benefits to Users**

- time saved finding locations
- confidence in navigating the building
- enable users with varied accessibility requirements to navigate the building

**Functionality**

**Good**

Tenant employees and at least one member of the building operations team can access digital maps of the building's common areas/amenity spaces.

**Excellent**

Tenant employees and at least one member of the building operations team can identify where they currently are and search for locations throughout the building via a digital map.

**Exceptional**

Tenant employees and at least one member of the building operations team can navigate their way around the building with personalized directions from their current location to where they need to get to.

**Requirements for Tenant Enablement**

**Good**

The landlord has provided a central method for tenant employees and the building operations team to download maps of building common areas in a standard file format.

**Excellent**

The landlord has provided an API to allow the tenant to integrate the wayfinding functionality into their own workplace solutions.

**Exceptional**

As excellent. Additionally, the landlord has provided suitable network infrastructure for tenants to optionally extend the functionality into their area. Extensions of the functionality are available for purchase directly through the landlord or from a third party solutions provider.

**Evidence Requirements**

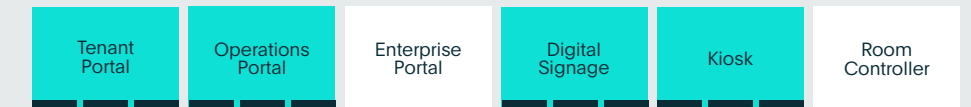
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Drawings from manufacturers / designers covering the real time location solution when targeting exceptional. Drawings should demonstrate coverage for the solution of all relevant areas.
- Signed vendor proposals or contracts describing the functionality level. Vendors are likely to be providers of tenant apps, digital signage kiosks, and real time location sensing solutions.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level (Exceptional): Network specifications demonstrating spare capacity / wireless network coverage in the tenant area for extension of the technologies used to deliver the functionality level within landlord areas.

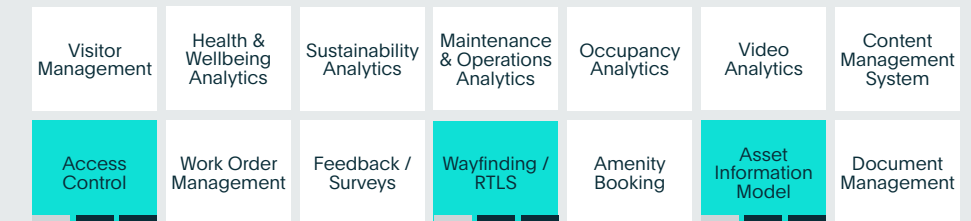
**Recommended evidence for occupied projects:**

- Functional description and/or screenshot of the user interfaces (software, web application, or mobile application) clearly showing digital maps with varying levels of functionality.
- Picture of hardware in place e.g. digital signage displaying maps, sensors in place if excellent / exceptional functionality.
- Videos or voiceovers of the functionality in use at the building in question.

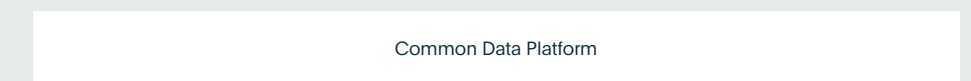
**Delivery**



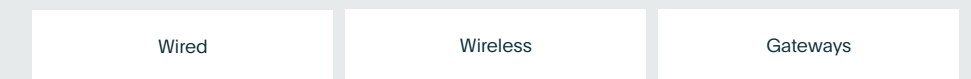
**Application**



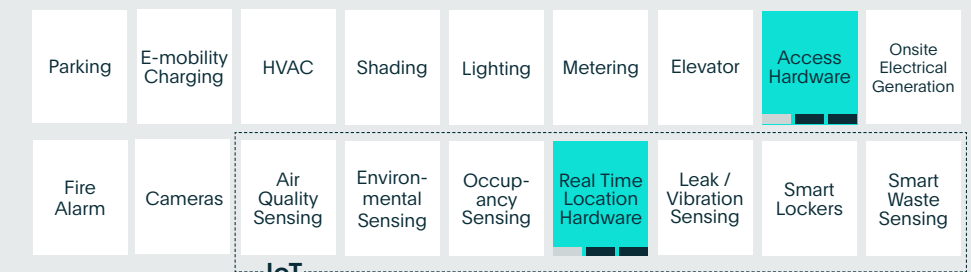
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
<b>UF1:3</b>	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

The landlord has delivered a solution for tenants and building operators to find individuals around the building.

The landlord has enabled tenants to integrate data from the person locating solution into their own workplace solutions and extend the functionality to include their own space.

**User Story**

As a Tenant employee, or member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to locate individuals around the building.

**Purpose**

Provide tenants and building operators with a safe and seamless way to locate individuals around the building.

**Problem**

- time wasted finding colleagues or meeting hosts
- unable to deploy staff to operational work correctly
- safety and security risks cause by users being in no-designated areas

**Benefits to Users**

- time saved finding individuals
- drive efficiency for building operations
- enable a means for people to locate others independently

**Functionality**

**Good**

Tenant employees and at least one member of the building operations team can be informed, with consent, of a colleague's typical place of work, given at a floor level of granularity or better.

**Excellent**

Tenant employees and at least one member of the building operations team can be informed, with consent, if a colleague is in the building and their typical place of work is given at a floor level of granularity or better.

**Exceptional**

Tenant employees and at least one member of the building operations team can locate a colleague, with consent, based on their live location.

**Requirements for Tenant Enablement**

**Good**

Tenant employees and members of the building operations team have access to a landlord app or portal containing a register with typical working locations. No integration to tenant workplace solutions required for full implementation.

**Excellent**

The landlord has provided an API to allow the tenant to integrate the person locating functionality into their own workplace solutions.

**Exceptional**

As excellent. Additionally, the landlord has provided suitable network infrastructure for tenants to optionally extend the functionality into their area. Extensions of the functionality are available for purchase directly through the landlord or from a third party solutions provider.

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include app providers, booking system providers, smart building integrators, real time location system providers, and other software providers.
- Drawings from manufacturers / designers demonstrating the coverage of the real time location solution when targeting exceptional.
- Implementation level: Documentation and / or screenshots describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level (Exceptional): Network specifications demonstrating spare capacity / wireless network coverage in the tenant area for extension of the technologies used to deliver the functionality level within landlord areas.

Recommended evidence for occupied projects:

- Pictures and/or screenshot of the user interfaces (software, web application or mobile application) clearly showing person locating with varying levels of functionality.
- Pictures of hardware in place e.g. digital signage displaying maps, sensors in place if exceptional functionality.
- Videos or voiceovers of the functionality in use at the building in question.

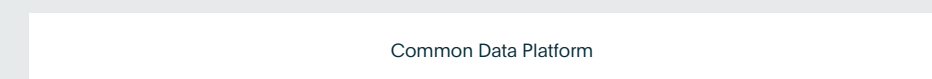
**Delivery**



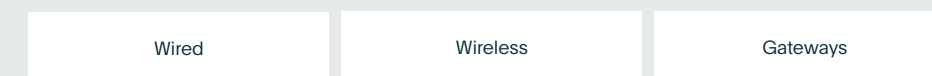
**Application**



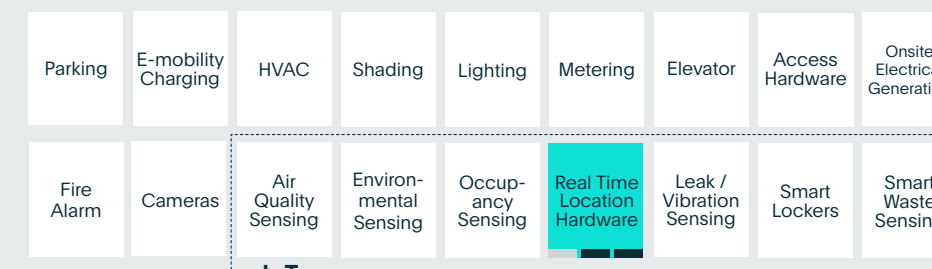
**Platform**



**Network**

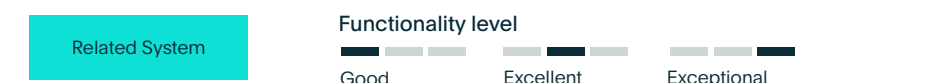


**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
<b>UF1:4</b>	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------



# UF1:5

## Lift Optimization

Individual and Collaborative Productivity

Credits **2**

### Criteria Description

The landlord has delivered a solution for the building's elevators to optimize their journeys and reduce waiting time for tenants.

### User Story

As a Tenant Employee, I want lifts to optimize my journeys.

### Purpose

Provide tenants with a solution for lifts to optimize their journeys and reduce waiting time.

### Problem

- time wasted waiting for and travelling via lifts
- inconvenience of crowded lifts
- poor performance and energy efficiency

### Benefits to Users

- reduce waiting and transport time
- increased convenience
- reduced maintenance cost

### Functionality

Good

Excellent

Exceptional

Tenant employee's time in lifts is minimized by optimizing the number of stops each lift journey makes for journeys starting on the main reception floor of the building.

Tenant employee's time in lifts is minimized by optimizing the number of stops each lift journey makes for journeys starting on all floors of the building.

Tenant employee's time in lifts is minimized by optimizing the number of stops each lift journey makes for journeys starting on all floors of the building. User's time waiting for a lift is minimized by optimizing the destination scheduling of lifts automatically based on the number of users waiting for lifts.

### Requirements for Tenant Enablement

Good

Excellent

Exceptional

Landlord delivered only. Award full implementation as standard.

### Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, lift / elevator manufacturers, app providers and other software providers.
- Videos or voiceovers of the functionality in use at the building in question.

### Delivery

Tenant Portal	Operations Portal	Enterprise Portal	Digital Signage	Kiosk	Room Controller
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### Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

### Platform

Common Data Platform
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### Network

Wired	Wireless	Gateways
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### Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

### How to read

Related System	Functionality level
	Good Excellent Exceptional

### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
-------

**Criteria Description**

The landlord has delivered a simple to use solution for tenants and building operators to track and report on air quality internally and externally.

The landlord has enabled tenants to integrate the air quality data into their own workplace solutions and extend sensing to include their own space.

**User Story**

As a Tenant Employee, or member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to understand and report on the air quality internally and externally.

**Purpose**

Provide tenants and building operators with a simple to use solution to track and report in real time the air quality internally and externally.

**Problem**

- worry about the harm poor air quality could be having in and around the building
- inability to report on status or change in air quality to authorities or tenants
- lack of visibility around the potential operational risks poor air quality causes landlords and tenants

**Benefits to Users**

- insight into the environmental performance of the building
- confidence that the air quality is suitable
- promoting how the work environment is delivering better productivity and wellbeing outcomes

**Functionality**

**Good**

At least one member of the building operations team can access CO2 data for the building at a floor by floor level of granularity or greater and can be notified if specific CO2 thresholds are exceeded.

**Excellent**

At least one member of the building operations team can access air quality data for the building at a floor by floor level of granularity or greater and can be notified if specific air quality thresholds are exceeded. Air quality data includes at least four of the following parameters:  
 - CO2 - temperature  
 - relative humidity  
 - Volatile Organic Compounds (Any or Total)  
 - PM (Any particulate size)

**Exceptional**

At least one member of the building operations team and tenant employees can access air quality data on all parameters described under excellent and be notified where thresholds are exceeded. Additionally, at least one member of the building operations team can view local outdoor air quality information for at least two of the following parameters:  
 - PM (Any particulate size)  
 - Nitrogen Dioxide  
 - Carbon Monoxide  
 - Ozone

**Requirements for Tenant Enablement**

**Good**

Tenant real estate team is able to request reports (e.g. CSV file) on air quality data from the building operations team.

**Excellent**

The landlord has provided an API to allow the tenant to integrate the air quality data into their own workplace solutions. Datasets required to be available by API depend on functionality level targeted.

**Exceptional**

As excellent. Additionally, the landlord has provided suitable network infrastructure for tenants to optionally extend the functionality into their area. Extensions of the functionality are available for purchase directly through the landlord or from a third party solutions provider.

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Drawings from manufacturers / designers demonstrating the coverage of the air quality sensing solution. The drawings should demonstrate reasonable coverage throughout common areas.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include air quality sensor manufacturers, app providers, data visualization providers and other software providers.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level (Exceptional): Network specifications demonstrating spare capacity / wireless network coverage in the tenant area for extension of the technologies used to deliver the functionality level within landlord areas.

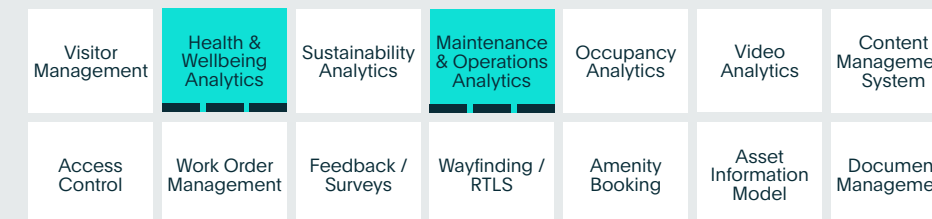
**Recommended evidence for occupied projects:**

- Functional description and/or screenshot of the user interfaces (web application or mobile application) clearly showing air quality data is available to both tenant users and landlord operations / FM at varying levels of granularity. Screenshots also of notifications issued to operations / FM users.
- Picture of hardware in place e.g. digital signage with AQ data, sensors installed, QR codes or other prompts to access AQ data.
- Videos or voiceovers of the functionality in use at the building in question.

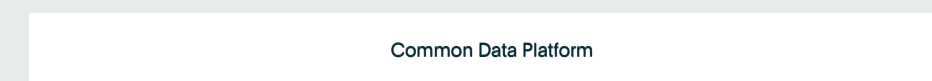
**Delivery**



**Application**



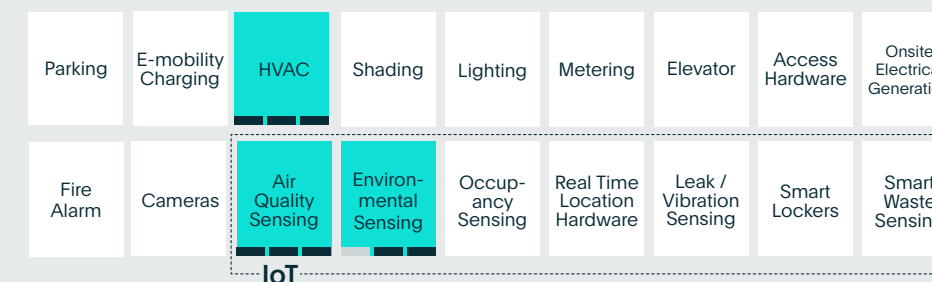
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	<b>UF2:1</b>	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

The landlord has delivered a seamless solution for tenants and building operators to mitigate the spread of diseases within the building.

The landlord has enabled tenants to integrate the disease prevention solutions into their own workplace solutions.

**User Story**

As a Tenant Employee or member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to have appropriate disease prevention measures in place.

**Purpose**

Provide tenants and building operators with a seamless solution to mitigate the spread of diseases in the building.

**Problem**

- worry of people with a virus coming to the office
- worry of not being informed if there has been a virus event in the building
- no ability to report status to authorities or tenants

**Benefits to Users**

- confidence that the office is a safe and healthy space
- confidence that alerts will be issued when relevant
- operational and workplace insight gained from the information reported

**Functionality**

**Good**

Tenant employees can enter the building and proceed through to lift or staircase areas touch-free.

**Excellent**

As good. Additionally, tenant employees may opt into social distancing, and be notified when they are at risk of not maintaining correct social distancing.

**Exceptional**

As excellent. Additionally, tenant employees may opt-in to an anonymized contact tracing solution that notifies them of any relevant contact tracing event which has occurred in the building based on their real-time and historic location.

**Requirements for Tenant Enablement**

**Good**

The landlord has provided a means for tenant employees to use the touch-free interfaces.

**Excellent**

The landlord has provided an API to allow the tenant to integrate notifications from the social distancing and / or contact tracing solution into their own workplace solutions.

**Exceptional**

**Evidence Requirements**

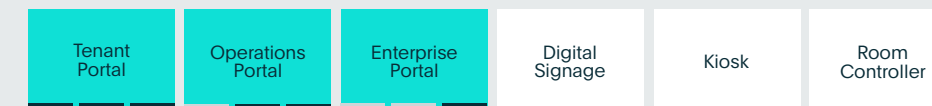
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Drawings or descriptions providing overview of how the access control system(s) and visitor management deliver a database of attendance records, which may be used to identify an individual for the explicit purpose of delivering a contact tracing message.
- Drawings from manufacturers / designers demonstrating the coverage of the occupancy sensing / real time location solution or similar which provides data on live usage for social distancing / contact tracing when targeting excellent / exceptional.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include access control, real time location solution, tenant app / portal, and occupancy sensing providers.
- Implementation level: Documentation and / or screenshots describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshot of the user interfaces (text, emails, web application or mobile application) clearly showing contact tracing notifications.
- Videos or voiceovers of the functionality in use at the building in question.

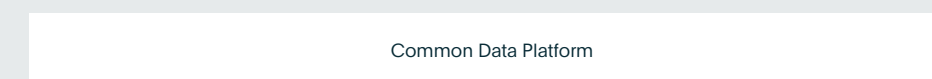
**Delivery**



**Application**



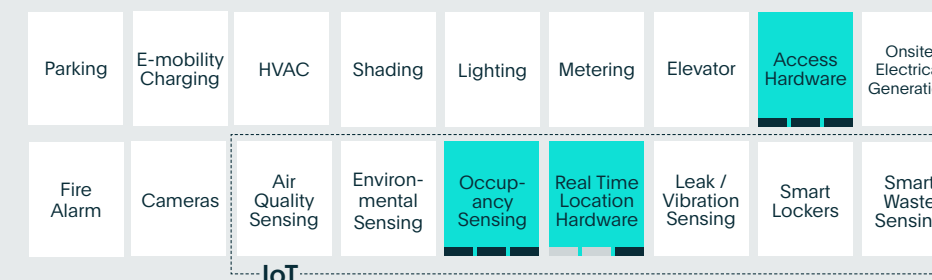
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	<b>UF2:2</b>	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

The landlord has delivered a solution for tenants and building operators to track and report on the building's wellbeing key performance indicators in real-time.

The landlord has enabled tenants to integrate the wellness data into their own workplace solutions and extend any relevant sensing to include their own space.

**User Story**

As a Tenant employee, or member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager want to understand and report on health and wellbeing metrics.

**Purpose**

Provide tenants and buildings operators with a solution to track and report on the building's wellbeing key performance indicators in real-time.

**Problem**

- lack of information on employee health and wellbeing
- no way to benchmark and measure improvements
- no way to report to employees the benefits of the workplace

**Benefits to Users**

- information for workplace optimization decision making
- visibility of the positive impact the workplace is having on productivity

**Functionality**

Good	Excellent	Exceptional
<p>At least one member of the building operations team can access wellness data for the building at a floor by floor level of granularity or greater including <b>at least three</b> of the following:</p> <ul style="list-style-type: none"> <li>- Environmental Comfort (Temperature and Relative Humidity)</li> <li>- Noise Levels</li> <li>- Light Levels</li> <li>- Daylight Levels</li> <li>- Tenant User Wellbeing Feedback / Complaints Tickets Raised</li> <li>- Step Counting (Steps taken in the Building)</li> <li>- Stairwell Use</li> <li>- Calories Burned (Based on estimates from step counting or use of Wellbeing facilities)</li> </ul>	<p>At least one member of the building operations team and tenant employees can access wellness data for the building at a floor by floor level of granularity or greater including <b>at least five</b> of the following:</p> <ul style="list-style-type: none"> <li>- Environmental Comfort (Temperature and Relative Humidity)</li> <li>- Noise Levels</li> <li>- Light Levels</li> <li>- Daylight Levels</li> <li>- Tenant User Wellbeing Feedback / Complaints Tickets Raised</li> <li>- Step Counting (Steps taken in the Building)</li> <li>- Stairwell Use</li> <li>- Calories Burned (Based on estimates from step counting or use of Wellbeing facilities)</li> </ul>	<p>As excellent. Additionally, tenant employees are able to view wellness data for themselves (e.g. steps taken, calories burned) or their local area (e.g. noise, environmental comfort) depending on the wellness factors tracked in the building.</p>

**Requirements for Tenant Enablement**

Good	Excellent	Exceptional
<p>Tenant real estate team is able to request reports (e.g. CSV file) on wellbeing data from the operations team.</p>	<p>The landlord has provided an API to allow the tenant to access wellbeing data and integrate it into their own tenant systems or app.</p>	<p>As excellent. Additionally, the landlord has provided suitable network infrastructure for tenants to optionally extend the functionality into their area. Extensions of the functionality are available for purchase directly through the landlord or from a third party solutions provider.</p>

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Drawings highlighting where wellbeing sensors are deployed i.e. Noise, Comfort etc. Sensing should be deployed at a reasonable level of coverage to award credit.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, software providers, and sensor manufacturers.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level (Exceptional): Network specifications demonstrating spare capacity / wireless network coverage in the tenant area for extension of the technologies used to deliver the functionality level within landlord areas.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshot of the reporting platform e.g. dashboard or an output report, showing different metrics being captured and reported on.
- Videos or voiceovers of the functionality in use at the building in question.

**Delivery**

Tenant Portal	Operations Portal	Enterprise Portal	Digital Signage	Kiosk	Room Controller
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**Application**

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

**Platform**

Common Data Platform
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**Network**

Wired	Wireless	Gateways
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**Device**

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	<b>UF2:3</b>	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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# UF2:4

## Tenant Comfort Control

Health and Wellbeing

Credits 4

### Criteria Description

The landlord has delivered a solution for tenants to adjust comfort conditions based on their preferences including lighting, temperature, ventilation and blinds in relevant shared spaces.

The landlord has digitally enabled central lighting, blinds, temperature and ventilation, allowing tenants to integrate control of these systems into their own workplace solutions and extend the control to include their own space.

### User Story

As a Tenant Employee, I want to adjust the environment (lighting, temperature, ventilation, blinds) to my preferences.

### Purpose

Provide tenants with a solution to adjust their working environment including lighting, temperatures, ventilation and blinds in an effortless and personalized way.

### Problem

- poor working conditions cause frustration and lack of concentration
- absenteeism, sickness and mental and physical discomfort
- inefficient building operation and increased operating costs

### Benefits to Users

- increase wellbeing at work
- reduce sickness due to office environment
- increase productivity and concentration
- reduce wasteful energy use and save money

### Functionality

Good	Excellent	Exceptional
Tenant employees can adjust the environment in relevant shared spaces via individual controls for two of the following: <ul style="list-style-type: none"> <li>- lighting</li> <li>- blinds</li> <li>- temperature</li> <li>- ventilation rate</li> </ul>	Tenant employees can adjust the environment in relevant shared spaces using a single digital interface for <b>two</b> of the following: <ul style="list-style-type: none"> <li>- lighting</li> <li>- blinds</li> <li>- temperature</li> <li>- ventilation rate</li> </ul>	Tenant employees can adjust the environment in relevant shared spaces using a single digital interface for <b>three</b> of the following: <ul style="list-style-type: none"> <li>- lighting</li> <li>- blinds</li> <li>- temperature</li> <li>- ventilation rate</li> </ul>

### Requirements for Tenant Enablement

Good	Excellent	Exceptional
Tenant employee has the ability to adjust environmental conditions using traditional methods e.g. wall mounted thermostat, light switches.	The landlord has delivered digital enablement of lighting, HVAC and blind systems which allow for tenant control via an API, or similar IP based solution. Systems in the tenant area should have appropriate level of zoning to allow for control of individual spaces. Landlords define what relevant shared space is - likely shared meeting rooms, the gym, auditoriums etc. Most critically, this criteria should demonstrate that the central comfort systems in place used by the tenant area are digitally enabled to allow the tenant to implement, say, their own meeting room control solution.	

### Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Drawings highlighting the functionality and location of room control switches i.e. thermostats for temperature adjustment and / or light switches.
- Block diagrams / topologies demonstrating how integration of systems into the central smart building platform will be achieved.
- Signed vendor proposals or contracts for the space control interfaces demonstrating the functionality level achieved.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

Recommended evidence for occupied projects:

- Pictures of/or screenshot of the user interfaces (wall mounted tablets, web or mobile app) clearly showing ability to adjust environmental control. Excellent or above only.
- Videos or voiceovers of the functionality in use at the building in question.

### Delivery

Tenant Portal	Operations Portal	Enterprise Portal	Digital Signage	Kiosk	Room Controller
---------------	-------------------	-------------------	-----------------	-------	-----------------

### Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

### Platform

Common Data Platform
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### Network

Wired	Wireless	Gateways
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### Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

### How to read



### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
-------

# UF2:5

## Comfort Optimization

Health and Wellbeing

Credits 2

### Criteria Description

The landlord has delivered a solution for building operators to adjust the building's environment and maintain optimum working conditions for tenants in landlord common spaces.

The landlord has enabled tenants to integrate the comfort optimization solution into their own workplace solutions and extend it to include their own space.

### User Story

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to optimize the environment in the building to maintain optimum working conditions and minimize comfort related complaints.

### Purpose

Provide building operators with a solution to optimize comfort conditions in landlord common spaces to ensure a best possible user experience and minimize comfort related complaints.

### Problem

- inefficiency caused by with temperature, lights, ventilation or blinds left on the wrong settings
- no feedback taken into account from tenants when configuring building environment
- poor comfort conditions not representative of desired tenants desired conditions

### Benefits to Users

- deliver best possible comfort conditions
- more efficient use of building systems

### Functionality

Good

Excellent

Exceptional

At least one member of the building operations team can optimize comfort conditions across all of the following environmental factors:

- Lighting
- Temperature
- Ventilation

throughout the building based on static setpoint changes to independent control systems.

At least one member of the building operations team can optimize comfort conditions across all of the following environmental factors:

- Lighting
- Temperature
- Ventilation

at a sub-floor level using a single combined control interface.

As excellent. Additionally, the control interface also contains tenant user comfort feedback data, with the ability to monitor comfort feedback historically and in real time. The system automatically adjusts set-points, within set threshold, in real time without input from the building operations team when comfort feedback is received.

### Requirements for Tenant Enablement

Good

Excellent

Exceptional

Tenant employee is able to place requests digitally to the building operator to adjust comfort settings in a specific area.

The landlord has provided an API for tenants to integrate the comfort feedback collection into their own workplace systems.

### Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Focus here will be on smart building integrators, BACS providers and software vendors delivering operations platforms.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

#### Recommended evidence for occupied projects:

- Pictures and/or screenshot of the user interfaces (web application, mobile application) clearly showing operations platform with reporting of systems resource efficiency. Notifications / suggestions of improvements to system control when targeting exceptional.
- Videos or voiceovers of the functionality in use at the building in question.

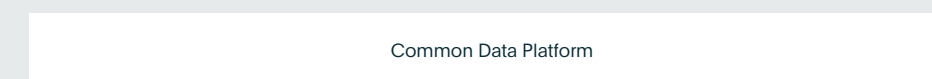
### Delivery



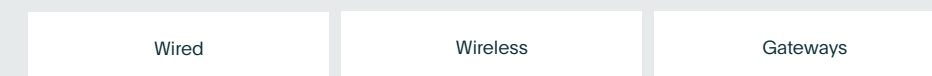
### Application



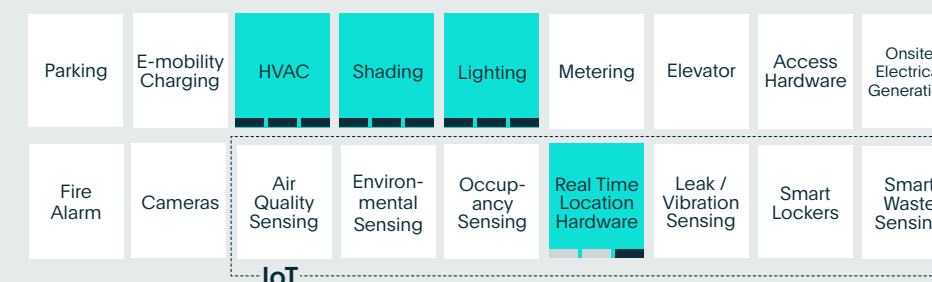
### Platform



### Network



### Device



\*Criteria related systems are advisory only subject to project deployment.

### How to read



### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
-------

**Criteria Description**

The landlord has delivered a solution for tenants and building operators to track the building's energy consumption and report against sustainability targets.

The landlord has enabled tenants to access energy data and integrate data into their own reporting solutions.

**User Story**

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to understand energy usage and efficiency.

**Purpose**

Provide tenants and building operators with a solution to track the building's energy performance overtime.

**Problem**

- no visibility on actual energy usage
- inability to measure impact of improvements on energy consumption and carbon footprint
- no way to report accurately for policy and regulation adherence
- lack of transparency of energy costs

**Benefits to Users**

- better information on energy usage
- identify areas to reduce energy consumption
- identify areas to reduce carbon emissions
- report against regulations or policies
- confidence in energy charges

**Functionality**

**Good**

At least one member of the building operations team can access overall energy usage data for the building at a floor by floor level.

**Excellent**

At least one member of the building operations team can access energy usage data for the building, and at a floor by floor level. At the building level, the energy usage data is broken down by different energy consumption groups including at least four of the following:

- Heating
- Cooling
- Lighting
- Lifts / Escalators
- Small Power
- Low Carbon Energy Sources (Generation rather than Usage)

Each energy consumption group is associated with static or dynamic carbon factors for sustainability reporting purposes.

**Exceptional**

As excellent. Additionally, at least one member of the building operations team is able to benchmark the buildings energy consumption against both the buildings designed energy performance and other buildings in the region.

**Requirements for Tenant Enablement**

**Good**

At least one member of the tenant real estate team has the ability to request energy reports (e.g. CSV File) from the building operations team.

**Excellent**

The landlord has provided an API to allow the tenant to easily extract all relevant building energy data and associated carbon factors, and integrate this into their own reporting or workplace solutions.

**Exceptional**

**Evidence Requirements**

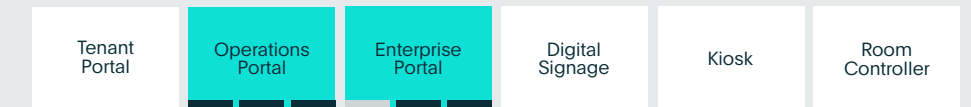
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Drawings / documentation highlighting where meters are located, the sub-metering and billing strategy, and communications design for the meters i.e. frequency of data polling, accuracy ranges, commissioning data, etc.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, metering providers, software providers, and manufacturers of renewable energy sources i.e. solar panels or air source heat pumps.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

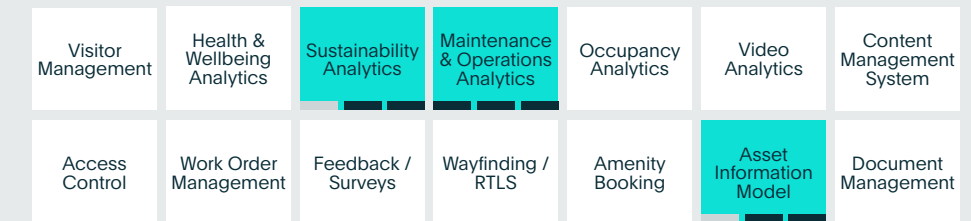
**Recommended evidence for occupied projects**

- Pictures and/or screenshot of the user interfaces (web application, mobile application, or digital signage) clearly showing a breakdown of energy data by floor and type. Text / email notifications of energy use falling outside of trend are also accepted.
- Videos or voiceovers of the functionality in use at the building in question.

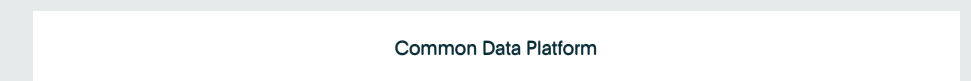
**Delivery**



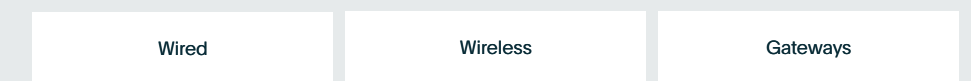
**Application**



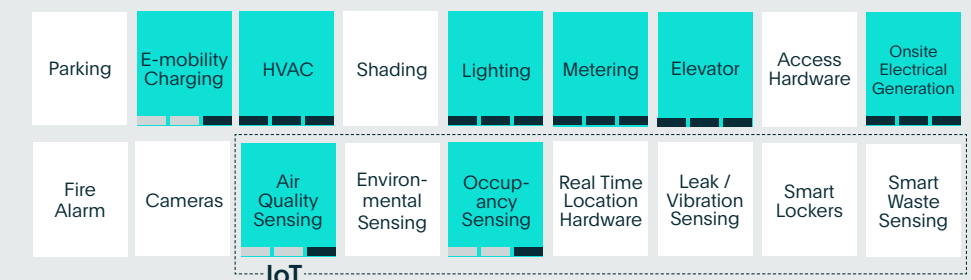
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	<b>UF3:1</b>	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------



**Criteria Description**

The landlord has delivered a solution for building operators to optimize the ongoing energy performance of the building.

The landlord has enabled tenants to extend the energy optimization program into their own space, and track it's success in real time.

**User Story**

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to deploy solutions which reduce energy consumption.

**Purpose**

Provide building operators with a solution to optimize the ongoing energy performance of the building.

**Problem**

- no ability to reduce energy consumption
- lack of knowledge to identify energy optimization opportunities
- energy source is fixed and does not reflect best value in real-time

**Benefits to Users**

- reduced costs
- reduced carbon footprint
- automation reduces the workload for operators

**Functionality**

Good	Excellent	Exceptional
<p>At least one member of the building operations team is notified of unusual energy consumption based on trend reporting across at least four of the following energy consumption categories:</p> <ul style="list-style-type: none"> <li>- Heating</li> <li>- Cooling</li> <li>- Lighting</li> <li>- Lifts / Escalators</li> <li>- Small Power</li> <li>- Low Carbon Energy Sources (Generation rather than Usage)</li> </ul>	<p>At least one member of the building operations team is provided with recommendations of how the building can optimize its energy performance across at least four of the following energy consumption categories:</p> <ul style="list-style-type: none"> <li>- Heating</li> <li>- Cooling</li> <li>- Lighting</li> <li>- Lifts / Escalators</li> <li>- Small Power</li> <li>- Low Carbon Energy Sources (Generation rather than Usage)</li> </ul>	<p>As excellent. Additionally, the energy optimization system incorporates data from external sources and sensors within the building. The system incorporates data from at least two of the following sources:</p> <ul style="list-style-type: none"> <li>- Occupancy Sensing</li> <li>- Building Events Calendar</li> <li>- Local Weather</li> <li>- Air Quality Sensing</li> <li>- Power Grid</li> <li>- e-mobility Charging</li> </ul>

**Requirements for Tenant Enablement**

Good	Excellent	Exceptional
<p>At least one member of the tenant real estate team has the ability to request energy reports (e.g. CSV File) from the building operations team.</p>	<p>The landlord has provided an API to allow the tenant to easily extract all relevant building energy data and associated carbon factors, and integrate this into their own reporting or workplace solutions.</p>	<p>As excellent. Additionally, the landlord has demonstrated the energy optimization systems ability to onboard data from tenant area sensing technologies into their energy optimization platform.</p>

**Evidence Requirements**

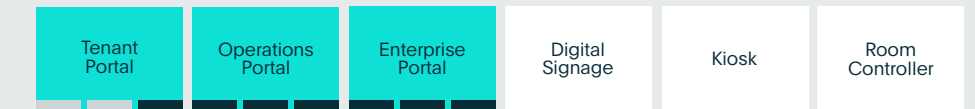
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Documentation demonstrating the building's ongoing energy performance program including targets and methodologies.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, metering providers, energy optimization and reporting software providers.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level(Excellent): Documentation demonstrating how tenant sensing technologies /systems have or could be integrated into the landlord energy optimization.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshots of the user interfaces (web application, mobile application, or digital signage) clearly showing energy optimization processes.
- Videos or voiceovers of the functionality in use at the building in question.

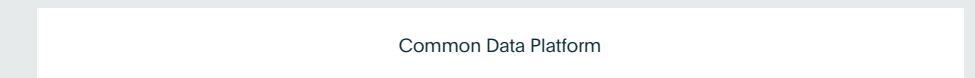
**Delivery**



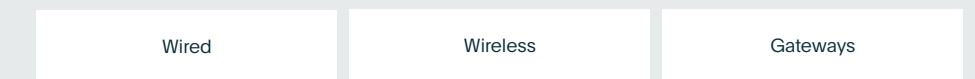
**Application**



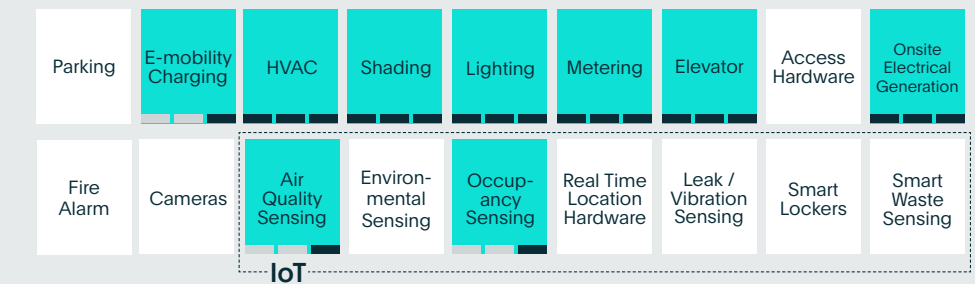
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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# UF3:3 Water Reporting

Sustainability

Credits 4

## Criteria Description

The landlord has delivered a solution for tenants and building operators to track the building's water consumption and identify areas for improvements.

The landlord has enabled tenants to integrate water data into their own workplace sustainability reporting.

## User Story

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager I want to understand water usage and efficiency.

## Purpose

Provide tenants and building operators with a solution to track the building's water consumption in real time.

## Problem

- lack of visibility on actual water usage
- no way to drive improvements in water usage and water waste
- hard to identify abnormalities or problems with water supply
- no clarity on charges

## Benefits to Users

- better information on water usage
- identify areas to reduce water usage
- identify areas to reduce water waste
- receive early warnings of problems with the water supply
- confidence in charges against actual consumption

## Functionality

Good

Excellent

Exceptional

At least one member of the building operations team can access water usage data for the building.

At least one member of the building operations team can access water usage data for the building at a floor by floor level of granularity or greater and understand where leaks may be occurring.

As excellent. Additionally, data is available on how alternate sources are used at the building level including at least one of the following:  
 - Grey Water  
 - Rain Water  
 and how the use of these sources has affected the carbon intensity of the building's water supply.

## Requirements for Tenant Enablement

Good

Excellent

Exceptional

At least one member of the tenant real estate team has the ability to request water reports (e.g. CSV File) from the building operations team.

The landlord has provided an API to allow the tenant to easily extract all relevant building water data and associated carbon factors, and integrate this into their own reporting or workplace solutions.

## Evidence Requirements

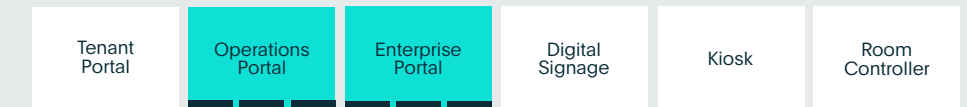
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Documentation demonstrating the building's ongoing energy performance program including targets and methodologies.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, metering providers, energy optimization and reporting software providers.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level(Excellent): Documentation demonstrating how tenant sensing technologies /systems have or could be integrated into the landlord energy optimization.

Recommended evidence for occupied projects:

- Pictures and/or screenshots of the user interfaces (web application, mobile application, or digital signage) clearly showing energy optimization processes.
- Videos or voiceovers of the functionality in use at the building in question.

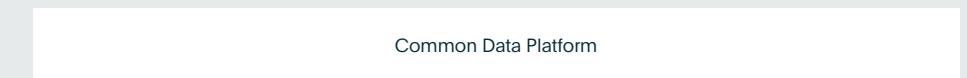
## Delivery



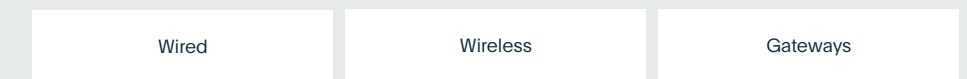
## Application



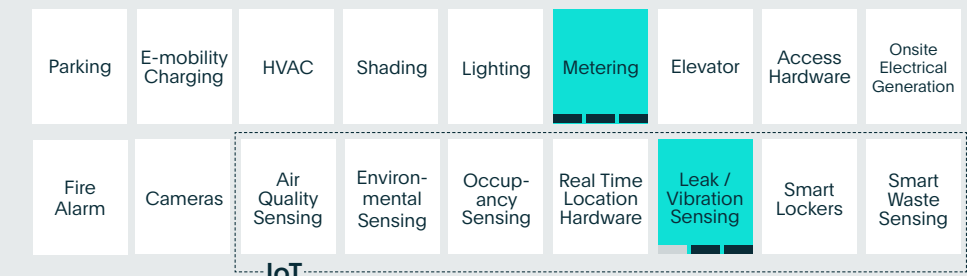
## Platform



## Network



## Device



\*Criteria related systems are advisory only subject to project deployment.

## How to read



## User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

## Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

## Innovation Criteria

IN1:1
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# UF3:4 Waste Reporting

Sustainability

Credits 4

## Criteria Description

The landlord has delivered a solution for tenants and building operators to track the building's waste generation and measure the impact of recycling schemes.

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

## User Story

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want to understand and report on waste.

## Purpose

Provide tenants and building operators with a solution to track the building's waste generation and measure the impact of recycling schemes.

## Problem

- lack of visibility on waste levels
- no way to measure impacts of improvements on waste and recycling schemes
- bins emptied when not full creating additional cost
- bins not emptied when full creating unsanitary situation

## Benefits to Users

- better information on waste
- identify areas to reduce waste
- identify areas to improve recycling
- efficiencies in bin emptying
- healthier environment

## Functionality

Good

Excellent

Exceptional

At least one member of the building operations team can access reports on waste generated at a building level including segregation to appropriate recyclable waste streams.

As good. Additionally, each waste stream is associated with a static carbon factor for sustainability reporting purposes.

As excellent. Additionally, at least one member of the building operations team has access to reporting on at least two of the following specialist waste streams:  
 - Wastewater / Sewage  
 - Batteries - Lightbulbs  
 - Electronic Equipment  
 - Food Waste  
 - Biomedical Waste  
 - Hazardous Liquid Waste / Chemicals

## Requirements for Tenant Enablement

Good

Excellent

Exceptional

At least one member of the tenant real estate team is able to request reports on waste (e.g. CSV file) from the building operations team.

The landlord has provided an API to allow the tenant to integrate waste data into their own sustainability reporting or other workplace solutions.

## Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Focus here will be on waste sensing companies and software providers delivering data access and reporting.
- Implementation level: Documentation and / or screenshots describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

Recommended evidence for occupied projects:

- Pictures and / or screenshots of the user interfaces (web application, mobile application) clearly showing reporting of waste data broken down at increasing levels of granularity depending on functionality level targeted.
- Videos or voiceovers of the functionality in use at the building in question.

## Delivery

Tenant Portal	Operations Portal	Enterprise Portal	Digital Signage	Kiosk	Room Controller
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## Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

## Platform

Common Data Platform
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## Network

Wired	Wireless	Gateways
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## Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

## How to read



## User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

## Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

## Innovation Criteria

IN1:1
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Criteria Description

The landlord has delivered solutions which inform tenants of the building’s sustainability objectives and engage them in reducing the building’s carbon footprint.

The landlord has enabled tenants to integrate the solution into their own workplace solutions and extend it to include their own space.

User Story

As a Tenant Employee, I am passionate about sustainability and want to both understand and help reduce the environmental impact of the building I work in.

Purpose

Provide tenants with information on the building’s sustainability objectives and ways of contributing to reducing the buildings environmental impact.

Problem

- tenant employees are unaware of the buildings carbon footprint
- tenant employees unaware of how they can help reduce the buildings carbon footprint

Benefits to Users

- greater transparency for tenant employees
- feeling of community and supporting a greater cause
- reduced carbon footprint

Functionality

Good	Excellent	Exceptional
<p>Tenant employees are able to view the buildings carbon footprint including at least three of the following metrics:</p> <ul style="list-style-type: none"> <li>- Electricity</li> <li>- Heating</li> <li>- Cooling</li> <li>- Water</li> <li>- Waste</li> </ul> <p>The carbon footprint is visualized in a gamified way which promotes understanding of scale.</p>	<p>As good. Additionally, at least one member of the tenant real estate team is provided with advice on how they can help reduce the carbon footprint of their tenancy.</p>	<p>As excellent. Additionally, tenant employees are provided with contextualized advice based on their current location and surrounding systems which gamifies their sustainability contribution and promotes engagement. The gamification calculates each tenant employee’s impact on the reduction of the building’s carbon footprint based on their response to contextualized advice.</p> <p>Gamification examples may include prompts like: “Take the stairs instead of the lift and save X carbon”, “You are working alone in a heated area, move to work nearer colleagues so that heating can be switched off - this action is equivalent to planting two trees”, “Open windows to reduce cooling requirements- this will save the equivalent of three households monthly electricity bills”.</p>

Requirements for Tenant Enablement

Good	Excellent	Exceptional
<p>The landlord has installed displays in common areas which visualize the buildings sustainability performance.</p>	<p>As good. Additionally, the landlord has provided an API, or other method, to allow the tenant to easily integrate the advice functionality into their own workplace solutions.</p>	

Evidence Requirements

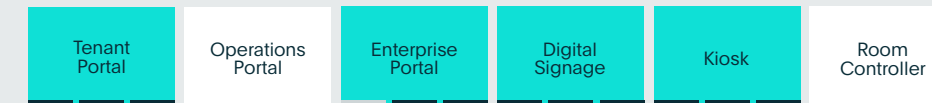
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Focus here will be on smart building integrators, software vendors delivering the visualizations and tips.
- Drawings demonstrating the locations of digital signage / kiosks for data display.
- Drawings demonstrating the coverage of the real time location services solutions to enable the exceptional level of functionality.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

Recommended evidence for occupied projects:

- Pictures and/or screenshot of the user interfaces (web application, mobile application, digital signage) clearly showing visualizations of energy data.
- Videos or voiceovers of the functionality in use at the building in question.

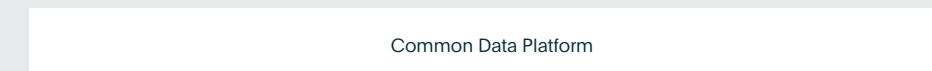
Delivery



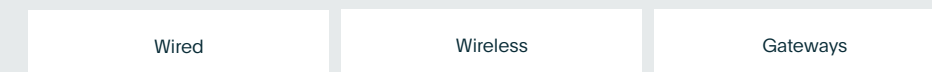
Application



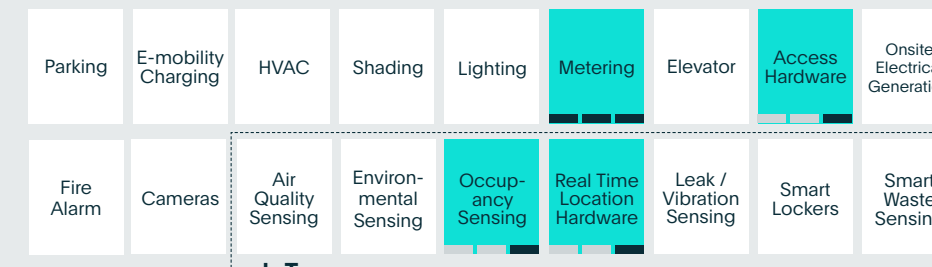
Platform



Network



Device



\*Criteria related systems are advisory only subject to project deployment.

How to read



User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

Innovation Criteria

IN:1
------



**Criteria Description**

The landlord has delivered a solution for tenants to find e-mobility charging points in and around the building.

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

**User Story**

As a Tenant Employee, I want to know if e-Mobility charging is available for a car, or bike or scooter.

**Purpose**

Provide tenants with a solution to find e-mobility charging points in and around the building.

**Problem**

- unable to charge electric car, bike or scooter in or around the building
- lack of visibility on if electric charging bays are free

**Benefits to Users**

- better information on the electric charging options available
- ability to coordinate charging requirements

**Functionality**

**Good**

Tenant employees can access information on the availability of car, bike or scooter charging points in or around the building.

**Excellent**

As good. Additionally, tenant employees have the ability to reserve a charging bay in advance and pay for electricity used where relevant.

**Exceptional**

As excellent. Additionally, tenant employees can arrange their charging to align with demand-response or other green energy initiatives available for their charging requirements.

**Requirements for Tenant Enablement**

**Good**

**Excellent**

**Exceptional**

The landlord has provided an API to allow the tenant to integrate the e-mobility functionality into their own workplace solutions.

**Evidence Requirements**

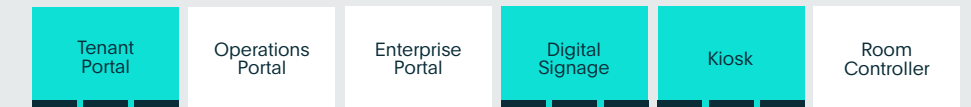
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Documentation demonstrating the building's ongoing energy performance program including targets and methodologies.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, metering providers, energy optimization and reporting software providers.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level(Excellent): Documentation demonstrating how tenant sensing technologies /systems have or could be integrated into the landlord energy optimization.

Recommended evidence for occupied projects:

- Pictures and/or screenshots of the user interfaces (web application, mobile application, or digital signage) clearly showing energy optimization processes.
- Videos or voiceovers of the functionality in use at the building in question.

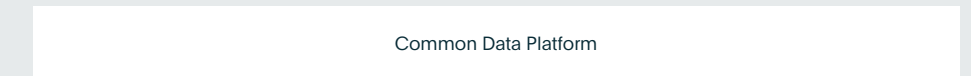
**Delivery**



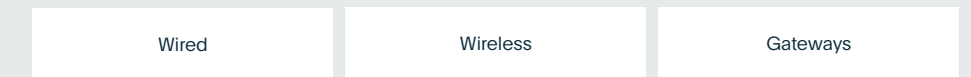
**Application**



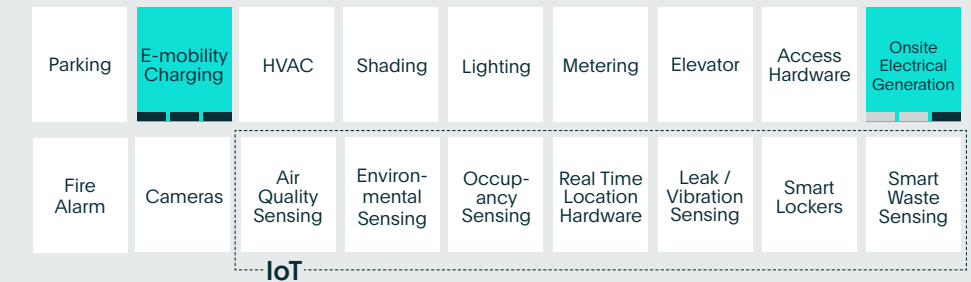
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

The landlord has delivered a simple to use and intuitive solution for tenants to access a range of services offered in and around the building (dry cleaners, car sharing, gym class, food and beverage, cinema, events).

**User Story**

As a Tenant Employee, I want to be able to access and book services in and around the building (dry cleaners, car sharing, gym class, food and beverage, cinema, events).

**Purpose**

Provide tenants with a simple to use and intuitive solution to access the range of services in and around the building (dry cleaners, car sharing, gym class, food and beverage, cinema, events).

**Problem**

- no information provided on what events and services are available in and around the building
- frustration of having to use multiple interfaces to access services and events

**Benefits to Users**

- reduced costs
- reduced carbon footprint
- automation reduces the workload for operators

**Functionality**

<b>Good</b>	<b>Excellent</b>	<b>Exceptional</b>
Tenant employees can access information on events and services in and around the building.	Tenant employees can access information on and book events and services in and around the building.	As excellent. Additionally, Tenant employees are able to pay for relevant services directly via the landlord solution and is able to set preferences or filter the types of events and services they see.

**Requirements for Tenant Enablement**

<b>Good</b>	<b>Excellent</b>	<b>Exceptional</b>
Landlord delivered only. Award full implementation as standard.		

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from manufacturers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include tenant engagement app providers, and other software vendors.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

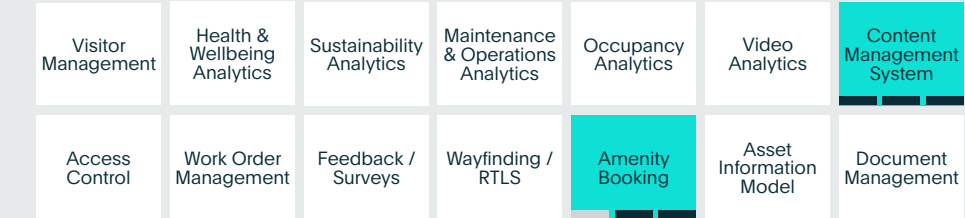
**Recommended evidence for occupied projects:**

- Pictures and/or screenshot of the user interfaces (web application, mobile application or digital signage) clearly showing events, ability to book, and set preferences.
- Videos or voiceovers of the functionality in use at the building in question.

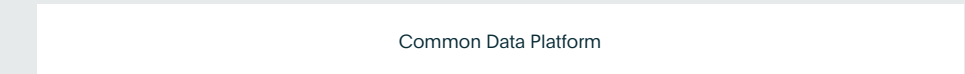
**Delivery**



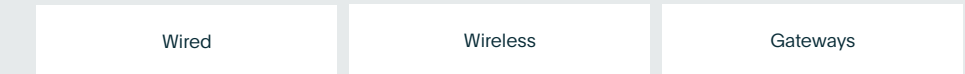
**Application**



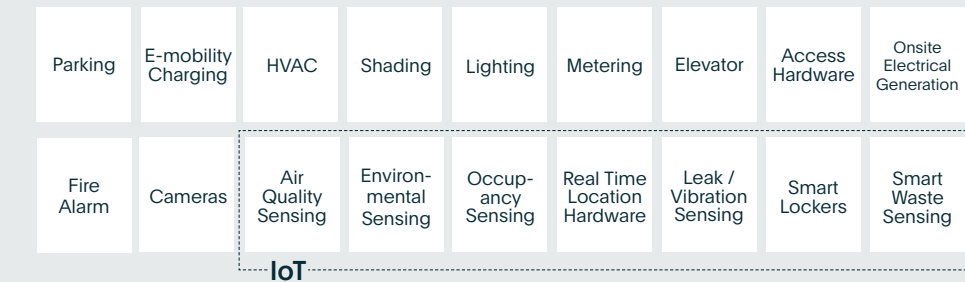
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------



# UF4:2

## Access Local Information

Communities and Services

Credits 2

### Criteria Description

The landlord has delivered a simple to use and intuitive solution for tenants to access information on the building's surrounding (weather, transport, retail).

### User Story

As a Tenant Employee, I want to have information on the building's surrounding (weather, transport, retail).

### Purpose

Provide tenants with a simple to use and intuitive solution to access information on the building's surrounding (weather, transport, retail).

### Problem

- unaware of services and promotions available close to the building
- frustration of having to use multiple interfaces

### Benefits to Users

- local information readily available
- seamless process to save time and drive better engagement

### Functionality

Good

Excellent

Exceptional

Tenant employees can access local information on at least two of the following topics:

- Outdoor Air Quality
- Public Transport Information
- Local Traffic
- Local Retail (Non F&B)
- Routes for Exercise
- Emergency Services
- Public Services (e.g. Post Office)

Tenant employees can access local information on at least two of the following topics:

- Outdoor Air Quality
- Public Transport Information
- Traffic - Local Retail (Non F&B)
- Routes for Exercise
- Emergency Services
- Public Services (e.g. Post Office) and configure preferences to receive updates relevant to them.

Tenant users can access local information on at least four of the following topics:

- Outdoor Air Quality
- Public Transport Information
- Traffic - Local Retail (Non F&B)
- Routes for Exercise
- Emergency Services
- Safety Updates (e.g. Protests)
- Public Services (e.g. Post Office) and configure preferences to receive updates relevant to them.

### Requirements for Tenant Enablement

Good

Excellent

Exceptional

Landlord delivered only. Award full implementation as standard.

### Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from manufacturers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include tenant engagement app providers, and other software vendors.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

#### Recommended evidence for occupied projects:

- Pictures and/or screenshot of the user interfaces (web application, mobile application, or digital signage) clearly showing the availability of local information i.e. travel, weather, local services.
- Videos or voiceovers of the functionality in use at the building in question.

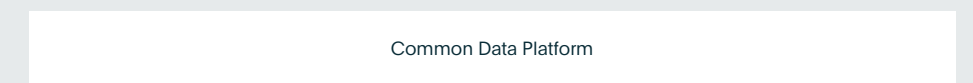
### Delivery



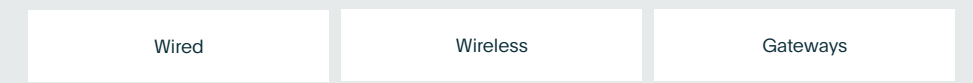
### Application



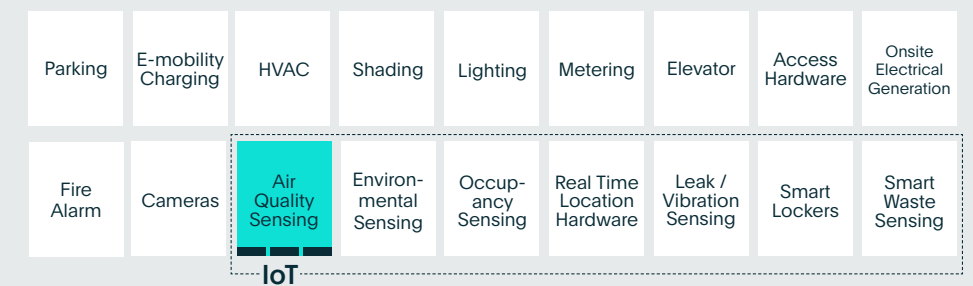
### Platform



### Network



### Device



\*Criteria related systems are advisory only subject to project deployment.

### How to read



### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
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# UF4:3 Delivery Management

Communities and Services

Credits 2

## Criteria Description

The landlord has delivered a simple to use and intuitive solution for tenants and building operators to seamlessly manage deliveries to the building.

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

## User Story

As a Tenant Employee, or member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want a seamless way to receive and manage deliveries (mail, food, packages) in the building.

## Purpose

Provide tenants and building operators with a seamless solution to receive and manage deliveries (mail, food, packages) in the building.

## Problem

- worry of items being misdelivered or stolen
- lack of information on when delivery has been made or to whom

## Benefits to Users

- not having to worry about receiving a delivery
- better visibility on the status of deliveries

## Functionality

Good

Tenant employees are notified that a delivery has been received by the building for them.

Excellent

Tenant employees are notified that a delivery has been received by the building for them including all of the following delivery details:

- Time of Arrival
- Receiving Building Operator
- Package Description / Photo

Exceptional

As excellent. Additionally, tenant employees are provided with automated secure access to a parcel storage facility where they can collect their delivery at a time which suits them.

## Requirements for Tenant Enablement

Good

Tenant employees are able to request information / arrange collection for parcel delivery from the responsible operational user.

Excellent

Exceptional

The landlord has provided an API for the tenant to integrate the delivery services functionality into their own workspace solutions.

## Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include delivery management software providers, tenant engagement app providers, smart locker providers, and other software vendors.
- Implementation level: Documentation and / or screenshots describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

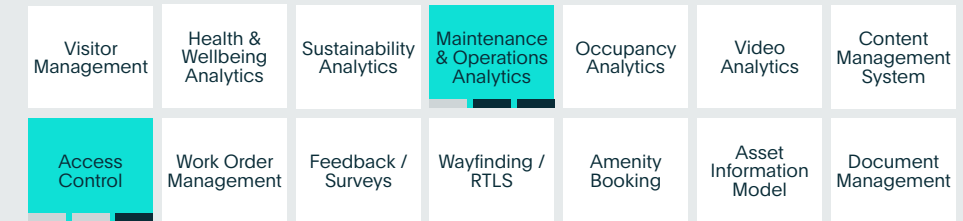
### Recommended evidence for occupied projects:

- Pictures and/or screenshot of the user interfaces (web application, mobile application, or digital signage) clearly showing a delivery management interface with information held for the user.
- Videos or voiceovers of the functionality in use at the building in question.

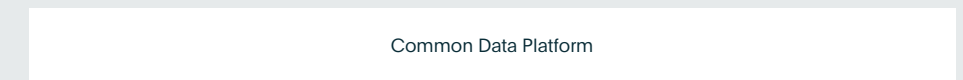
## Delivery



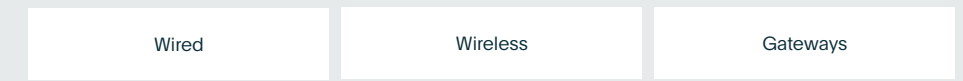
## Application



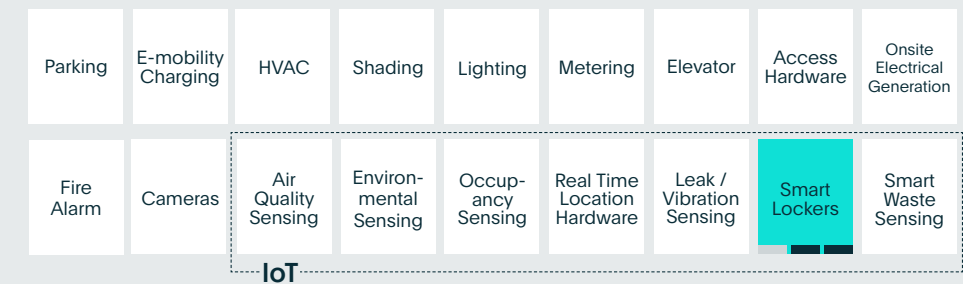
## Platform



## Network



## Device



\*Criteria related systems are advisory only subject to project deployment.

## How to read



## User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

## Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

## Innovation Criteria

IN1:1
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# UF4:4

## Amenity Space Booking

Communities and Services

Credits 4

### Criteria Description

The landlord has delivered a solution for tenants to book and check-in automatically to shared amenity spaces (parking garage, bike space, end of trip, shared workspaces, auditoriums and other shared space types).

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

### User Story

As a Tenant Employee, I want to find, know when free, book and check-in automatically to shared amenity spaces (car park, bike space, end of trip, shared workspaces, auditoriums and other shared space types).

### Purpose

Provide tenants with a centralized solution to book and check-in automatically to shared amenity spaces provided centrally by the landlord for use of all tenants (car park, bike space, end of trip, shared workspaces, auditoriums and other shared space types).

### Problem

- time is wasted having to find amenity space
- worry that a space wont be available
- no information on real use of the amenity

### Benefits to Users

- save time organizing my day
- not having to worry about finding a space
- better use of space

### Functionality

Good

Excellent

Exceptional

Tenant employees can see availability of at least two types of shared amenity spaces including, but not limited too the following:

- car parking spaces
- bike parking spaces
- end of trip facilities
- shared workspaces

Tenant employees are able to remotely make and manage bookings.

Tenant employees can see availability of at least two types of shared amenity spaces including, but not limited too the following:

- car parking spaces
- bike parking spaces
- end of trip facilities
- shared workspaces

Tenant employees are able to remotely make and manage bookings. Additionally, the system is able to identify no shows and free booked amenity spaces when they occur.

As excellent. Additionally, the booking system learns tenant employees booking patterns and can provides suggestions for repeat bookings or makes them automatically on the tenant employees behalf.

### Requirements for Tenant Enablement

Good

Excellent

Exceptional

Landlord delivered only. Award full implementation as standard.

### Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, work order management system providers, tenant engagement app providers, and other software vendors.
- Reporting examples or descriptions of reporting intention which covers feedback collected and how it is intended to be used.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

#### Recommended evidence for occupied projects:

- Pictures and/or screenshot of the user interfaces (web application, mobile application, or digital signage) clearly showing the ability to create tickets with metadata i.e. location, image, issue type etc. Plus operational view of tickets within work order management interface.
- Videos or voiceovers of the functionality in use at the building in question.

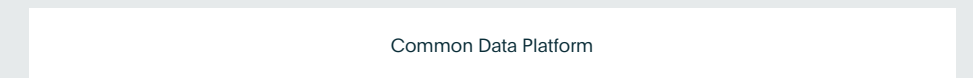
### Delivery



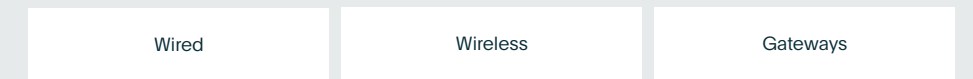
### Application



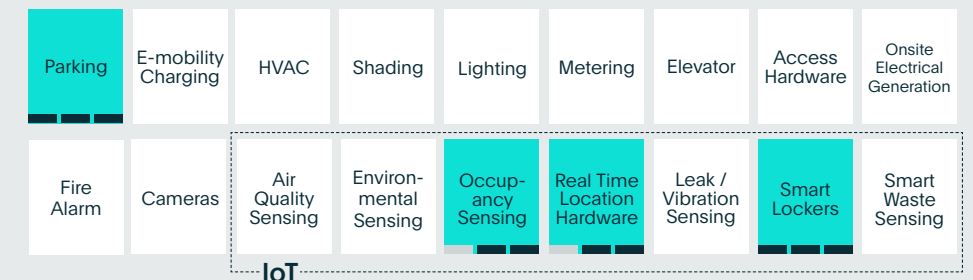
### Platform



### Network



### Device



\*Criteria related systems are advisory only subject to project deployment.

### How to read



### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
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**Criteria Description**

The landlord has delivered a simple to use and intuitive solution for tenants and building operators to provide, analyze and respond to feedback and suggestions on how the building's experience could be improved.

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

**User Story**

As a Tenant Employee I want to provide feedback and suggestions.

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want to respond and analyze feedback and suggestions.

**Purpose**

Provide tenants with a simple to use and intuitive solution to provide feedback and suggestions and for the building's operators to analyze and respond to.

**Problem**

- frustration that my voice is not being heard
- struggling to understand user needs
- incorrect prioritization between needs and planned improvements

**Benefits to Users**

- increased user satisfaction
- appropriate prioritization of building roadmap updates

**Functionality**

Good	Excellent	Exceptional
Tenant employees can issue feedback on at least two of the following topics including: - Comfort - Building Operations - Amenities / Services Available - Events - User Experience	As good. Additionally, tenant employees receive updates on improvements that are being made based on feedback submitted. Members of the building operations team are provided with specific feedback reports based on their area of operational responsibilities e.g. Maintenance, Reception, Gym, Events.	As excellent. Additionally, tenant employees are able to view building feedback trends including ratings of specific services, areas, and other user experience elements. Providing feedback is rewarded to promote additional feedback generation.

**Requirements for Tenant Enablement**

Good	Excellent	Exceptional

Landlord delivered only. Award full implementation as standard.

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, work order management system providers, tenant engagement app providers, and other software vendors.
- Reporting examples or descriptions of reporting intention which covers feedback collected and how it is intended to be used.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshots of the user interfaces (web application, mobile application, or digital signage) clearly showing energy optimization processes.
- Videos or voiceovers of the functionality in use at the building in question.

**Delivery**

Tenant Portal	Operations Portal	Enterprise Portal	Digital Signage	Kiosk	Room Controller
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**Application**

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

**Platform**

Common Data Platform
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**Network**

Wired	Wireless	Gateways
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**Device**

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	<b>UF4:5</b>	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

The landlord has delivered a solution for tenants and building operators to track and optimize the buildings cleaning in real time.

The landlord has enabled tenants to integrate the solution into their own workplace solutions and extend it to include their own space.

**User Story**

As a Tenant Employee I want to provide feedback and suggestions.

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want to respond and analyze feedback and suggestions.

**Purpose**

Provide tenants and building operators with a solution to track and optimize the building's cleaning in real time.

**Problem**

- resource wasted cleaning areas that don't require cleaning
- frustration that its too difficult to report problems
- worry that an unsafe or unclean area is not being dealt with
- no information on equipment usage and level of cleaning

**Benefits to Users**

- improve efficiencies in cleaning schedules
- time saved in reporting and tracking outcomes of requests
- provide a safer and cleaner environment

**Functionality**

Good	Excellent	Exceptional
<p>At least one member of the building operations team can view the historic and upcoming cleaning schedule in shared spaces including all of the following:</p> <ul style="list-style-type: none"> <li>- Shared Workspaces</li> <li>- Bathrooms</li> <li>- Showers and End of Trip Facilities</li> </ul>	<p>At least one member of the building operations team and can view the historic and upcoming cleaning schedule in shared spaces including all of the following:</p> <ul style="list-style-type: none"> <li>- Shared Workspaces</li> <li>- Bathrooms</li> <li>- Showers and End of Trip Facilities</li> </ul> <p>Additionally, tenant employees can raise cleaning requests for shared spaces.</p>	<p>As excellent. Additionally, the cleaning schedule is automatically optimized based on any one of the following:</p> <ul style="list-style-type: none"> <li>- Utilization of Shared Spaces (Based on Bookings or Sensor Data)</li> <li>- Priority Level of Raised Cleaning Requests</li> <li>- Building Events Calendar</li> <li>- Fill Sensors (e.g. Waste, Dispensers)</li> </ul>

**Requirements for Tenant Enablement**

Good	Excellent	Exceptional
<p>At least one member of the tenant real estate team has the ability to request the historic and upcoming cleaning schedule for shared spaces from the building operations team.</p>	<p>Landlord has provided an API to allow the tenant to integrate cleaning data and feedback functionality into their own workplace solutions.</p>	<p>As excellent. Additionally, the landlord has demonstrated the cleaning systems ability to onboard data from tenant area sensing technologies into their cleaning platform.</p>

**Evidence Requirements**

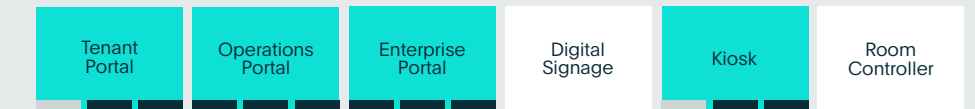
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Drawings from manufacturers / designers demonstrating the coverage of occupancy / access control / location services solutions which provides data on live usage to inform cleaning schedules.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, work order management system providers, software providers, and sensor manufacturers.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level(Excellent): Documentation demonstrating how tenant sensing technologies /systems have or could be integrated into the landlord energy optimization.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshot of the user interfaces (web application, mobile application, or digital signage) clearly showing cleaning schedules visible, interaction with occupancy / frequency of use data, and the ability to raise cleaning tickets.
- Videos or voiceovers of the functionality in use at the building in question.

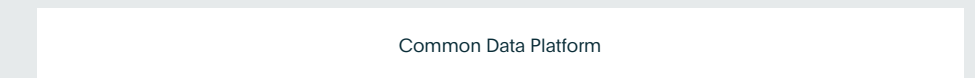
**Delivery**



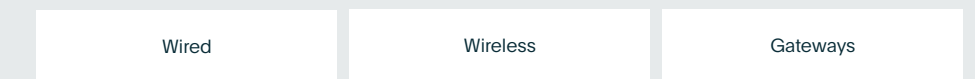
**Application**



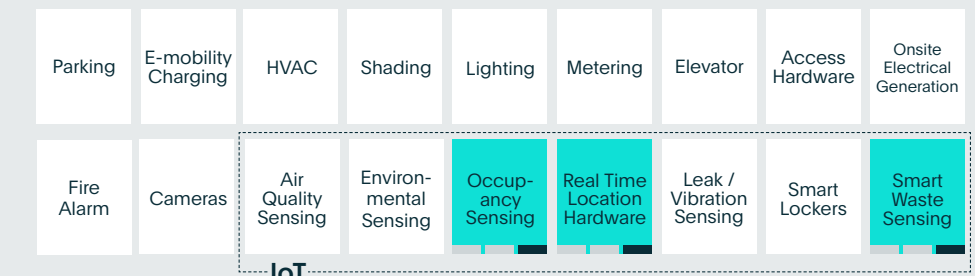
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	<b>UF5:1</b>	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------



Criteria Description

The landlord has delivered a solution for building operators to track and report accurately on the building's maintenance costs.

User Story

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want to have visibility of and report on maintenance costs

Purpose

Provide building operators with a solution to track and report accurately on the building's maintenance costs.

Problem

- no accurate real time tracking of maintenance costs
- no ability to track improvements against a baseline

Benefits to Users

- visibility on maintenance costs
- tracking of improvements
- peace of mind that costs are appropriate

Functionality

Good

Excellent

Exceptional

At least one member of the building operations team can access current and historic maintenance cost reports for the building including a breakdown for:  
 - Common area costs  
 - Repairs and servicing

At least one member of the building operations team can access current and historic maintenance cost reports for the building including a breakdown for:  
 - Common area costs  
 - Repairs and servicing  
 Broken down type of maintenance work and including trend reporting.

As excellent. Additionally, historic maintenance costs are used to support prioritization of future maintenance work and factor into work order management.

Requirements for Tenant Enablement

Good

Excellent

Exceptional

Landlord delivered only. Award full implementation as standard.

Evidence Requirements

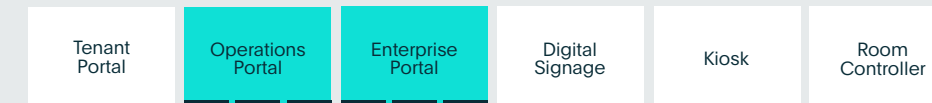
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include operations software vendors and FM contractors.

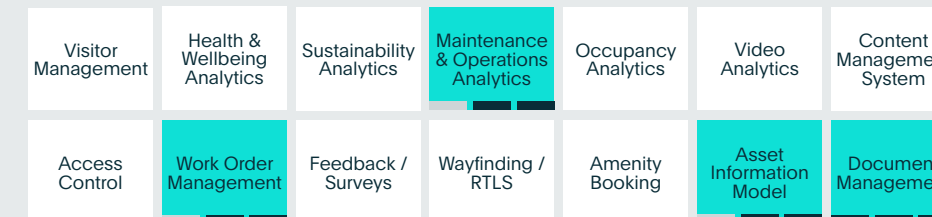
Recommended evidence for occupied projects:

- Functional description and/or screenshot of the user interfaces (software, web application, or mobile application) clearly showing reporting of building maintenance activities with varying levels of granularity depending on functionality level.
- Videos or voiceovers of the functionality in use at the building in question.

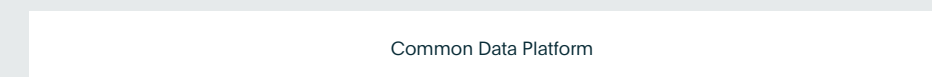
Delivery



Application



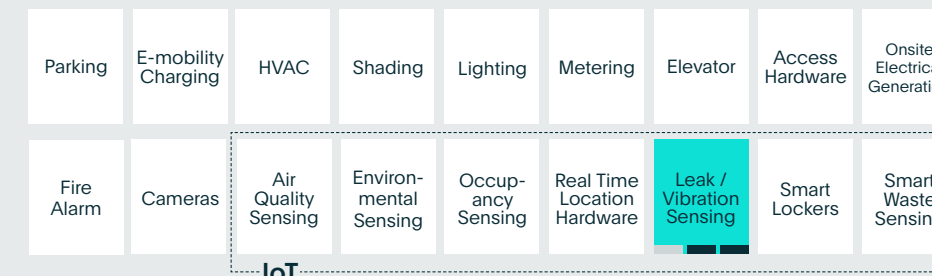
Platform



Network



Device



\*Criteria related systems are advisory only subject to project deployment.

How to read



User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

Innovation Criteria

IN1:1
-------

**Criteria Description**

The landlord has delivered a centralized solution for tenants and building operators to be alerted in real time when a building system fails.

The landlord has enabled tenants to integrate the solution into their own workplace solutions and extend it to include their own space.

**User Story**

As a Tenant Employee, Tenant Real Estate Team, member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want to be alerted of system failures relevant to me.

**Purpose**

Provide tenants and building operators with a centralized solution to be alerted in real time when a building system fails.

**Problem**

- delays caused between fault, investigation/diagnosis and resolution
- problems occur without notification
- inefficient building operations

**Benefits to Users**

- building maintenance schedules can be adjusted to optimize effectiveness
- real time information on system status
- building systems uptime and performance is maximized

**Functionality**

**Good**

At least one member of the building operations team can receive notification of faults with core buildings systems in a consistent format. At least one member of the tenant real estate team receives notification of relevant outages which will impact their organizations working day.

**Excellent**

As good. Additionally, the system learns the priority of any given alert, based on previous interaction of the building operations team. Low priority alarms no longer notify the building operations team.

**Exceptional**

As excellent. Additionally, tenant employees directly receive notifications of relevant outages which will impact their working day.

**Requirements for Tenant Enablement**

**Good**

At least one member of the tenant real estate team receives email / text updates when systems which will impact their organization's working day fail.

**Excellent**

**Exceptional**

The landlord has provided an API for the tenant to integrate the notification of outages functionality into their own workplace solutions.

**Evidence Requirements**

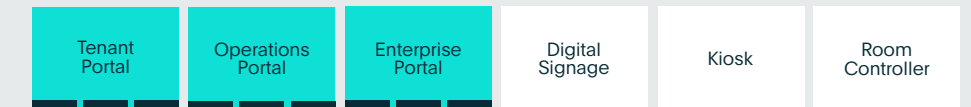
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, smart building platforms, work order management / CAFM providers, and other software vendors.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

**Recommended evidence for occupied projects:**

- Screenshots of the user interfaces (software, web application, or mobile application) clearly showing notifications sent, can also be email / text, when an issue occurs. Evidence of prioritization and centralized 'Single Pane of Glass' view of systems required for excellent and exceptional respectively.
- Videos or voiceovers of the functionality in use at the building in question.

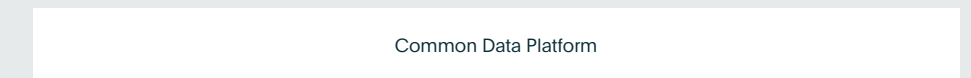
**Delivery**



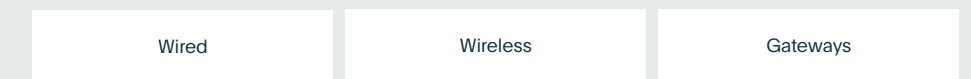
**Application**



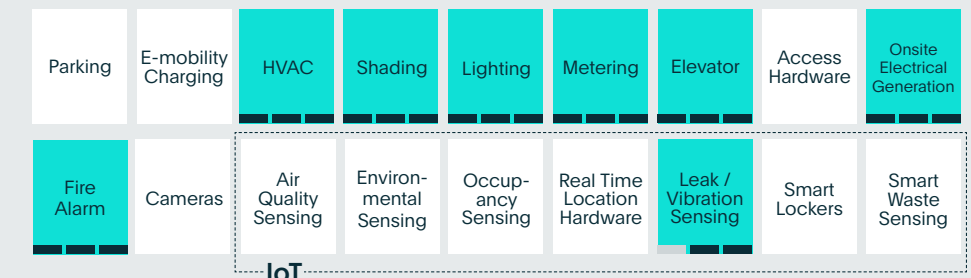
**Platform**



**Network**



**Device**



\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	<b>UF5:3</b>	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

The landlord has delivered a centralized solution for tenants and building operators to raise, track, dispatch, and follow up on maintenance and issues related to the building.

The landlord has enabled tenants to integrate the solution into their own workplace solutions and extend it to include their own space.

**User Story**

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, or Tenant Employee I want to be able to raise, track, dispatch and follow up on issues.

**Purpose**

Provide tenants and building operators with a centralized solution to raise, track, dispatch, and follow up on maintenance and cleaning issues related to the building.

**Problem**

- dissatisfaction that requests are not being processed
- no information available on maintenance work that is underway
- no clear tracking of cost and effort required to maintain the building
- lack of ability to track work order progress and responsibilities

**Benefits to Users**

- better visibility of schedule of work for all users
- time saved tracking and organizing work
- better working environment for all users

**Functionality**

Good	Excellent	Exceptional
<p>All members of the building operations team can submit maintenance tickets when they identify an issue. Tickets have relevant metadata including at least three of the following:</p> <ul style="list-style-type: none"> <li>- Issue Type</li> <li>- Location</li> <li>- Description</li> <li>- Priority</li> </ul>	<p>All members of the building operations team and tenant employees can submit maintenance tickets when they identify an issue and be provided with updates on the resolution of the issue. Tickets have relevant metadata including at least three of the following:</p> <ul style="list-style-type: none"> <li>- Issue Type</li> <li>- Location</li> <li>- Description</li> <li>- Priority</li> </ul>	<p>As excellent. Additionally, members of the building operations team are assigned to issues automatically for resolution based on their location, skillset, and the issue's priority.</p>

**Requirements for Tenant Enablement**

Good	Excellent	Exceptional
<p>The tenant real estate team can request reports on the maintenance issues logged from the building operations team.</p>	<p>The landlord has provided an API to allow the tenant to integrate the ticketing functionality into their own workplace solutions.</p>	

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, work order management system providers, tenant engagement app providers, and other software vendors.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshot of the user interfaces (web application, mobile application or digital signage) clearly showing the ability to create tickets with metadata i.e. location, image, issue type etc.
- Videos or voiceovers of the functionality in use at the building in question .

**Delivery**

Tenant Portal	Operations Portal	Enterprise Portal	Digital Signage	Kiosk	Room Controller
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**Application**

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

**Platform**

Common Data Platform
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**Network**

Wired	Wireless	Gateways
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**Device**

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

Criteria Description

The landlord has delivered a solution for the building's systems to self-diagnose faults as they occur and reduce disruption to tenants.

User Story

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want systems to self-diagnose and reduce my workload in identifying the root cause of faults.

Purpose

Provide building operators with a solution for the building system's to self-diagnose faults as they occur and reduce disruption to tenants.

Problem

- systems faults not addressed due to the frequency of occurrence
- difficulty in diagnosing faults and identifying remedial action
- system maintenance agreements not adhered to
- disruption and cost of resolving faults

Benefits to Users

- reduced disruption to end users
- cost savings
- confidence that best practice measures are being undertaken
- peace of mind that systems are operating as expected

Functionality

Good

Excellent

Exceptional

At least one member of the building operations team is made aware of any faults detected by the FDD across all building systems.

At least one member of the building operations team is made aware of any faults detected by the FDD across all building systems. Additionally, at least one member of the building operations team is presented with suggested actions for resolving the detected fault.

As excellent. Additionally, the system can implement relevant fault resolution actions automatically without approval from the building operations team.

Requirements for Tenant Enablement

Good

Excellent

Exceptional

Landlord delivered only. Award full implementation as standard.

Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Description and schematics of the building's systems e.g. HVAC, lighting, lifts. These should clearly demonstrate how they will integrate to the FDD solution.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, work order management system providers, and maintenance and operations software providers.

Recommended evidence for occupied projects:

- Pictures and/or screenshot of the user interfaces (web application, mobile application, or digital signage) clearly showing reporting of test-failures, evidence must be provided that these tests were system initiated rather than by operations staff. For exceptional demonstration of recommendations made.
- Videos or voiceovers of the functionality in use at the building in question .

Delivery

Tenant Portal	Operations Portal	Enterprise Portal	Digital Signage	Kiosk	Room Controller
---------------	-------------------	-------------------	-----------------	-------	-----------------

Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

Platform

Common Data Platform
----------------------

Network

Wired	Wireless	Gateways
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Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

How to read



User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

Innovation Criteria

IN1:1
-------



**Criteria Description**

The landlord has delivered a solution for the building’s systems to predict when a piece of equipment might fail so that maintenance work can be performed before faults occur.

**User Story**

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want predictive maintenance for the building’s systems.

**Purpose**

Provide building operators with a solution for the building’s systems to predict when a piece of equipment might fail so that maintenance work can be performed before faults occur.

**Problem**

- time and money wasted by servicing to schedule instead of need
- insufficient servicing causing disruption and frustration
- inability to identify patterns and so prevent faults in future
- not adhering to contracted servicing levels

**Benefits to Users**

- reduce disruption to end users
- costs savings
- time saving

**Functionality**

**Good**

**Excellent**

**Exceptional**

At least one member of the building operations team is notified of expected maintenance requirements of individual buildings systems, based on their usage.

At least one member of the building operations team is provided with regular, centralized, reports on the expected maintenance requirements of all the buildings systems. Reports provide insights into when systems are likely to fail, and allow prioritization of predictive maintenance tasks.

As excellent. Additionally, reports provide cost estimates for both system downtime and the cost of the repair, these parameters further factor into the prioritization of predictive maintenance tasks.

**Requirements for Tenant Enablement**

**Good**

**Excellent**

**Exceptional**

Landlord delivered only. Award full implementation as standard.

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Drawings or descriptions of any FM sensing solution deployed and how this factors into predictive maintenance. Examples of sensors may include vibration, leak detection, air quality and occupancy.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, and maintenance and operations software providers.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshot of the user interfaces (web application, mobile application or digital signage) clearly showing reporting of predictive maintenance and recommendations made.
- Videos or voiceovers of the functionality in use at the building in question.

**Delivery**

Tenant Portal	<b>Operations Portal</b>	Enterprise Portal	Digital Signage	Kiosk	Room Controller
---------------	--------------------------	-------------------	-----------------	-------	-----------------

**Application**

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	<b>Maintenance &amp; Operations Analytics</b>	Occupancy Analytics	Video Analytics	Content Management System
Access Control	<b>Work Order Management</b>	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	<b>Asset Information Model</b>	Document Management

**Platform**

Common Data Platform
----------------------

**Network**

Wired	Wireless	Gateways
-------	----------	----------

**Device**

Parking	E-mobility Charging	<b>HVAC</b>	<b>Shading</b>	<b>Lighting</b>	<b>Metering</b>	<b>Elevator</b>	Access Hardware	<b>Onsite Electrical Generation</b>
<b>Fire Alarm</b>	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	<b>Leak / Vibration Sensing</b>	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		<b>UF5:6</b>	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

The landlord has delivered a simple and efficient solution for building operators to manage the security of the building.

**User Story**

As a member of the security team e.g. Security Manager, Security Staff, I want a simple way to manage the security of the building.

**Purpose**

Provide building operators with a simple and efficient solution to manage the security of the building.

**Problem**

- unaware exactly who is in the building
- unable to easily control areas people can access
- conflicting alerts from different security systems

**Benefits to Users**

- ability to address security concerns in real time
- seamless integration between different security systems
- deliver secure workplace to other users

**Functionality**

**Good**

At least one member of the security team can track utilization of all external entry points and receive notification of unauthorized access attempts.

**Excellent**

As good. Additionally, At least one member of the security team can configure, rapidly and on the go, the security settings for each entry point to allow isolation of security threats.

**Exceptional**

As excellent. Additionally, at least one member of the security team receives pre-emptive notifications of unauthorized access attempts based on solutions outside of the access control system. e.g. Camera analytics, glass break sensors.

**Requirements for Tenant Enablement**

**Good**

**Excellent**

**Exceptional**

Landlord delivered only. Award full implementation as standard.

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators describing the functionality level and how it will be achieved.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Drawings from manufacturers / designers covering the CCTV, access control and security sensor locations.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, access control providers, CCTV providers, sensor manufacturers and computer vision / camera analytics providers.

Recommended evidence for occupied projects:

- Pictures and/or screenshot of centralized security interface including, for example, CCTV footage, reporting of alarms, and notification capabilities.
- Videos or voiceovers of the functionality in use at the building in question.

**Delivery**

Tenant Portal	<b>Operations Portal</b>	Enterprise Portal	Digital Signage	Kiosk	Room Controller
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**Application**

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	<b>Occupancy Analytics</b>	<b>Video Analytics</b>	Content Management System
<b>Access Control</b>	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	<b>Asset Information Model</b>	Document Management

**Platform**

Common Data Platform					
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**Network**

Wired	Wireless	Gateways
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**Device**

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	<b>Access Hardware</b>	Onsite Electrical Generation
Fire Alarm	<b>Cameras</b>	Air Quality Sensing	Environmental Sensing	<b>Occupancy Sensing</b>	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	<b>UF6:1</b>
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN:1
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# UF6:2

## Building Utilization

Safety and Security

Credits 4

### Criteria Description

The landlord has delivered a simple to use solution for tenants and building operators to access real time and historic information on building utilization.

The landlord has enabled tenants to integrate the solution into their own workplace solutions and extend it to include their own space.

### User Story

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want to understand how the building and specific spaces are utilized.

### Purpose

Provide tenants and building operators with a simple to use solution to access real time and historic information on building utilization.

### Problem

- lack of information on who is in the building
- no way to measure and make improvements
- safety concerns in the event of an incident/fire
- no way to report on building utilization

### Benefits to Users

- safer building for all users
- streamline response to emergency incidents
- better decisions making and reporting for utilization

### Functionality

Good

Excellent

Exceptional

At least one member of the building operations team is provided with real-time and trend reporting on the number of people in the building.

As good. Additionally, At least one member of the building operations team is able to understand how shared spaces e.g. Lobby, Amenity Spaces, Shared Workspaces; are being utilized based on direct measures of occupancy.

As excellent. Additionally, trend reporting and real-time analysis provide detailed utilization information including both dwell time and the number of unique users.

### Requirements for Tenant Enablement

Good

Excellent

Exceptional

Tenant real estate team are able to request reports (e.g. CSV file) from the operational user detailing building utilization.

The landlord has provided an API to allow the tenant to integrate the building utilization data into their own workplace solutions.

As excellent. Additionally, the landlord has provided suitable network infrastructure for tenants to optionally extend the functionality into their area. Extensions of the functionality are available for purchase directly through the landlord or from a third party solutions provider.

### Evidence Requirements

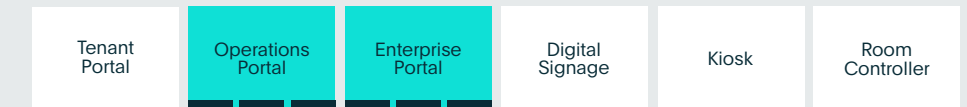
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specification / architectures from designers or smart building integrators for integration of the systems described in the tech stack.
- Drawings from manufacturers / designers covering the occupancy real time location sensing solution. Drawings should demonstrate a granularity of coverage aligned to the functionality level.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include smart building integrators, access control providers, sensor manufacturers, and computer vision / camera analytics providers.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.
- Implementation level(Excellent): Documentation demonstrating how tenant sensing technologies /systems have or could be integrated into the landlord energy optimization.

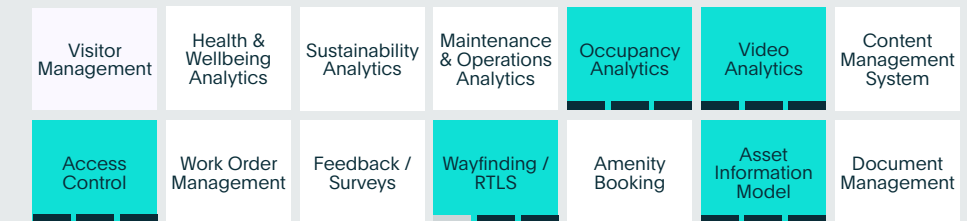
#### Recommended evidence for occupied projects:

- Pictures and/or screenshot of centralized reporting / dashboarding providing an overview of building utilization as described by the functionality level.
- Videos or voiceovers of the functionality in use at the building in question .

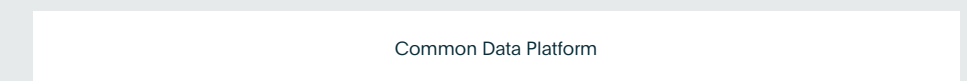
### Delivery



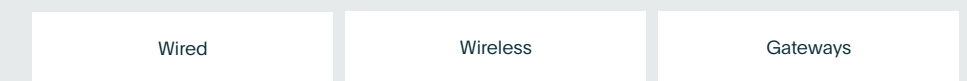
### Application



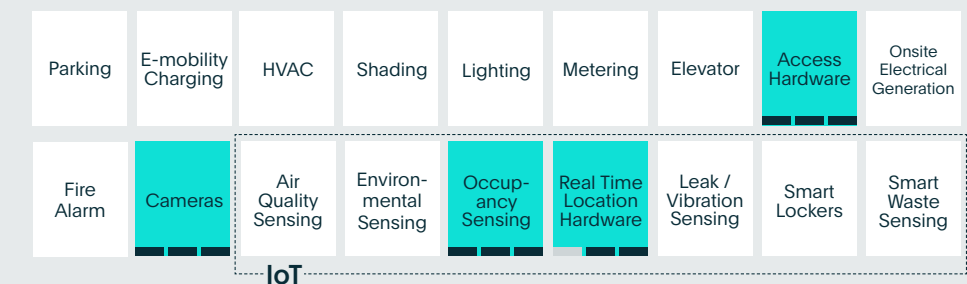
### Platform



### Network



### Device



\*Criteria related systems are advisory only subject to project deployment.

### How to read



### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN:1
------



### Criteria Description

The landlord has delivered a centralized solution for tenants and building operators to manage the on-going compliance of the building.

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

### User Story

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want a centralized management of my building's compliance documents.

### Purpose

Provide tenants and building operators with a centralized solution to manage the on-going compliance of the building.

### Problem

- large number of documents in stored in different locations and methods
- manual reporting, checks and inspection processes
- little visibility on overall policies and actions that need to be run

### Benefits to Users

- time saved finding and sharing documents
- time saved on incident reporting, compliance checks and inspections
- accountability and traceability on actions and follow up

### Functionality

**Good**

At least one member of the building operations team can access compliance management documentation including at least two of the following:

- Operation and maintenance manual
- Regulatory inspection reports
- Safety protocols
- Risk assessments from a centralized source

**Excellent**

As good. Additionally, at least one member of the building operations team is notified when documents are updated or additional material has been added.

**Exceptional**

As excellent. Additionally users can complete compliance-related actions, such as submitting data for regulatory checks.

### Requirements for Tenant Enablement

**Good**

The tenant real estate team is able to request compliance documents from the building operations team.

**Excellent**

The tenant real estate team has full access to compliance documents at all times either via their own login to the landlord portal or through an API allowing extraction of documents and reporting functionality into their own workplace solutions.

**Exceptional**

### Evidence Requirements

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical documentation / architecture from designers detailing the functionality to be delivered by the software solution eg <https://www.bureauveritas.co.uk/building-in-one>.
- Signed vendor proposals or contracts describing the functionality level. These will likely come through the solutions provider i.e. document management system, or through a party which operates the building i.e. the FM company.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

Recommended evidence for occupied projects:

- Pictures and / or screenshot of the document management system plus notifications received when documents are updated - notifications may be email / text / app based.
- Videos or voiceovers of the functionality in use at the building in question.

### Delivery

Tenant Portal	<b>Operations Portal</b>	<b>Enterprise Portal</b>	Digital Signage	Kiosk	Room Controller
---------------	--------------------------	--------------------------	-----------------	-------	-----------------

### Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	<b>Document Management</b>

### Platform

Common Data Platform
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### Network

Wired	Wireless	Gateways
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### Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

### How to read



### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	<b>UF6:3</b>
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
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# UF6:4

## Emergency Alerts

Safety and Security

2

### Criteria Description

The landlord has delivered an efficient solution for tenants and building operators to be informed of potential security and health risks in the building and surrounding area.

The landlord has enabled tenants to integrate the solution into their own workplace solutions.

### User Story

As a Tenant Employee, or member of the building operations team e.g. Security Manager, Property Manager, Asset Manager, Facility Manager, I want to be alerted of potential security and health risks in the building and surrounding area.

### Purpose

Provide tenants and building operators with an efficient solution to inform building users of potential security and health risks in the building and surrounding area.

### Problem

- poor awareness of emergencies in and around the building
- time wasted understanding the situation rather than reacting
- non optimized evacuation notification and procedures
- concerns about ability to safely and quickly evacuate the building

### Benefits to Users

- awareness of emergencies and speed of response
- safer environment for all users
- better communication and information on evacuation processes

### Functionality

Good

At least one member of the building operations team is provided with real-time emergency notifications on at least three of the following:

- Security Breach / Break-in
- Terrorism / Shooting
- Fire
- Gas / Hazard Leaks
- Disaster / Weather Warnings
- Local Events (Violent Protests, Police Chase etc.).

Excellent

As good. Additionally, tenant employees receive emergency notifications in real-time and, where a public address system is present, emergencies are broadcast through the building public address system.

Exceptional

As excellent. Additionally, tenant employees are issued with guidance on appropriate action as part of the emergency notifications received. Where evacuation is required, the notifications contain information on dynamic evacuation routes which are further supported by dynamic emergency signage / lighting.

### Requirements for Tenant Enablement

Good

The building operations team trigger traditional alerting features i.e. fire alarms where evacuation is required. Where it is not required i.e. Violent Protests outside, the building operations team manually issue warnings to the tenant real estate team for distribution to tenant employees.

Excellent

The landlord has provided an API for tenants to integrate the emergency notification functionality into their own workspace solutions.

Exceptional

As excellent. Additionally, the landlord has extended the dynamic emergency signage / lighting solutions into the tenant area as standard. Where these solutions are not implemented in the building, award implementation according to excellent level.

### Evidence Requirements

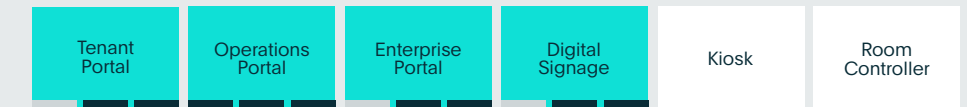
The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical documentation / architecture from designers detailing the functionality to be delivered by the software solution.
- Block diagram / topology clearly showing how the integration of systems to deliver the functionality will take place.
- Specifications of the building alarm system including its ability to control, issue notifications, and extract data from other systems to inform evacuation e.g. occupancy sensing.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include fire alarm system providers, sensor manufacturers and smart building integrators.
- Implementation level: Documentation and / or screengrabs describing the tenant integration interface e.g. API Documentation. References to the existence of APIs for integration are also accepted.

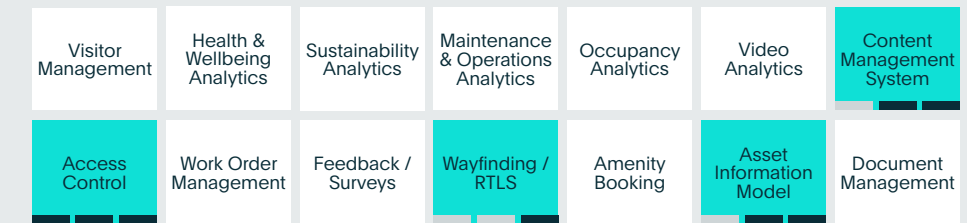
Recommended evidence for occupied projects:

- Pictures and/or screenshots of the central alarm monitoring statuses and reporting on evacuation success.
- Videos or voiceovers of the functionality in use at the building in question.

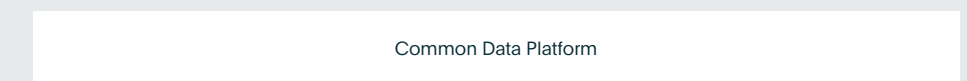
### Delivery



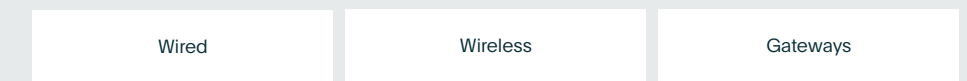
### Application



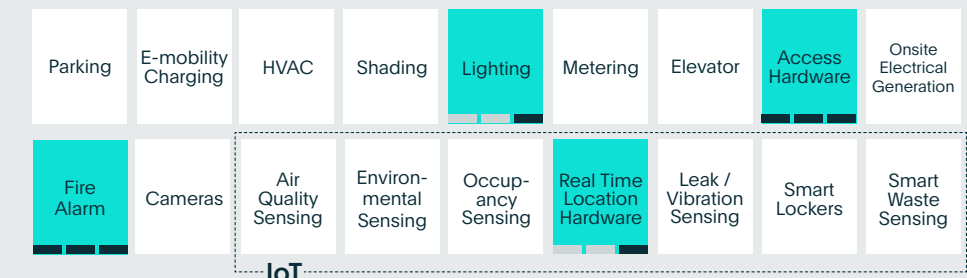
### Platform



### Network



### Device



\*Criteria related systems are advisory only subject to project deployment.

### How to read



### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
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**Criteria Description**

The landlord has delivered a simple to use and efficient solution for building operators to manage third party access to the building safely.

**User Story**

As a member of the building operations team e.g. Property Manager, Asset Manager, Facility Manager, I want track and manage third party access to the building.

**Purpose**

Provide building operators with a simple to use and efficient solution to manage third party access to the building safely.

**Problem**

- time delay in organizing permits to work
- no realtime information on ongoing potentially hazardous work
- archaic and lengthy process to perform verification of security certificates of personnel and delivery

**Benefits to Users**

- real time information on contractors on site
- centralized storage of information and documentation of contracting work
- risk of incidents is reduced

**Functionality**

**Good**

**Excellent**

**Exceptional**

At least one member of the building operations team can create and distribute work permits to third parties ahead of their arrival to the building. 3rd Parties obtain an access pass upon arrival.

At least one member of the building operations team can create and distribute work permits to third parties ahead of their arrival to the building and coordinate all third-party access remotely to minimize disruption.

As excellent. Additionally, operational users can securely run management processes ahead of arrival on at least 2 of the following:  
 - Risk assessments  
 - Access requirements  
 - Scope of work  
 - Compliance  
 Certification management can be completed, stored, and communicated appropriately prior to third-party access commencing.

**Requirements for Tenant Enablement**

**Good**

**Excellent**

**Exceptional**

Landlord delivered only. Award full implementation as standard.

**Evidence Requirements**

The compliance to a user story can be justified by a selection of the following project specific documents:

- Technical specifications from designers or smart building integrators describing the functionality level and how it will be achieved.
- Signed vendor proposals or contracts describing the functionality level. Likely vendors include CAFM / Work order management system providers, app providers, smart building integrators, and other software vendors.

**Recommended evidence for occupied projects:**

- Pictures and/or screenshots of the third-party access interfaces (web application, mobile application) showing the ability to associate work orders with access rights for 3rd parties.
- Videos or voiceovers of the functionality in use at the building in question.

**Delivery**

Tenant Portal	<b>Operations Portal</b>	Enterprise Portal	Digital Signage	<b>Kiosk</b>	Room Controller
---------------	--------------------------	-------------------	-----------------	--------------	-----------------

**Application**

<b>Visitor Management</b>	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
<b>Access Control</b>	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	<b>Document Management</b>

**Platform**

Common Data Platform
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**Network**

Wired	Wireless	Gateways
-------	----------	----------

**Device**

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	<b>Access Hardware</b>	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

\*Criteria related systems are advisory only subject to project deployment.

**How to read**



**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	<b>UF6:5</b>
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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# Physical diversity of tenant connectivity routes

Tenant Digital Connectivity

1

Provision of two or more diverse riser locations and two or more points of entry. Risers must be separated by at least 5m and points of entry by at least 7m.

### Purpose

Ensure tenant smart workplace solutions can be enabled via a resilient and reliable internet connection protected from single points of failure in the as they are routed through the building.

### Problem

Connectivity services with single points of failure are vulnerable to damage due to single events.

### Benefit to Users

Diverse points of entry enable physical separation of wired connectivity services, improving the resiliency of business-critical services to tenants.

The physical separation can protect against a variety of external factors, including maintenance works on the street or pavement, excavations at the boundary of the building, construction, fire, flooding and even traffic accidents.

Riser diversity provides a physical separation of incoming services at the riser level, which improves the resiliency of business-critical services to tenants who choose to have diverse connectivity services.



### Credit Allocation

All or nothing. Full credits for buildings that have diverse points of entry separated by 7m or more and diverse telecommunications risers separated by 5m or more.

The diverse risers must serve all tenanted floors.

### Evidence Requirements

Current WiredScore certification report.

Evidence, in the form of plan drawings and/ or section drawings demonstrating:

- location and details of POEs
- internal containment routes to the telecommunications rooms and risers
- riser locations on each floor

Photographic evidence of the diverse routes in place.

### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3

TF2:4	TF3:4
TF2:5	

### Innovation Criteria

IN1:1
-------





# Choice of fiber and fixed wireless service providers

Tenant Digital Connectivity

Credits **1**

### Criteria Description

Presence of a range of fiber and fixed wireless service providers with their equipment in the appropriate landlord areas of the building to enable tenants to get the service they require.

### Purpose

Provide tenants with a range of provider options to base the connectivity requirements of their smart workspace solution on.

### Problem

Building owners and operators who do put the onus of responsibility on the provision of fiber and fixed wireless to a building on to its tenants do not position the building as forward thinking from a connectivity or smart feature perspective.

### Benefit to Users

A range of high-speed service providers in a building enables tenants to:

- implement failover on their connectivity provision
- access services of sufficient bandwidth to meet business needs
- access or develop a resilient service offering
- benefit from a price competitive landscape for services
- access their preferred provider



### Credit Allocation

All or nothing. Full credits for buildings that have at least two different and distinct options for fiber and fixed wireless providers for tenants to chose from.

### Evidence Requirements

Current WiredScore certification report.

A selection of the following evidence items are required:

- photographs of provider equipment
- current or proposed service agreements with providers

### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
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**Criteria Description**

Provision of a functional, secure and safe Wi-Fi service, as a free amenity to tenants and guests.

**Purpose**

Provide tenants and other users with wireless connectivity in common areas so as to be able to interface with the smart building functionality available to them.

**Problem**

Without a dedicated, landlord provided, connectivity service it is not possible to guarantee that users can access the full range of smart building user functionalities available to them in the building.

**Benefit to Users**

Provision of a dedicated means to be connected to the internet through out the building.

**Credit Allocation**

All or nothing. Full credit if Wi-Fi is available in reception/lobby and one other amenity space.

**Evidence Requirements**

Current WiredScore certification report.

A selection of the following evidence items are required:

- design documentation, to support the Wi-Fi service provided in the building, demonstrating Wi-Fi standard and areas of coverage
- Wi-Fi performance report demonstrating Wi-Fi standard and areas of coverage
- RF survey or other maintenance documentation, less than one year old, demonstrating Wi-Fi standard and areas of coverage

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

A platform exists, eg the BMS/BAS/BMCS, for the building that can aggregate information from as well as control the core building systems.

**Purpose**

A centralized platform that can integrate and control building systems ensures operation can be integrated to deliver smart functionality to users.

**Problem**

Without a common interface to work from it is difficult, costly and inefficient to deliver and maintain smart technology outcomes to users of a building.

**Benefit to Users**

The ability to have a unified means to control the core building systems is the starting point to having a scalable way of delivering smart functionality in a building.

**Credit Allocation**

Full credits awarded for a BMS/BAS/BMCS that integrates and provides the following functionality via an industry-standard operational technology protocol:

- Real-time status reporting
- Trend reporting
- Control and command of the systems

**Evidence Requirements**

System block diagram, documentation, specification, commissioning reports, and/or installation/management contracts for the design or implementation of the BMS, BAS, and Energy Management Systems or other operational platform and the communication protocol used.

**Including but not limited to**

- make/model
- systems connected
- asset log
- vendor documentation on the maintenance and management of the system

**Core Systems**

- HVAC
- Power / Metering

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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# TF2:2

## Tenant software platform

Building Systems

Credits **2**

### Criteria Description

A technology enabled interface is available for tenant employees to interact with the features and services of the building.

### Purpose

Ensures there is a method for the majority of users of the building to interact with the services the building provides.

### Problem

Tenants employees are often unaware of the full range of smart building services that are on offer to them.

### Benefit to Users

Having a means for new and existing smart building functionality to be readily presented to tenants and other users of the building enables these features to be utilized.

### Credit Allocation

Full credits awarded for a single building application (mobile app, portal or website) that, via integration with the buildings systems, enables users to interact with the building's services and features.

Partial credit awarded if the building application only provides information on rather than interaction with the building's services or if multiple applications are required.

### Evidence Requirements

Documentation, specification, installation/SaaS contracts, or screenshots of the building application that is in place including:

- Method of use for building users
- Platform / application provider
- Specification on which core and extended building systems it interfaces with
- Whether the system provides information on the building's smart features or enables interaction with these features.

### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
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**Criteria Description**

A platform exists for the building that connects and manages asset and facility data, operational data, and real-time equipment data extracted from different building systems. The platform has the ability to both read and write information, allowing control and optimization of the building systems.

The platform should deliver the following features:

- Performance dashboards to monitor the different aspects of building assets' performance and operations
- Work order management for operational teams
- Document control for updates and compliance

**Purpose**

Integrating previously siloed maintenance and operation systems into a single control center, enables greater transparency of data and subsequently opens new opportunities to drive operational efficiencies.

**Problem**

Building systems operating in control siloes forgo potential operational efficiencies which might be gained from their holistic integration.

**Benefit to Users**

A platform that integrates the buildings siloed maintenance and operations systems into a single operational control center generates transparency and, allows the building to optimize its operational efficiency.

**Credit Allocation**

Full credits awarded for a single software application that can manages at least two of the requirements.

Partial credit awarded if multiple software interfaces are required to achieve management of these features.

**Evidence Requirements**

Documentation, specification, installation/SaaS contracts, or screenshots of the operations platform that is in place including:

- Platform / application provider
- Specification on which core and extended building systems it interfaces with
- The functionality delivered by the operations platform

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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# TF2:4

Extended systems integrated into the operations platform

Building Systems

Credits **1**

## Criteria Description

The operations platform implemented incorporates data from extended systems present in the building. Access to data from all building systems present enables better decision making for the operations team.

## Purpose

A centralized platform that can integrate the full range of building sensing and control systems enables an extended set of smart building functionality to be delivered to all users of the building.

## Problem

Without all systems of a building being connected via a common interface the value of building systems is limited, as is the ability to rapidly implement new smart building functionality.

## Benefit to Users

The full systems capability of the building is available via an open and interoperable method.

## Credit Allocation

Full credits awarded for an operations platform that integrates all the extended systems present in the building.

Partial credit if only a subset of the extended systems present in the building are integrated.

## Evidence Requirements

System block diagram, topology, documentation, specification, commissioning reports, and/or installation/management contracts for the design or implementation of the operations platform which includes reference to extended systems and or services the platform is integrated to.

### Including but not limited to

- Make/model
- systems connected
- asset log
- vendor documentation on the maintenance and management of the system

### Examples of extended systems

- Environmental or wellbeing sensing
- Water management
- Occupancy sensing
- Building transportation
- Fire
- Public address
- Blinds
- Access control
- Security / CCTV
- Booking systems
- e-mobility charging
- Tenant software platform

## User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

## Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3

TF2:4	TF3:4
TF2:5	

## Innovation Criteria

IN1:1
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# TF2:5

## Asset information model

Building Systems

Credits **2**

An asset information model is a single/centralized tool that maps the location and operational status of all the elements of core, and ideally extended, building systems. It's existence enables intergrated management of the building throughout its life.

### Purpose

A centralized asset information model exists to underpin integrated digital design, modeling, construction, commissioning, operation, and retrofit of the building throughout its lifecycle.

### Problem

Without an up to date asset information model the building has no single source of truth for the capture of information, nor its updating, throughout the buildings lifecycle.

### Benefit to Users

A single source of truth exists for all users in a common data environment which underpins a wide range of smart building functionality.

Transparency and availability of critical design, construction, and commissioning information for the effective operation and retrofit of the building.

Enables spatial analysis for software systems delivering smart building functionality.

### Credit Allocation

Full credits awarded for an asset information model which incorporates information beyond as built from the buildings commissioning, systems performance and active users to create an operational digital twin.

Partial credits awarded for an asset information model which utilizes a common data environment and provides adequate detail on the buildings as-built structure, and systems.

### Evidence Requirements

Demonstration of the asset information model via its inclusion in specification, files, or imagery e.g. BIM.

For full credit, the evidence should demonstrate both the presence of an asset information model containing static information e.g. location of walls, mechanical equipment, and dynamic data fed from the smart buildings platforms e.g. flow rates, room temperatures, occupancy.

### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			

TF2:5

### Innovation Criteria

IN1:1

**Criteria Description**

The landlord has delivered a comprehensive integration network infrastructure including the following components:

- Enterprise switch infrastructure connectivity capability with a service agreement or similar in place. Switches have spare capacity
- Integration network accessible to each floor of the building and enabling at minimum 10 Gigabit network connectivity.
- All core and edge equipment housed in secure and dedicated environment that meets vendor required environmental operating conditions, or maintains 0 - 70C and RH of <95% whichever more stringent.

**Purpose**

Key to the implementation of smart building functionality is the active equipment that enables the segmentation and routing of data throughout the building. As such it is paramount that this equipment is fit for purpose and under suitable maintenance schedules.

**Problem**

- If the landlord integration network does not extend to all areas of the building and provide suitable connectivity, end devices may be unable to deliver against their intended functionality
- Lower specification switches may not provide the required network performance and have an unacceptable mean time between failure
- Absence of a switch maintenance support contract may result in unacceptable network downtime and increased cybersecurity risks through failure to update the firmware to current versions
- Core and edge switches may not function properly if the local environmental conditions are outside of vendor recommendations
- Core and edge switches may suffer accidental or malicious damage if not housed in secure accommodation

**Benefit to Users**

- A reliable, resilient, and secure network that allows the efficient monitoring and control of all edge devices and connected systems.
- The building is future proofed to accommodate new smart systems via IP and other interfaces
- The critical components for the distribution of smart building capabilities are located in the best possible environment for their stable and ongoing operation.

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

Partial credit if two or more components are implemented. A partial credit award is worth one credit.

**Evidence Requirements**

Switch specification or switch vendor data sheet along with service / support information.

Landlord network schematic stating which cabling standard has been used for the implementation such as:

- ANSI/TIA-568-D.1
- EN 50173-2 Part 2
- ISO 11801-1

Details of accommodation secure and dedicated building accommodation - environmental enclosure or details of environmental control (heating, cooling, humidity) in telecoms room and risers.

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

An internet connection is in place for the building systems and integration network to connect to with the following minimum capabilities

- At least a 100Mbps symmetric connection
- With automatic failover solution in place to accommodate service level and physical level interruptions
- With dedicated security protocols in place to manage cloud, other third party and remote connections (firewalls or similar)

**Purpose**

Building systems will need to be connected to platforms outside of the building to enable features such as firmware upgrades and remote maintenance, data collection into cloud platform, or remote control.

Therefore it is required that there is a suitable, secure and dedicated internet connection for the building systems to connect to.

**Problem**

The operation, maintenance and feature set of the buildings systems can be limited without appropriate and dedicated internet connectivity.

**Benefit to Users**

- Ability to integrate the buildings systems and smart functionality into remote platforms in a secure and reliable way.
- Additional flexibility in how smart functionality can be implemented.
- Increased reliability of core functionality of the building systems due to remote maintenance.

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Block diagrams, topology, specifications, or other documentation demonstrating how the core building systems are connected to the internet.

Details of the landlord’s internet service along with the security and failover specification.

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	<b>TF3:2</b>	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

The integration network has support for a range IP based open protocols which enable communication between core building automation and control systems and the other components of the smart building stack.

**Purpose**

An integration network utilizing IP based and open protocols is better futureproofed. It has interoperability of systems front of mind and can be serviced flexibly by various organizations.

**Problem**

There are multiple IP based open protocols that are used for smart building systems. The integration network will become the bottleneck for updating and extending smart building functionality if it cannot support a range of these protocols.

**Benefit to Users**

- Increased flexibility in accommodating a wider range of smart edge devices
- Improved future-proofing to accommodate new devices
- Ease and flexibility of system operation, maintenance and, commissioning

**Credit Allocation**

Full credit if the building supports at least three IP based building automation and control protocols.

Partial Credit if the building supports at least two IP based protocols.

**Evidence Requirements**

Specifications, block diagrams, or topology architectures demonstrating the IP-based open protocols used to integrate core building automation and control systems.

Manufacturer / contractor product specifications demonstrating the readiness of installed or specified gateways, controllers, or edge devices used to translate protocols from serial to IP.

Examples of IP based open protocols include, but are not limited to:

- BACnet IP
- MQTT
- Modbus TCP
- DALI over IP (DALI+)
- KNX
- TCP/IP
- RESTful Web Services

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

The landlord has put in place wireless networks dedicated to supporting the internet of things (IoT) and other edge devices. These networks are either in use or enabled for future use by owners or tenants.

**Purpose**

Sensors and edge devices are often installed away from the integration network and need alternative means of connecting back to the other components of the smart building stack.

**Problem**

- Absence of an appropriate wireless network may mean that some edge devices such as IoT devices might not be able to connect to other components of the smart building stack
- The full benefit of the proposed building smart features may not be realized
- Future smart applications may not be able to be connected so easily and cost effectively
- Monitoring and control of IoT devices may be compromised

**Benefit to Users**

A reliable, resilient and secure networks that allows the efficient monitoring and control of all relevant IoT and edge devices.

**Credit Allocation**

Full credit if the building has two dedicated wireless networks for IoT devices, either enabled for readiness or in use.

Partial credit if the building has a single dedicated wireless networks for IoT devices, either enabled for readiness or in use.

**Evidence Requirements**

Landlord systems network specification

Network vendor/provider design solution and heat map demonstrating ubiquitous building coverage.

**Examples of accepted wireless networks include:**

- Bluetooth Mesh
- LPWANs e.g. Sigfox, LORAWan, Narrowband IoT etc.
- Wi-Fi (Minimum Wi-Fi 5 Standard AND must be dedicated VLAN for IoT)
- Cellular

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	<b>TF3:4</b>			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

A smart building vision or strategy in place and used to define the development, delivery and maintenance of smart building functionality.

This plan needs to be made available to all appropriate stakeholders through the building lifecycle.

**Purpose**

Development of smart functionality is a continuous process and therefore having a method for planning and prioritizing how features will be developed is important in continuing to ensure a building delivers on the evolving requirements of its users.

**Problem**

- Without a clear plan in place, decisions on building functionality may be taken in an unstructured manner
- The full potential smart building experience may not be realized, or realized at a later date
- Cost efficiencies may not be fully realized
- The building may not operate as efficiently as possible for the investment committed and future proofing may be reduced

**Benefit to Users**

- Provides a clear strategy to improve the smart building functionality improvements are made in a structured and logical manner.
- Building is more likely to be future proofed in terms of experience, cost efficiencies and sustainability.

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Copy of smart building vision or strategy for the building covering designed outcomes based on the requirements of user groups, and desired outcomes.

AND / OR

Overarching smart vision document for the building with the estimated phasing of feature implementation for at least 6 months into the future.

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

An integration guide exists for the building which provides technical guidance for tenants on integration to landlord systems. The guide provides a central source of documentation for all available tenant integrations.

**Purpose**

The purpose of the guide is to provide a technical single source of truth on integration for smart building functionality into the tenant's own workplace solutions.

**Problem**

- Potential for sub-optimal integration of smart functionality if integration process not clear
- Increased system / data security risks if integration not correctly undertaken
- Tenants will not be able to make full use of the smart features and capabilities in the building that the landlord has enabled
- Tenants may not be able to benefit from the full smart experience that the building is capable of delivering

**Benefit to Users**

- Higher right first time confidence level for extending smart functionality
- Tenants able to benefit from full building smart functionality capability
- Easy integration of building systems monitoring and control within tenant areas
- Tenant full access to the available building data on visitor management, energy usage, compliance documentation and other smart features
- Tenants able to fully benefit from the buildings smart capabilities in terms of experience, efficiencies, sustainability and future applications

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Tenant smart technology integration guide for the building defining which systems and for what functionality integration can be achieved at. The guide should outline the availability for software / API integration with the buildings systems detailing:

- Form of protocol - eg REST, MQTT
- Which building systems can be interfaced
- How the API documentation is made available for integration to third parties

Landlord integration network specification and / or software architecture outlining how tenant integration can be achieved.

Design Brief/Employers Requirements documentation stating requirement for an integration guide.

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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# ⇒ TF4:3

## Smart functionality effectiveness

Governance

Credits **1**

### Criteria Description

One or more success metrics (eg KPIs) defined for the user stories or user story categories that are delivered in the building. Method in place for these success metrics to be monitored against and impact measured via user surveys. Annual feedback review method in place with records kept.

### Purpose

Ensuring that both the smart functionality of a building is meeting user expectations and also that the documented capabilities of the building are reflective of the current state of the building are two key features to ensure a smart building continues to deliver value to all current and future users.

### Problem

- Without any predefined success metrics, it is harder to measure how successful smart building features have been, or to make informed investment decisions on new smart features
- Without any regular user surveys, it is more difficult to assess how well the various smart building functionality elements are performing, from a user experience perspective
- The building may not deliver the full smart functionality that it is capable of

### Benefit to Users

- Allows smart performance of the building to be more accurately assessed
- Improved likelihood that better value investment decisions are made
- Building more likely to achieve experience, cost efficiency and sustainability benefits, rather than Improved user experience
- Regular user surveys enable a landlord to understand what smart building functionality is working well and what is not working so well
- This should lead to an improved overall experience for users in the building

### Credit Allocation

Full credit are awarded if the criteria description is fully met.

### Evidence Requirements

Definition of smart building success metrics for the building, including regular and up-to-date (less than 6 months old) results data. Success metrics might include thresholds for and statistics from interactions with the tenant app, faults raised by FDD etc.

Specification of user surveys that will be undertaken, and example survey document from other buildings where possible.

Design Brief/Employers Requirements documentation stating requirement for a smart building success metrics.

### User Functionality

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

### Technological Foundation

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

### Innovation Criteria

IN1:1
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**Criteria Description**

Building has a standards based cybersecurity policy that covers the building systems and landlord integration network which is in a form that tenants can integrate into their security processes.

**Purpose**

Ensure an all encompassing, top-down, cybersecurity strategy is in place for the smart building’s network and systems. This not only ensures existing smart building functionality is delivered in an appropriate manner but also provides a process for how the implementation of new smart functionality needs to take into account appropriate cybersecurity measures.

**Problem**

- An unstructured approach to managing cybersecurity threats is more likely to result in cybersecurity breaches of the landlord integration network
- Differing levels of protection may be afforded to certain parts of the network, without this being realized
- A higher risk that some components of the network may be more vulnerable to attack than others
- If the building cybersecurity policy is not clearly structured or omits key requirements, tenants may misinterpret information or make assumptions on missing elements, increasing the vulnerability of both the landlord integration network and tenant networks to cybersecurity risks

**Benefit to Users**

- A standards based approach to managing cybersecurity threats should ensure that all areas of the landlord integration network are appropriately and regularly assessed against the appropriate criteria
- Vulnerability risks should be lower and the risk to connected devices minimized
- A clear well structured building cybersecurity policy covering all key requirements, should be easier for tenants to understand and take appropriate implementation measures on their networks, to maintain high standards of cybersecurity

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Copy of a standards based cybersecurity policy for the building.

Expectation is the cybersecurity policy will include how the following areas cybersecurity are addressed:

- Landlord Internet connection
- Building Systems
- Landlord integration network
- Software systems of the building

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

Cybersecurity policy has been applied at a logical level on the Landlord Integration Network and the building systems.

**Purpose**

Validating that the cybersecurity policy has been implemented across the building systems and integration network.

**Problem**

- Potential points of weakness can occur at any point on the landlord Integration network and the gateway devices connected to it
- Failure to apply the cybersecurity policy at a logical level throughout the whole integration network, may result in points of vulnerability and a lower level of cybersecurity
- Failure to apply the cybersecurity policy to all building systems may result in increased vulnerability from potential points of weakness
- Gateway and other edge devices without the appropriate security requirements, may allow unauthorized access to the landlord integration network

**Benefit to Users**

- Implementing the cybersecurity policy in a structured manner at a logical level, will ensure that all areas of potential threat are addressed and appropriate mitigation measures taken, to reduce the vulnerability to cybersecurity attacks
- The building systems will be able to operate fully in the ways intended, avoiding system downtime due to security breaches

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Records, commissioning reports or specification on how the cybersecurity requirements, generally outlined in the cybersecurity policy of the following parts of the building are addressed:

- Landlord Internet connection
- Building Systems
- Landlord integration network
- Software systems of the building

Details of how the cybersecurity policy has been applied at a logical level on the landlord integration network from integrator or manufacturer.

Details, eg system vendor/integrator documentation, on how the cybersecurity policy has been applied to all building systems.

Design Brief/Employers Requirements documentation stating requirement for cybersecurity policy to be applied at a logical level on the landlord integration network.

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	<b>TF5:2</b>	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------



**Criteria Description**

Active cybersecurity testing such as penetration and vulnerability testing undertaken at the commissioning of new features as well as on an ongoing basis across the building systems and integration network at least on an annual frequency.

**Purpose**

Ongoing testing and validation of the cybersecurity performance of the building not only ensures that the implementation of the cybersecurity policy is fit for purpose but also that the building is not at immediate risk of being compromised.

**Problem**

- Although a cybersecurity policy may be in place, if smart systems across the building are not regularly assessed, hardware and software points of weakness may go undetected, increasing vulnerability tests
- Newly installed building systems which may have vulnerability issues, would not be detected
- If regular proactive penetration tests are not undertaken, there will be a lower awareness of any system points of weakness

**Benefit to Users**

- Regular and proactive cybersecurity assessments across all building systems will identify any points of weakness and reduce the likelihood of a cybersecurity breach.
- The building systems will be able to operate fully in the ways intended, avoiding system downtime due to security breaches.

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Schedule of when cybersecurity assessments are undertaken across the smart systems of a building on a regular basis along with Previous reports of cybersecurity assessments that have occurred over the last 12 months.

Design Brief/Employers Requirements documentation stating requirement for proactive cybersecurity assessments are undertaken across the smart systems of a building on a regular basis including when the first test will take place as part of the commissioning process.

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
-------

**Criteria Description**

A defined data ontology is in place for the building to produce a semantic data model. The semantic data model enables current and future analytics applications, as well as interoperability with the buildings surrounding environment.

**Purpose**

The use of a standardized ontology supports the effective lifecycle operations of a building and allows for ease of data access and processing by smart buildings software solutions.

**Problem**

- Lack of structured building data leads to cost overruns and issues in the commissioning process
- Lack of structured building data makes absorption of information by analytics systems difficult or impossible
- Lack of structured building data leads to solutions which carry a poor processing latency and level of security
- Lack of structured building data creates analytics challenges when benchmarking to other buildings or integrating data into systems external to the building

**Benefit to Users**

- Structured data enables analytics stacks which require parent child relationships
- Structured data enabled interoperability between OT systems and IT layer applications

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Technical specifications, commissioning reports or vendor proposals detailing which semantic data ontology is used on the project, examples of application and which building systems will be incorporated into the ontology structure.

Screenshots, videos or other visual evidence of the ontology implemented.

**Examples of common ontologies include:**

- Brick
- Haystack
- RealEstateCore
- Google Digital Buildings Project (BDSN)
- Digital Twins Definition Language (DTDLD)
- Asset Administration Shell (AAS)
- Open Data Protocol

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	<b>TF6:1</b>
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN:1
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**Criteria Description**

Building data is aggregated in a central database utilizing a recognized databasing standard. The data is easily accessible for use by various applications supporting the smart building functionality.

**Purpose**

Ensure the building can produce an accurate, consistent and understandable representation of itself which can be accessed and interpreted by a wide range of users.

**Problem**

- Without a strategy in place for how the data generated in a building is aggregated into a consistent structure the value that can be extracted from this data is limited
- Additionally without a building data structure that is simple, machine processable and interoperable via use of common industry standards the value of the data gathered is diminished

**Benefit to Users**

- The ability to extract the most insight from the data collected from the building
- The ability to aggregate data at a portfolio or smart city level for extended integrations
- The ability to provide a historic data model of the building when considering sale, acquisition or for compliance and insurance purposes

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Specifications, vendor proposals / contracts or architecture diagrams demonstrating where the data will be stored, and which systems data will be included in the storage location.

Screen grabs, videos or other visual evidence of the database in operation including clear view of field names and labels to demonstrate structure.

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

A policy is in place, adhering to national regulations (EU GDPR, PII etc.), and is made available to individuals who use the building and explains the purpose of the data collection.

**Purpose**

Ensure buildings adhere to local regulations on data gathering and sharing and take a proportionate approach to the utilization of sensitive data in delivering smart functionality.

**Problem**

- Defining how user personal information is gathered is a legal obligation in the majority of countries and therefore must be normal practice for smart buildings
- Individuals have growing privacy and data security concerns due to how their information is being gathered and stored

**Benefit to Users**

- Transparency on the way in which individuals data is being used
- Pre-emptive approach on understanding how personal information is being gathered and stored

**Credit Allocation**

Full credit are awarded if the criteria description is fully met.

**Evidence Requirements**

Policy documents or exerts outlining the data management process for data captured from operational technology equipment and network that may contain personal identifiable information.

Availability can be via means such as:

- building website or app
- Identifying the building operations stakeholder that is responsible for the policy
- Integrating it into the tenant O&M manual

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

IN1:1
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**Criteria Description**

Innovation credits are awarded for functionalities, technologies or processes that are not covered already in the SmartScore certification. These innovations need to positively impact the building's ability to deliver optimal outcomes for the users beyond the current, perceived, best in class levels.

**Purpose**

Provide a framework for rewarding forward-thinking landlords who provide added value to their tenants.

**Problem**

There will be some landlord provisions that are not yet captured by the SmartScore certification.

**Benefit to Users**

Enable tenants to achieve optimal functionality in new and novel ways or extend their in-building technology and connectivity capabilities beyond current, perceived, best in class levels.

**Credit Allocation**

A maximum of 5 innovation credits can be awarded for one building. The innovation credits are awarded in addition to the credits received in the remaining criteria. The total number of innovation credits awarded is reflected in the Building Report as part of the SmartScore Certification Package.

**NOTE:** Innovation credits are additional to the 100 credits available through the certification process. However, no building can score more than 100 credits including those awarded from this question.

**Evidence Requirements**

The following evidence items are required:

Submission of Innovation Credits application form by the developer or landlord or their agents

**User Functionality**

UF1:1	UF2:1	UF3:1	UF4:1	UF5:1	UF6:1
UF1:2	UF2:2	UF3:2	UF4:2	UF5:2	UF6:2
UF1:3	UF2:3	UF3:3	UF4:3	UF5:3	UF6:3
UF1:4	UF2:4	UF3:4	UF4:4	UF5:4	UF6:4
UF1:5	UF2:5	UF3:5	UF4:5	UF5:5	UF6:5
		UF3:6		UF5:6	

**Technological Foundation**

TF1:1	TF2:1	TF3:1	TF4:1	TF5:1	TF6:1
TF1:2	TF2:2	TF3:2	TF4:2	TF5:2	TF6:2
TF1:3	TF2:3	TF3:3	TF4:3	TF5:3	TF6:3
	TF2:4	TF3:4			
	TF2:5				

**Innovation Criteria**

# Delivery Layer

## Overview

Delivery refers to the digital user interface layer by which end users can visualise and interact with meaningful insights from the correlated building and workplace systems. It includes the visual representation of the application layer via mobile devices, digital signage, kiosks and operational portals.

### Tenant Portal

A mobile application or web portal focussed on the tenant experience. These software solutions cover all of the products, services, and amenities that are designed to improve the working lives of people in commercial office buildings. They commonly act as the primary point of communication between landlords and their occupiers.

### Operations Portal

A software solution used in the day to day operation of the building, typically by facilities teams. These solutions act as single pane of glass collating building plans, asset information and maintenance requirements of a building into a single platform. Typically, information is presented in dashboards or tables for simple digestion by the user.

### Enterprise Portal

A software solution aimed at delivering big picture insights on an asset. Typically used by asset managers or senior stakeholders to deliver cost, ESG or leasing related reporting.

### Digital Signage

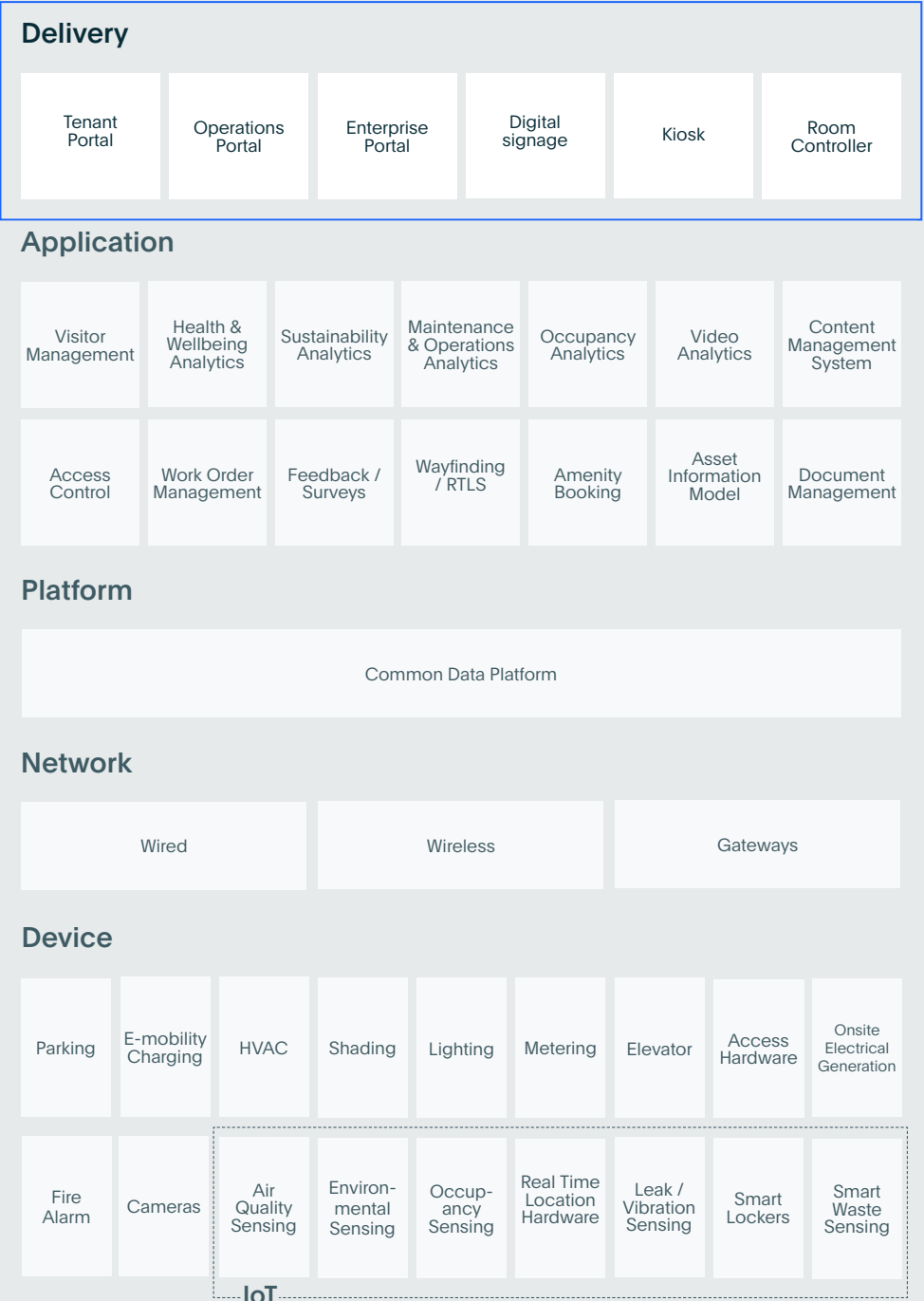
Digital displays use technologies such as LCD, LED, projection, and e-paper to display digital images, web pages, video, data dashboards, or text amongst others. They can be found indoors and outdoors, and provide a range of communication functions including wayfinding, marketing, and education.

### Kiosk

An interactive display for building users to access information on the building. These are often found in shared spaces, in particular building lobbies, and may allow features such as amenity booking, granting access credentials, or locating a specific space in the building.

### Room Controller

Tenant facing control software enables adjustments to the environment of a specific space. Space control software integrates control of all available parameters in a specific controllable area including, but not limited to, thermal comfort, light, shading, and air. They are commonly presented as wall-mounted tablets but may also be present on personal devices.



# Application Layer

## Overview

Refers to the Web, App and local based software programs from the multiple base-building subsystem and 3rd party applications tapping into the data layer and providing whole building data analysis, reporting, management and control of subsystems.

### Visitor Management

Visitor management refers to software used for tracking the usage of a building. By gathering this information, a Visitor Management System can record the usage of facilities by specific visitors and provide documentation of visitors' whereabouts.

### Video Analytics

Video analytics is a technology that processes a digital video signal using a special algorithm to derive data for insights. The algorithms used break down into three common types: Fixed algorithm analytics, Artificial intelligence learning algorithms, and Facial recognition systems.

### Wayfinding / RTLS

A software package which collects, normalises and processes data from real time location sensing (RTLS) solutions. The software packages may be used to deliver wayfinding experiences, occupancy data and a range of other smart building user functionalities.

### Health & Wellbeing Analytics

Software services that deliver insight into the health and wellbeing conditions within a building. This may refer to air, movement, light, and noise amongst others. Insights serve to improve the quality of the environment both live and retrospectively.

### Content Management System

A software solution aimed at managing content for building users. These solutions populate news feeds in tenant portals and on digital signage, they may also be used to issue notifications to building users.

### Amenity Booking

Amenity booking software allows users to reserve amenities of different types within the building. The software is commonly present within an online portal or app and is based on integrations to calendar systems at the site.

### Sustainability Analytics

Sustainability analytics generally describes the process of collecting sustainability datasets including energy, water and waste, before applying sophisticated analytical software and algorithms to deliver insights around consumption and time of use reductions.

### Access Control

A software solution used to manage how people can enter various areas of a building. Access control software integrates with hardware i.e. readers, turnstiles, locks. The software manages a directory of users each of which carries authorisation credentials for accessing different areas or amenities in the building. Some access control solutions come with their own hardware, while others integrate to a range of hardware solutions.

### Asset Information Model

Also known as a Building Information Model (BIM), an Asset Information Model is used throughout the construction of a building to bring together all the construction designs of a building from architects, engineers, systems providers. Asset information models also play an important role in building operations as they provide detailed metadata on as-built MEP and structural components for fault detection, predictive maintenance, and other high workload analytics packages.

### Maintenance & Operations Analytics

Software services deliver insights on the operation, efficiency, and feedback loops associated with building systems, typically those which fall under the Building Automation and Control systems umbrella. Usually these solutions are used to drive cost efficiencies, and can include topics like fault detection and diagnosis, predictive maintenance, and lift optimisation.

### Work Order Management

Refers to the software solution that allows reporting, processing, tracking, and completion of work order information in a timely manner minimizing disruption to the running of the building. May integrate with other systems to provide more granularity for the work order scheduling via a single dashboard.

### Document Management

Document management software helps to store, access, manage, control, and track digital documents and electronic images of paper-based information that has been captured through document scanning technology, or ingested as a digital document.

### Occupancy Analytics

Space utilization analytics leverages data from software or sensors to measure the use of your space. Commonly this is defined as the occupancy of your building divided by its capacity. The insights gained are commonly used to drive operational efficiencies in facilities management, and inform future space planning and design.

### Feedback / Surveys

A software solution which deals with the collection and analysis of building feedback from all users. Feedback may be presented as formalized surveys or via passive ticketing. The system delivers insights on the performance of the building from the perspective of its various user groups.

## Delivery

Tenant Portal	Operations Portal	Enterprise Portal	Digital signage	Kiosk	Room Controller
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## Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

## Platform

Common Data Platform
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## Network

Wired	Wireless	Gateways
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## Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

# Platform Layer

## Overview

A Common Data Platform is the method in which all the information from separate base-building subsystems come together into a single usable, controllable, and interoperable interface. Depending on the building system architecture adhered to, this is where the data storage (On-prem and/or cloud), normalisation, conversion, ontology and workflow orchestration occur. This enables 3rd Party integration at the application layer(s) across all subsystems via provision of open standards and communication protocols.

### Delivery

Tenant Portal	Operations Portal	Enterprise Portal	Digital signage	Kiosk	Room Controller
---------------	-------------------	-------------------	-----------------	-------	-----------------

### Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

### Platform

Common Data Platform
----------------------

### Network

Wired	Wireless	Gateways
-------	----------	----------

### Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT



# Network Layer

## Overview

Network Layer is the physical Infrastructure layer required for backend data communication to the common data platform and/or BACS controllers for wider Smart Building integration. Depending on the implementation architecture adhered to, it includes edge servers and gateways.

### Wired

Wired refers to the physical connectivity, active equipment and communication protocols that enable the segmentation and routing of data throughout the building.

### Wireless

Wireless refers to any data and telecommunication signal transmission made without the use of physical wires. Signals transmit data as electromagnetic waves as opposed to through a copper cable or fiber core.

### Gateways

Gateways refers to network nodes that connect networks with different transmission protocols together. The node connects to the network via wired building automation protocols or wireless comms.

### Delivery

Tenant Portal	Operations Portal	Enterprise Portal	Digital signage	Kiosk	Room Controller
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### Application

Visitor Management	Health & Wellbeing Analytics	Sustainability Analytics	Maintenance & Operations Analytics	Occupancy Analytics	Video Analytics	Content Management System
Access Control	Work Order Management	Feedback / Surveys	Wayfinding / RTLS	Amenity Booking	Asset Information Model	Document Management

### Platform

Common Data Platform
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### Network

Wired	Wireless	Gateways
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### Device

Parking	E-mobility Charging	HVAC	Shading	Lighting	Metering	Elevator	Access Hardware	Onsite Electrical Generation
Fire Alarm	Cameras	Air Quality Sensing	Environmental Sensing	Occupancy Sensing	Real Time Location Hardware	Leak / Vibration Sensing	Smart Lockers	Smart Waste Sensing

IoT

# Device Layer

## Overview

This layer includes the operational technology systems for building automation & controls (BACS) such as HVAC, IT, Access Control, Lighting, etc; required to locally and directly monitor and control the building services as well as internet-of-things (IoT) end user edge components such as edge devices, sensors and actuators that are connected to a network and can transmit or receive data.

### Parking

Parking systems deliver a seamless parking experience within the building. They can consist of a range of components including barriers, apps, dynamic signage, number plate recognition, payment terminals, and vehicle detection sensors.

### e-Mobility Charging

A system for charging mobility solutions i.e. Car, Bike, Scooter. The system may offer features such as booking, payment, and alignment to renewable energy or demand response initiatives. The system may have multiple charging points available at a single site.

### HVAC

A central operational technology control system that delivers command logic for heating, ventilation, and air conditioning in a building. The system is commonly composed of field controllers driving pumps, valves, and dampers amongst others to regulate building thermal comfort and air quality. Common alternative names include BMS, BAS, BACS.

### Shading

An automated shading system integrates with existing building controls and responds to changing conditions in order to maximize performance. The focus of shading systems is to optimize daylighting conditions and conserve energy.

### Lighting

A lighting control system is an intelligent network-based lighting control solution that incorporates communication between various system inputs and outputs related to lighting control with the use of one or more central computing devices. Lighting control systems serve to provide the right amount of light where and when it is needed.

### Metering

Metering systems provide information on the consumption of resources within the building. Commonly they serve to deliver control, billing, and planning outcomes. Meters may be installed to measure energy, in the form of electricity or thermal loads (Heating / Cooling), or on other inputs like Gas and Water.

### Elevator

A vertical transportation system that provides rapid circulation between building floors in multi-storey buildings. It can operate as a standalone system with its dedicated maintenance and operations analytics and reporting but can also integrate at a software level with other building systems to drive operational efficiencies and optimise passenger experience.

### Access Hardware

Access control hardware refers to the physical components which constitute an access control solution, these include credential readers, turnstiles, locks and other components. Access control hardware is typically linked directly to software, or may be delivered independently.

### Onsite Electrical Generation

Refers to any source of energy being leveraged by the building to contribute to its main incomer. Typically manifests as onsite renewables, battery storage, or backup generators. These technologies are often used to manage demand response initiatives, or in an emergency to keep critical systems running.

### Fire Alarm

A fire alarm system warns people when smoke, fire, carbon monoxide, or other fire-related emergencies are detected. These alarms may be activated automatically from smoke detectors, and heat detectors or may also be activated via manual fire alarm activation devices such as manual call points or pull stations.

### Cameras

A distributed network of cameras that provide monitoring of spaces in and around a building. The cameras may additionally act as data inputs for camera analytics use cases.

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IoT

# Device Layer (IoT)

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### Air Quality Sensing

Air quality sensors deliver ongoing data on the chemical makeup of air. They may take measurements outside, inside, and within ductwork. Commonly measured parameters include CO2, Particulate Matter, and Volatile Organic Compounds e.g. Formaldehyde.

Sensors should always be installed at breathing height, and are deployed on either wireless or wired networks within a building.

### Real Time Location Hardware

Real-time location services (RTLS) describes a range of technologies for locating an asset or resource - from radio frequency-based approaches to determining distance by measuring the difference between fixed anchors of beacons/tags that are affixed to personnel, equipment and materials. The technology provides a unique identifier, meaning the identity of tracking subject is known.

### Smart Lockers

A smart locker is a storage solution that has integrated technology built into it, allowing it to automate features like package delivery, notification, and distribution.

### Environmental Sensing

Refers to the IoT sensing technologies aimed at environmental parameters not covered underneath the air quality umbrella. Typical examples include light, daylight, and thermal comfort. These solutions may be integrated directly into systems like lighting and HVAC, or feed into wider platforms for storage and analytics.

### Leak / Vibration Sensing

Leak sensors, also referred to as leak detectors, are devices that serve to provide an alarm condition or visual indication of the presence of a leak condition from a pipe or other system that contains liquids or gases. In buildings, the most common application is to check for leaks from HVAC or other water pipework.

### Smart Waste Sensing

Sensing solutions to establish the quantity of waste present in a container. Solutions commonly sense the fill level of the container using ultrasound. Once the fill level is established software derives the volume of waste based on the static size of the container.

### Occupancy Sensing

A way of anonymously identifying how many people are occupying a space. Sensors often utilize a form of infrared, radar, or low-quality camera to determine the presence and number of individuals. Sensors are commonly on the ceiling or under desk mounted.

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IoT

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