

Guide on FM Procurement

An initiative from the FMIC (Facilities Management Implementation Committee) Procurement Taskforce

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First edition: 25 January 2021

Second edition: 31 July 2026

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Preface

As part of the Real Estate Industry Transformation Map (ITM)¹ launched on 8 February 2018, the Building and Construction Authority (BCA) was tasked to coordinate the development of the Facilities Management (FM) sector. A tripartite Facilities Management Implementation Committee (FMIC) was formed in April 2018 to bring together major stakeholders, comprising both public and private building owners, FM service and solution providers, trade associations and chambers (TACs), and unions, to co-develop initiatives to create a healthy and integrated FM eco-system. Building on this foundation, BCA is now championing the refreshed Built Environment (BE) Industry Transformation Map which amalgamates the previous Construction and Real Estate ITMs, focusing on a value-chain approach to seize opportunities for the BE sector.

Within this broader transformation agenda, procurement is a key enabler to FM transformation and in creating lead demand in the public sector. The FMIC's Procurement Taskforce, set up to review and strengthen FM procurement practices, has consulted the Centre of Excellence for FM (JTC), various Government Procuring Entities (GPEs) and FM providers to prepare this Guide on FM Procurement. This second edition builds upon the original guide, incorporating feedback from users, lessons learned from implementation, and updated best practices to provide enhanced guidance for FM procurement.

The Guide aims to provide service buyers with an overview of the tender process for FM procurement, key considerations in determining the procurement approach, adoption of outcome-based contracting, structured tender evaluation framework and performance management of the service providers. Outcome-based requirements are desirable as they allow the FM service providers to innovate and adopt more productive solutions rather than providing fixed headcounts or task-based requirements. This gives more value and better quality to the service buyers.

¹ As of September 2022, the Construction ITM and Real Estate (Facilities Management) ITM have been amalgamated into one Built Environment ITM. For details, please refer to [Built Environment Industry Transformation Map \(ITM\) | Building and Construction Authority](#).

The Guide also includes examples of outcome-based specifications and performance management indicators to measure the outcomes and used for payments, which can be included in tender requirements. Key updates in this second edition include enhancements across the supply chain to:

- a) strengthen collaboration through longer-term FM contracts and collaborative contracting approaches to facilitate shared goals and joint problem-solving;
- b) enhance payment practices with tiered payment arrangements to allow timely payment for work done; and
- c) encourage good subcontracting practices through cost transparency and responsible contracting approaches to promote business sustainability and value creation.

This Guide is part of BCA's ongoing commitment to improving FM procurement practices. It will continue to evolve based on implementation experience, stakeholder feedback, and emerging industry developments.

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Applicability of Guide on Facilities Management Procurement

This Guide aims to provide guidelines to the FM sector and to set the standards for the procurement of facilities management (FM) services. FM service buyers and providers are encouraged to adopt these standards across the entire FM value chain to ensure consistent service delivery and a collaborative FM ecosystem.

? Which FM services is this guide applicable to?



FM01 Integrated FM (IFM) & Managing Agent (MA) Services



FM02 Cleaning services



FM03 Landscaping



FM04 Pest Control



ME01-ME12 Mechanical & Electrical Maintenance Works



CW01 CR01 Building Maintenance & Repairs

? Additional FM Procurement References



EPU/SER/43 Security services

Refer to MHA's Guide on Outcome-Based Security Contracting²



FM02 Cleaning services

Refer to NEA's Guide on Specifications for Outcome-Based Cleaning Contract³



Smart FM

Refer to BCA's Guide to Smart FM⁴ for adoption of smart solutions in FM



Green FM

Guide to Green Procurement for Facilities Management⁵

(for Public Sector reference)

² For MHA's Guide on Outcome-Based Security Contracting, pls refer to [SPF | Resources](#)

³ For NEA's Guide on Specifications for Outcome-based Cleaning contract, pls refer to [Outcome-based Contracting \(OBC\)](#)

⁴ For BCA's Guide to Smart FM, pls refer to [Smart Facilities Management | Building and Construction Authority](#)

⁵ For GreenGov.SG's Guide to Green Procurement for Facilities Management for Public Sector FM Practitioners, pls refer to [Green Procurement for FM](#)

FM Procurement Process

One of the key challenges identified by the FMIC is the fragmented FM sector. Firms provide services in silos, typically offering only a single service such as cleaning, security, landscaping or maintenance. Contract requirements are often prescriptive which discourage investment in training or technology.

Furthermore, FM operation tends to be heavily reliant on manpower and manual operations. In this age of digitalisation and with an ageing workforce, it is timely for FM companies (FMCs) to adopt FM management and digital platforms. This enables fully digitalised property management models that reduce and replace manual processes and paper-based workflows, thereby saving time, costs and reduce any possible disruption to the operations.

Thus, there is significant opportunity for strategic integration and improved efficiency. Procurement can serve as a strategic tool to drive this transformation and build resilience in the FM sector. As the sector moves toward integrated service and outcome-based solutions, service buyers will be able to consolidate numerous separate agreements into single, more streamlined and efficient contracts. The sector should also move away from transactional contracting towards collaborative partnership models that allow organisations to drive innovation, share ownership of outcomes, improve service performance, and align incentives across the FM value chain. To support this transformation, this Guide collates the good practices and considerations into 4 stages of procurement process; covering pre-tender to post-tender stage as illustrated in Figure 1 below.

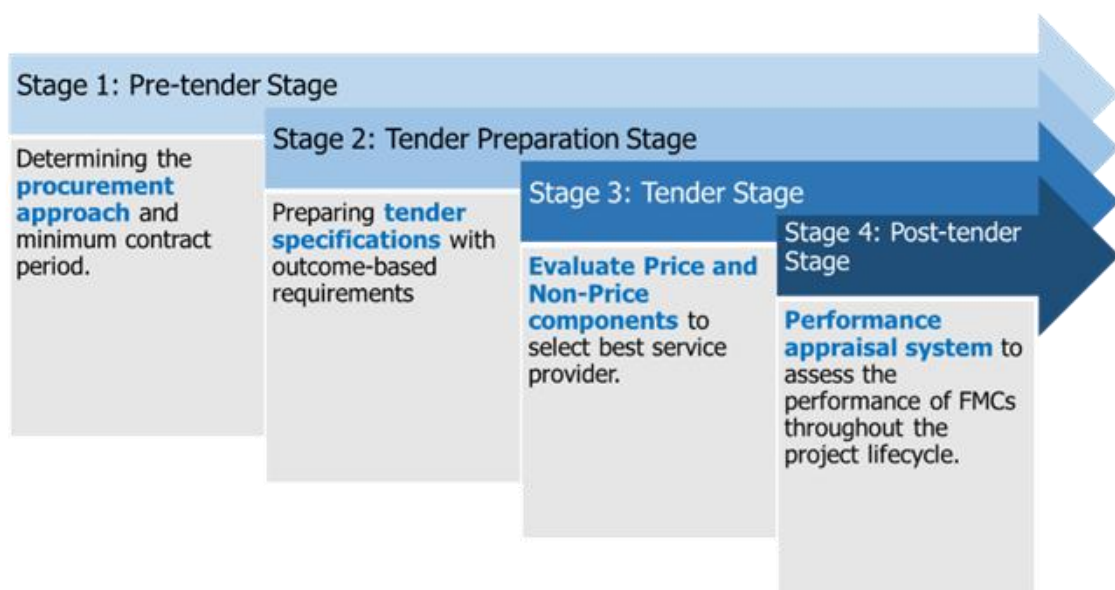


Figure 1: Stages of FM procurement

Stage 1: Pre-Tender Stage

1.1 Determining the Procurement Strategy and Approach

1.1.1 Service buyers should establish a clear FM strategy before selecting the most suitable procurement approach. This would allow service buyers to identify FM service objectives in relation to organisational priorities such as service quality, sustainability, and innovation, and determine the appropriate FM delivery model. Some considerations for deciding on the delivery models are as outlined in Figure 2 below.

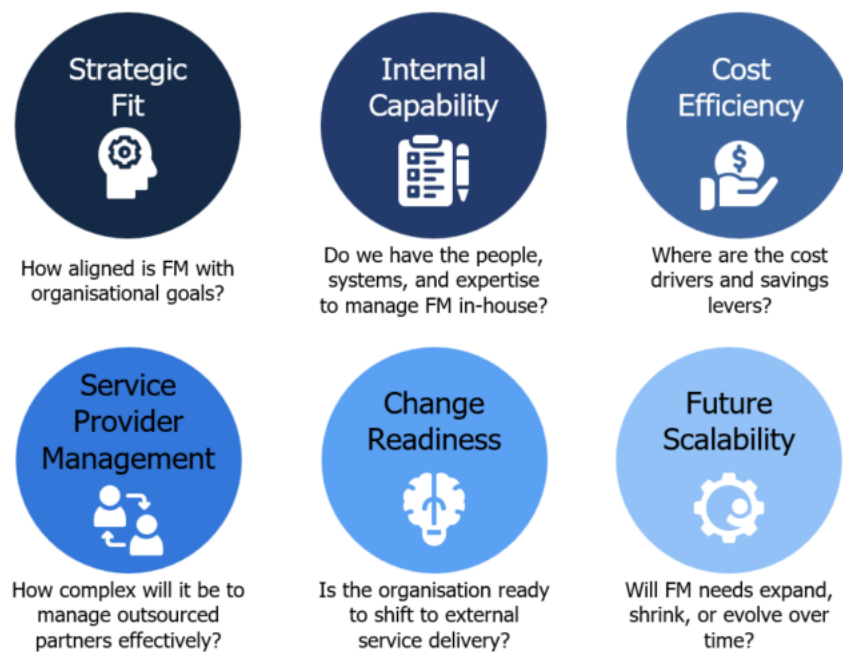


Figure 2: Key considerations for determining the appropriate FM delivery model



Why is a well-defined FM strategy important?

Benefits of a well-defined FM strategy

- ✓ Establishes an agreed purpose for proceeding with a procurement project
- ✓ Identifies the optimal service delivery model for a defined scope of services
- ✓ Reduces resistance to change through early stakeholder alignment

1.1.2 A common delivery model is to award multiple separate contracts for each single FM service within a building separately. Service buyers typically engage a Managing Agent (MA) to manage the various single service term contracts. This is commonly known as the Managing Agent-Term Contract (MA/TC) procurement model. However, this approach is resource intensive and lacks integration across building services since each term contract covers only a specific scope.

1.1.3 **Where there are synergies for optimisation and economies of scale in the portfolio, service buyers should consider adopting Integrated FM (IFM) contracts to provide overall visibility and integrated control of building FM services (see definition of IFM below).** For building owners with a portfolio of buildings, an aggregation of FM (AFM) services across multiple properties is possible. A longer contract period and outcome-based specifications should also be adopted so that there would be scale and scope for service providers to implement smart FM and other innovative solutions.



What is Integrated FM (IFM)?

Definition of Integrated FM (IFM)

IFM refers to the provision of at least two distinct FM Services for completed buildings or properties in one contract. The FM Services can be delivered by the FMCs or MAs directly or outsourced, centralised and managed by FMCs or MAs. Any outsourcing or subcontracting should be supported with documentary proof of subcontracting arrangement. FM Services include:

- Building maintenance services
- Mechanical and Electrical maintenance services
- Security services
- Cleaning services
- Landscaping services
- Pest control services

BCA Facilities Management (FM) Registry

The FM Registry is a registry of firms eligible to provide FM services for the public sector in Singapore. A new FM01 Workhead was set up on 1 April 2020 for registering FM companies providing IFM and MA services. Government agencies procuring FM services can specify the relevant FM Workheads corresponding to the scope of their tenders.

Workhead	Description
FM01⁶	Provision of integrated facilities management (IFM) and/or managing agent (MA) services by facilities management companies
FM02	Housekeeping, Cleansing, Desilting & Conservancy Services
FM03	Landscaping, which refers to landscaping maintenance works
FM04	Pest Control

⁶ For list of firms and tendering limits under FM Workheads, pls refer to [CRS, FM, and SY Registries tendering limits | Building and Construction Authority](#)



Why choose IFM?

Benefits of IFM

Integrated FM approach allows service buyers and providers to achieve the following:

Service Buyers

- ✓ Reduce resources on service buyers in contract supervision and management through single point of responsibility instead of managing multiple FM service contracts.
- ✓ Reduce possibility of operational disputes between different service providers who are involved in maintaining the same building.
- ✓ Improve responsiveness by having the IFM service provider to provide one-stop service to coordinate and manage multiple FM services in the building or facility.
- ✓ Achieve greater economies of scale through aggregation of demand for common or similar services within the building or facility which could lead to lower costs in the longer term.
- ✓ Leverage off the service provider's sub-contract network to obtain better pricing.

Service Providers

- ✓ Increase productivity as flexibility and autonomy is provided to Facilities Management Companies (FMCs), which provide IFM services, to streamline their processes and adopt technology or smart FM⁶ solutions (e.g. IoT, integrated command centre, multi-functional FM robots) for resource and operational optimisation to achieve desired outcomes.
- ✓ Optimise FM service delivery which could lead to better service quality

Tips

Considerations for IFM and AFM	Tips
Higher contract values and more complex tender evaluation	More resources and time could be factored in during the tender evaluation process.
Managing single-provider risk	Service buyer to have contingency measures (i.e. activation of term contractors from other projects or specify higher security deposit) to manage risks and ensure continuity of services.
Adapting to different building requirements	Service buyers should specify the KPIs and Service Level Agreement accordingly to the building requirements in the tender document.

1.2 Contract Duration

- 1.2.1 Short contract durations would mean more resources spent to conduct frequent tenders and service buyers may not get the best value for money without economies of scale. Conversely, a longer contract duration would provide a longer cost recovery period for investments in technology/training and retain workers on the job. This encourages service providers to invest in staff training, technology and innovative solutions, which could translate into better quality FM services.

Recommended minimum contract duration

At least 3 years with an option to extend for another 3 years (i.e. 3 + 3 years contract) provided the terms and conditions are met.

Note: With overall good performance, service buyers can exercise the option to extend the contract duration whilst bearing in mind factors such as any changes in the scope of work or changes in contract cost if the contract were to be extended.

Tip

- ✓ It is recommended to include a reasonable “mobilisation period” in addition to the contract period. This is to allow the awarded contractor to familiarise with the site issues, take over from incumbent and set up documentation/ reporting processes for better handover of services.
- ✓ NEA’s cleaning guide includes a provision where full payment will be made if the Provider scores at least 75% in performance in the first 3 months of the contract. This grace period applies only to the initial 3 months to ensure that the Provider has sufficient time for familiarisation.

Examples of current IFM/AFM contracts

Areas of maintenance services	Contract Duration
BCA Academy (using NEC4 FM Contract): • Hard services: Mechanical, electrical, and plumbing infrastructure, heating, ventilation, and air-conditioning (HVAC) systems, fire safety systems, security systems, Audio-Visual (AV) systems • Soft services: Cleaning, pest control, landscape, waste management, tenant and event support services	4 + 4 years
IFM services for a community and lifestyle hub: • Hard services: Building maintenance works, mechanical and electrical services maintenance, plumbing and sanitary maintenance • Soft services: Cleaning, waste management, pest control, security, landscape maintenance, health and safety management, utilities management, carpark management, tenant management	3 + 3 Years
IFM and AFM services for several institution developments: • Hard services: Building maintenance works, ACMV, mechanical and electrical services, plumbing and sanitary services, fire protection system, gas installation inspection • Soft services: Cleaning, pest control, landscape maintenance	4 + 2 Years

IFM services for an office development: • Hard services: Building maintenance works, mechanical and electrical services, plumbing and sanitary services, audio visual system management • Soft services: Landscape, waste, cleaning, pest control, security, utilities, help desk, health and safety management	5 Years
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1.3 Outcome-Based Contract (OBC)

1.3.1 In OBCs, service specifications are based on desired outcomes or outputs for the FM services, rather than basing on headcount to be provided or prescriptive task-based requirements.

1.3.2 The benefits of OBC are summarised below:

- ✓ Provides flexibility for service providers to propose efficient and innovative solutions by integrating manpower, technology and operational processes to meet the desired outcomes.
- ✓ Leverages service providers' experience which may reduce operational costs, maintenance costs and resources.
- ✓ Improves control and enforcement of quality standards instead of focusing on headcounts and/or prescriptive methods and processes.

Tip

- ✓ Clearly specify the desired outcomes in OBCs and avoid being subjective to minimise contention.
- ✓ Merely removing headcount numbers from a tender, while retaining all the prescriptive requirements or tasks, does not qualify as an OBC. Refer to Stage 2 on drafting an OBC.

1.4 Collaborative Contracting

- 1.4.1 Collaborative contracting represents a shift from traditional transactional procurement towards partnership-based approaches that foster long-term value and resilience in FM delivery. This approach enables organisations to drive innovation, improve service performance, foster transparency, and build shared ownership of outcomes across the FM value chain.
- 1.4.2 FM contracts are evolving towards longer-term and integrated services, creating a need to fostering long-term partnerships across the value chain requires agile frameworks that can adapt to changing requirements, mechanisms to manage uncertainties and risk, and structured approaches such as performance expectations to maintain service quality. Collaborative contracting provides a framework to enable integrated service delivery across the supply chain, including subcontractors.

Why adopt Collaborative Contracting?

Benefits of collaborative contracting

- Aligns objectives across both client and FM service provider teams
- Enables more agile resourcing and improved problem solving through open collaboration
- Reduces disputes by aligning incentives, open-book transparency, and shared success criteria
- Enables more efficient contract administration, enhanced risk management and optimised risk allocation
- Creates sustainable long-term partnerships that adapt to evolving business needs and environment
- Drives greater total value over contract lifecycle, beyond initial cost savings

START

1. Build organisational knowledge and develop collaborative mindset

- ✓ Familiarise with collaborative contracting principles through trainings and industry events
- ✓ Educate internal stakeholders and align organisational goals to collaborative objectives
- ✓ Foster open communication and joint problem-solving
- ✓ Build shared commitment to project success



2. Identify collaborative approaches

- ✓ Identify collaborative features or forms of contract. Examples:

- ✓ **Collaborative contracts** such as NEC4

- ✓ Collaborative features:

- ✓ **Set clear and concise Key Performance Indicators** that is achievable and aligned to business strategy

- ✓ **Fairer risk sharing** (limitation of liability, adjustments to contract to cater to government requirements e.g. Progressive Wage Model)

- ✓ **Partnering workshops** to foster team culture, establish project objectives

- ✓ **Early notification regime** to identify risk early and joint-problem solving

- ✓ **Transparent cost models and gain-share mechanisms** to incentivise mutual benefit, innovation, and efficiency

Shared success and enhanced delivery outcomes

3. Conduct early market engagement

- ✓ Engage potential partners pre-tender to familiarise on tender requirements, scope and sharing of collaborative approaches adopted
- ✓ Assess market readiness for collaborative partnerships



4. Prepare tender documents

- ✓ Communicate partnership expectations clearly in tender briefing documents
- ✓ Design evaluation criteria assessing partnership capabilities and collaborative experience



5. Establish governance and performance management

- ✓ Define governance structures including roles, communication protocols, dispute resolution paths
- ✓ Establish meeting cadences and forums to support alignment, partnership, transparency
- ✓ Implement early warning process for risk management and establish processes to measure performance



FINISH

Figure 3: Building stronger partnerships through collaborative contracting

1.5 Organisational Readiness

1.5.1 With the contract framework and specifications established, service buyers should review the organisational structures to effectively implement and manage the IFM/OBC project.

Tip

Organisational design

- ✓ Define clear criteria and values that will shape decisions about team structure, such as maintaining service quality, ensuring cost effectiveness etc.
- ✓ Determine which functions should remain in-house versus those to be delivered externally by service providers.
- ✓ Assess staff capabilities and skills to identify gaps by reviewing the current team's experience and capacity to understand what expertise are lacking for effective FM service delivery.

Why are organisational readiness and transition planning important?

Benefits of well-designed organisation and transition

- ✓ Prevents duplication of effort and ensures clear roles between different parties
- ✓ Retains appropriate capability within the organisation for strategic oversight
- ✓ Minimises service disruption while maintaining service quality
- ✓ Builds staff confidence in the delivery approach
- ✓ Reduces concerns through clear communication and timely engagement

Stage 2: Tender Preparation Stage

2.1 Preparing Tender – Tender Documentation

Tender Process

- 2.1.1 Service buyers should allocate adequate time within the tender process to enable meaningful engagement between service providers and their subcontractors, facilitating better partnerships and more well-informed proposals. Service buyers should also extend tender briefings and site show-rounds to both service providers and key subcontractors as much as possible. Clear understanding of tender requirements across the value chain could encourage more innovative and effective solutions for enhanced service quality.

Contract Clauses

- 2.1.2 Contract provisions should include transparent pricing strategies from service providers that ensure fair compensation to subcontractors. This includes requiring itemised cost schedule across each subcontractor trades (e.g. cleaning, landscaping), separating the subcontractors' costs from service providers' management fees and profit margins.

Example of apportionment of costs across the individual trades

S/N		Items
1		Profit
2	Operating Cost	Preliminaries <i>(equipment/ tools/ instruments/ Information Technology (IT) etc.)</i>
3		Manpower cost <i>(based on proposed manpower deployment including tenant management with breakdown on the cost and position for each additional manpower etc.)</i>
4		General property management and maintenance <i>(repair and maintenance works through Schedule of Rates etc.)</i>
5		Cleaning and waste management <i>(façade cleaning, waste disposal, recycling, cleaning services etc.)</i>
6		Pest control <i>(pest inspection/ treatment etc.)</i>
7		Landscape maintenance <i>(manpower, equipment, materials etc.)</i>
8		Mechanical & electrical services maintenance <i>(fire protection systems, ACMV, electrical installations, alarm systems, Building Management Systems, security systems, auto doors, etc.)</i>
9		Sanitary & plumbing maintenance <i>(water tank cleaning, sewer line and manhole flushing etc.)</i>
10		Office management functions <i>(online room booking systems, card access to rooms, coffee machine/ vending machine rental and consumables, water dispenser maintenance etc.)</i>
11		Other services <i>(BCA Green Mark re-certification, toilet cleanliness monitoring system, contactless smart card and mobile ID readers, renewal of building signage etc.)</i>
12		Management Fee <i>(Profit + Operating Cost, for each Property)</i>

2.1.3 Contract owners across the entire FM value chain should ensure contract provisions are fair, equitable and encourage good project management and subcontracting practices. These include:

- a) Responsible use of catch-all clauses. It is important to provide clarity and avoid overly broad provisions which may lead to disputes.
- b) Provide a fair penalty system based on service-specific deductions rather than performance deduction across all services for service lapses by a single scope of service. See Para 2.4.2 for more details on performance-based payment.
- c) Consider Limitation of Liabilities (LoL) aligning financial risk with the contract value and avoid the use of blanket, unilateral indemnities. For example, setting a LoL to the contract value (i.e. 1x the contract value).
- d) Incorporate Progressive Wage Model (PWM) requirements and allow adjustments for cost increases due to announced PWM changes after contract award. See sample clauses below.

**Sample clauses on additional progressive wage cost
(reference from NEC4 FMC Z clauses)**

For the purposes of this Contract, the following shall apply:

- ✓ Additional Progressive Wage Requirements refer to any requirements under the Progressive Wage Model that are introduced after the Contract Date, including the introduction of new sectors or the revision of existing minimum wages.
- ✓ Additional Progressive Wage Costs are the additional costs incurred by the Service Provider in respect of workers' wages to meet the Additional Progressive Wage Requirements.
- ✓ Where the Service Provider incurs Additional Progressive Wage Costs arising from Additional Progressive Wage Requirements, such costs shall constitute a compensation event (i.e. variation) under this Contract.

- e) Require IFM service providers to share a reasonable portion of incentives / rewards with their subcontractors to align interests and goals s. See Para 2.4.3 for more details.
- f) Require regular joint reviews amongst the service buyers, IFM service providers and subcontractors which are essential to maintain service quality and strengthen working relationships. These engagements help identify improvement opportunities and address operational matters proactively. All findings should be documented and considered in future tender assessments.
- g) Incorporate structured dispute resolution mechanisms to promote cost-effective resolution whilst preserving working relationships. For e.g. disputes should first be resolved through good-faith negotiation before proceeding to mediation or arbitration, if unsuccessful. Parties should continue their contractual duties during dispute processes to avoid service disruption.

2.1.4 Service buyers should ensure that IFM service providers engage subcontractors that meet their minimum competency criteria such as licensing requirements, acceptable safety records, and training certifications. IFM service providers should not replace key subcontractors without the prior written approval of the service buyer after award. Any replacement subcontractor proposed must meet equivalent or higher competency criteria for the service buyer's approval or demonstrate how the affected scope of services will be maintained without disruption to service quality. Subcontractors which did not meet the minimum criteria may be rejected by service buyers.

2.1.5 To support talent attraction and build capability for long-term sustainability of the sector, service buyers should encourage IFM service providers to hire and deploy fresh graduates or mid-career conversion professionals (i.e. less than 1 year of relevant FM working experience). For example, specify a minimum percentage of the core FM team to be fresh graduates / mid-career professionals (e.g., at least 10% of the core operational team) supported by a structured mentorship plan. in the tender requirements or accord additional points for IFM service providers who included new FM entrants in their deployment and development plan during tender evaluation.

Example of tender specifications and evaluation criteria

The Service Provider is strongly encouraged to hire and deploy fresh graduates (defined as candidates with less than 1 year of relevant FM working experience) for the Property Associate, or Technician roles under this contract. The total number of fresh graduates deployed shall not exceed X% (e.g. 20%) of the entire core FM team workforce.

Evaluation Criteria on the Deployment and Development of Fresh Graduates

The Tenderer shall submit a write-up detailing its plan for recruiting and deploying fresh graduates for Property Associate, or Technician Roles under this contract. The write up shall include the following:

- **Deployment Approach:** A clear hiring and deployment plan in accordance with the requirements specifications (i.e. the total number of fresh graduates deployed shall not exceed e.g. 20% of the entire core FM team workforce).
- **Onboarding & Mentorship:** A structured orientation and mentorship programme to ensure the stability of fresh graduate deployment.
- **Retention & Career Pathway:** Measures to build long-term capability.

The Tenderer shall provide the anticipated number of fresh graduates, and the proposed roles and responsibilities of the fresh graduates associated with the proposed roles deployed for this contract.

2.2 Drafting Outcome-Based Contracts

2.2.1 The key features of an outcome-based contract (OBC) are (1) outcome-based specifications and (2) performance appraisal and reward system.

2.2.2 When drafting an OBC, service buyers should first decide on the desired outcomes and describe the outcomes in the outcome-based statements. Service buyers should ensure that outcome-based requirements extend to subcontractors, with IFM service providers required to disclose performance targets and KPI measurements for subcontracted scopes.

A performance appraisal and reward system is essential for effective contract management in which key performance indicators (KPIs) are used to measure the achievement of outcomes. Service buyers should take reference from relevant guidelines (e.g. NEA's Guide on Specifications for Outcome-based Cleaning Contract) on measurable outcomes and performance standards for respective services. To monitor and encourage good performance, the KPIs can be tied to the service provider's payments where rewards are based on performance achievement and deductions, or liquidated damages are applied for failure to achieve result-driven outcomes.

2.2.3 Figure 4 below shows the flowchart for drafting an OBC. The considerations for drafting an OBC are further explained in this section.

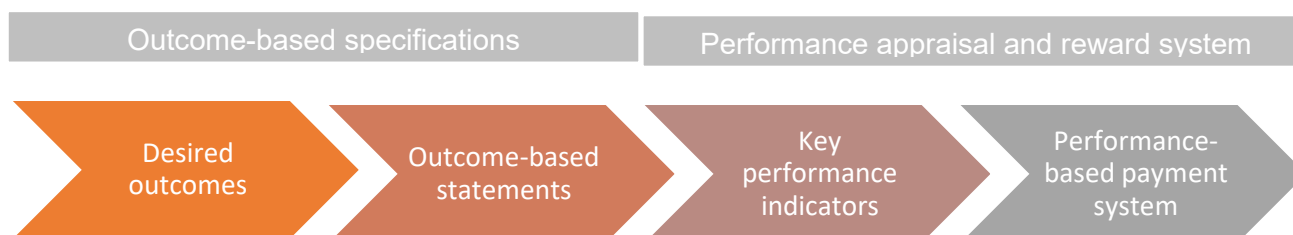


Figure 4: Drafting outcome-based contracts

2.2.4 A sample list of commonly used outcome-based statements and the corresponding KPIs can be downloaded at the following weblink (<https://go.gov.sg/fm-procurement-obc-kpi>). Service buyers may refer to or adapt these sample outcome-based statements/KPIs into their tenders.

2.3 Desired Outcomes and Outcome-Based Statements

- 2.3.1 The desired outcomes spell out the end results which service buyers expect from the service providers, and it should be aligned with the organisation's business objectives. The outcome-based statements set out the scope of services, what is to be achieved, the desired performance standard and the required service quality.
- 2.3.2 To ensure that the stipulated outcomes are achievable, the service buyer should include outcome-based statements and priorities as a guide for service providers. Outcome-based statements should allow for service providers to propose alternative solutions to meet the required outcome through integrating manpower, adopting technology and/or redesigning operational processes.



Avoid

- **Avoid specifying task-based requirements** e.g. deploying 1 cleaner at each level to mop the office floor on a daily basis. Such tasks should be kept minimal to allow service providers to focus on achieving desired outcomes with optimal resource deployment and use of innovative methods or technologies.
- **Avoid over-specifying requirements** which could drive up costs unnecessarily.
- **Avoid ambiguous requirements** so that service providers have a clear understanding of the scope of work to prevent any mismatch in expectations which could lead to tense relationships between the service buyer and the service provider.



Tip

- ✓ When specifying the maintenance schedule, service buyers should adjust the frequency of maintenance according to the priority / importance and should not set too onerous requirements.
- ✓ Adopt digital solutions to monitor delivery of outcomes.

Examples of desired outcomes and outcome-based statements

Desired outcome	Outcome-based statement
Customer satisfaction	Ensure time taken to respond to complaints is within the specified timeframe.
	Ensure that customer satisfaction, measured by customer satisfaction assessments and surveys, is at a satisfactory level.
Minimum disruption, disturbance and inconvenience to building operations	Ensure that routine maintenance is carried out in a timely manner to minimise downtime, breakdown or failure
	Ensure that building occupants are well informed of planned maintenance works

2.4 Drafting Collaborative Contracts

- 2.4.1 When drafting a collaborative contract, service buyers should first define the shared objectives and establish the governance structure that will support collaboration throughout the contract period. This includes setting out the roles and responsibilities of each party, the communication and escalation protocols, and the mechanisms for early warning and joint risk management. Service buyers should ensure that collaborative obligations extend to subcontractors, with IFM service providers required to flow down the collaborative principles and transparency requirements to their supply chain.

2.4.2 Service buyers can adopt or take reference from standard collaborative contract form such as the NEC4 Facilities Management Contract (FMC)⁷ for use in their tenders. The NEC4 contract incorporates collaborative principles and facilitates good management of risks through mutual trust and cooperation and structured project management procedures and contract mechanisms. Originated from the United Kingdom, the NEC4 FMC is a suite of collaborative contracts developed to support a range of FM contract approaches including IFM services and single maintenance service contracts.



Figure 5: NEC4 FMC fosters collaboration for better FM project delivery

Adopting NEC4 FMC requires mutual organisational readiness, dedicated contract administration resources, and clear understanding of its risk-sharing mechanisms (e.g., early warnings and compensation events). Service buyers and service providers should ensure their project administration teams undergo proper NEC4 training prior to contract execution.

⁷ NEC is a division under Thomas Telford Ltd, the commercial arm of the Institution of Civil Engineers (ICE), the owner and developer of NEC suite of contracts. NEC4 contract is the latest edition of a suite of collaborative contracts for construction and facilities management projects. For more information on NEC4 contract, please visit <https://www.neccontract.com/>

2.4.3 As the NEC4 is a standard contract form used internationally, additional clauses [\(click here to view the clauses\)](#) have been developed to better support the implementation of NEC4 FMC for pilot FM projects in Singapore. These include:

- Y(SG) clauses that align NEC4 FMC with Singapore's laws
- W clauses that provide dispute resolution options incorporating local dispute resolution protocols and practices
- Z clauses that offer additional conditions of contract for project-specific requirements. A base set of Z clauses has been developed considering public sector procurement

**Examples of collaborative approaches in contract provisions
(reference from NEC4 FMC and GPE contracts)**

Collaborative approaches	Examples of contract provisions
Fostering collaboration	a) Parties are required to act in spirit of mutual trust and cooperation. b) Parties (i.e. service buyer or provider) are required to notify ambiguities or inconsistencies as soon as either becomes aware.
Incentivising performance & innovation	a) Collaborative identification and implementation of technologies, innovations, or testbeds with shared cost and benefit arrangements. Sample clauses: • The Organisation and the FMC may, during the course of the Contract, jointly identify, evaluate, and implement new or existing technologies, innovations, or testbeds that enhance productivity, quality, sustainability, or cost-efficiency in the management of the development. • Where both Parties agree that a trial implementation is warranted, the arrangements for cost-sharing, funding, and benefit-realisation shall be determined jointly on a case-by-case basis,

	taking into consideration the nature of the solution and its potential impact. • The costs and benefits associated with the scaled-up deployment shall be mutually agreed between the Organisation and the FMC, reflecting the respective contributions and benefits derived. The Organisation reserves the right to classify any scaled-up solution as part of the Baseline Solutions. • All solutions implemented under this clause shall be reflected in the FMC's Technology Implementation Plan and form part of the ongoing joint performance and innovation review between the Organisation and the FMC.
Enhancing flexibility & adaptability	a) Include price adjustments for inflation or material price fluctuation for risk-sharing. b) Conduct annual joint review exercise on subcontractor costs with scope adjustments implemented through contract variations.
Encouraging proactive approaches to dispute avoidance & resolution	a) Requirement to introduce a senior representative to resolve issues early and prevent dispute escalation. b) Requirement for parties to exhaust good-faith negotiation and mediation before arbitration.
Enhancing equitable risk allocation & management	a) Early warning mechanism: • Framework for parties to notify matters affecting time, cost and quality • Early warning register for good contract management • Regular meetings to discuss register matters b) Limitation of liability provisions to create fairer risk balance between service buyers and providers. Sample clauses: The liability of the FMC to the Organisation shall be limited as follows:

	• In respect of all breaches in the Contract for the contract period of three (3) years from the Commencement Date (“Initial Term”), the FMC’s aggregate liability (for this Initial Term) to the Organisation shall not exceed the Contract Price for the Initial Term; and • In respect of all breaches in the Contract for the Optional Term (if granted by the Organisation), the FMC’s aggregate liability (for this Optional Term) to the Organisation shall not exceed the Contract Price for the total of both the Initial Term and the Optional Term.
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2.5 Key Performance Indicators (KPIs)

2.5.1 The Key Performance Indicators (KPIs) are used to measure the achievement of the desired outcomes, and the performance measurement shall be clearly specified in the documents. A maximum score is set for each KPI, and the service provider is scored accordingly to its achievement. The total KPI scores (i.e. performance scores) will be computed at a regular fixed period as agreed in the contract and used to measure the performance of the service providers against the Performance Targets (PT) (Refer to 2.3.2) set by the service buyers.

Tip

- ✓ **Service level agreements such as specified timeframes for service providers to respond or attend to system failure can be detailed in the specifications.**
- ✓ **KPIs and measurements should be:**
 - **Clear** – Use simple language to avoid ambiguities.
 - **Measurable**
 - Use objective indicators to enable enforcement and translation to payment. A clear and transparent methodology on how the service buyer and providers will measure the achievement of KPI is useful to ensure fair evaluation.
 - Where possible, objective data collected by the service buyers or procurers' facilities management system and other statistical information shall be used to measure the performance of each KPI.
 - **Achievable** – Service buyers should assess the viability of the KPI set based on existing conditions.
- ✓ **Service buyers should adopt the relevant Singapore Standards to measure performance of service providers.** Examples:
 - SS 694 on Code of practice for the measurement of cleaning performance for commercial, residential estates and retail F&B premises
 - SS 721 on Code of practice for the performance of pest management services

Examples of KPI and Measurement for M&E services (for illustration only)

Outcome-based Statements	KPI	KPI Target	KPI scores
Ensure that routine maintenance is carried out timely to minimise downtime, breakdown or failure	No. of failures to restore systems within stipulated response time.	Not more than 2 failures per month	0 to 2 failure - 5 points 3 to 4 failures – 3 points > 4 failures – 0 points
Ensure that building occupants are well informed of planned maintenance works	No. of complaints due to failure to inform building occupants of maintenance works.	Not more than 2 complaints per maintenance work	0 to 2 failure - 5 points 3 to 4 failures – 3 points > 4 failures – 0 points
Attend to system failures timely	Time taken to respond and rectify system failures within stipulated timeframe	95% of cases attended within stipulated timeframe	95% and above - 10 points 90% -< 95% - 5 points Below 90% - 0 points

Performance score = total KPI scores achieved

Note: Service buyers to rationalise and set the KPIs, KPI targets and scoring according to the desired outcomes set and organisation's business objectives.

Performance Targets

- 2.5.2 The service buyers will set a monthly and/or annual Performance Target, pegged to the total KPI scores, to be met by the service providers. The Performance Target can be the same throughout the duration of the contract or vary yearly according to service buyers' expectations but must be clearly stated upfront in the tender documents. Similarly, the frequency and methodology of performance evaluation should be clearly specified upfront to prevent disputes.

Example of Monthly Performance Target

Year of Service	Monthly Performance Target
1 st Year	80%
2 nd Year	83%
3 rd Year	86%
4 th and Subsequent Year	88%

Note: The Performance Target can be the same throughout the duration of the contract or vary yearly according to service buyers' expectations.

- 2.5.3 To derive the overall KPI scores for IFM contracts, service buyers could evaluate the KPI scores for each FM service and average or sum up the scores on a weighted basis.

2.6 Performance-Based Payment for Primary Service Providers

- 2.6.1 To encourage service providers to meet or perform beyond the Performance Targets, performance-based payments can be adopted, i.e. if the total KPI score achieved is above the Performance Target, a bonus amount on top of the monthly base fees can be paid to the service provider. Conversely, any under-achievement of Performance Target can result in amount being deducted from the monthly base fees. Such bonuses and deductions shall be cascaded proportionately to subcontractors and downstream service providers whose work contributed to the relevant performance outcome. **The bonus and deduction of monthly fee should be capped at 10% of the monthly fee maximum at each tier of the supply chain.**

Example of Performance-Based Payment model

KPI score achieved by service provider	Bonus/Deduction Payment to be received by service provider
Performance Target + 10% or more	Monthly Base Fee* + 10%
Performance Target + x% (up to 10%)	Monthly Base Fee + x% (up to 10%)
Performance Target	Monthly Base Fee
Performance Target – x% (up to -10%)	Monthly Base Fee – x% (up to -10%)
Performance Target - 10% or more	Monthly Base Fee - 10%

* The Monthly Base Fee is the Base Fees stipulated in the Breakdown Costs of Tender and accepted in the Contract.

If the monthly based fee is \$150,000 per month and service provider obtains a KPI score of 75% for the month where the Performance Target is set at 80%, the service provider shall be paid based on monthly base fee less 5%, i.e. \$142,500 for that month.

Fair, transparent and prompt payment across the FM value chain

- 2.6.2 Performance-based deductions should be applied only to the specific services that fail to meet performance standards, rather than as blanket deductions across all services, so that well-performing service providers and subcontractors are not penalised for failures in unrelated services.
- 2.6.3 When performance bonuses are awarded, service providers are encouraged to share a portion of these incentives with their subcontractors to strengthen ownership and motivation across all tiers of the supply chain.

Example of targeted incentives and disincentives by trade services

Service Performance Score (SPS) for the Month = 100 Points + Service Merit Points – Service Deviation Points	
Compute service deviation and merit points acquired by Service Provider across all FM Service Category	< Performance Target (e.g. 85 points) Proceed to check service deviation points acquired by each FM service category (threshold = >x points)
	≥ Performance target (e.g. 85 points) Proceed with monthly payment

Monthly Payment Computation	
Minimum SPS achieved by the Service Provider	Payment Percentage
100 & above	No adjustment
85 to 89	No adjustment
84 & below	- The monthly management fee will be computed based on the FM categories that have acquired more than 3 Service Deviation points. - Each Service Deviation point will result in the reduction of the monthly payment by 1%.

Monthly Key Performance Indicators & Service Merit Points				
S/N	Key Performance Indicators		Service Merit Pts	Remarks
1	Customer Satisfaction	Received ≥ 5 compliments for service rendered	5	Any forms of compliment from email, survey and other acceptable feedback channel for services provided according to the Accepted Plan and according to the following requirements: • The compliment must be clearly expressed and be time-specific • It must originate from an identifiable and authorised source • It must be documented, dated, and verifiable • Verbal compliments will not be considered
2		Received 4 compliments	4	
3		Received 3 compliments	3	
4		Received 2 compliments	2	
5		Received 1 compliment	1	
6		Received 0 compliment	0	

Monthly Key Performance Indicators & Service Demerit Points				
S/N	Key Performance Indicators	Service Failure Description	Metric/ Trigger	Service Demerit Pts
1	Cleaning Frequency	Missed cleaning frequency without prior approval	≥1 missed session per area/day	1 pt per occurrence
2	Toilet Consumables	Unclean, jammed, or broken dispensers	Verified during site inspection	1 pt per item
3	Waste Management	Overflowing bins (general/recycling/organic)	≥2 bins/month found >75% full overnight	2 pts per instance
4	Security Response Time	Security personnel fail to respond to an incident or call within 15 minutes	Time-stamped records show response >15 mins	2 pts per delay
5	ACMV System Compliance	Use of improper procedures, or failure to meet BCA, NEA, or ASHRAE standards	Verified by inspection, or regulatory advisories	2 pts per violation
6	Audio and Visual System Usage	Complaints on AV-related issues	≥3 valid complaints/month	1 pt per complaint; from 4 th complaint onwards
7	Tenants Management on Communication	Inaccurate or incomplete communication of scheduled works impacting tenants	>1 instances of incorrect or missing notification per quarter	1 pt per instance
8	Events Management	Failure to set up venue on time per event brief	Setup not completed at least 1 hour before event start	2 pts per event

Example: Calculating service performance score for the month

S/N	FM Category	Service Deviation Pts	S/N	FM Category	Service Deviation Pts
1	Cleaning	11	12	Integrated FM Systems	0
2	Toilet		13	Survey on Satisfaction Level	0
3	Waste Management		14	Workplace Safety	0
4	Pest Control	0	15	Audio and Visual System	2
5	Security Management	4	16	Tenants Management	1
6	Landscape Management	0	17	Building Management System	0
7	ACMV System	2	18	Events Management	2
8	Fire Protection System	0	19	Sustainability Drive	0
9	Other Mechanical Systems	0	20	Extra Low Voltage Systems	0
10	Lift & Vertical Transportation Systems	0	21	Condition Based Assessment	0
11	Power Distribution and Electrical Installations	0			

- Service Merit points accumulated for the month = 3 points
- Service Deviation points accumulated for the month = 22 points
- Total Service Performance Score for the month = $100 + 3 - 22 = 81$ points

There are two FM categories which have accumulated more than 3 Service Deviation points

- Cleaning, Toilet and Waste Management = 11 Service Deviation points (11% reduction)
- Security Management = 4 Service Deviation points (4% reduction)

Total worked out monthly payment =

(89% x monies listed in Price List for Cleaning, Toilet and Waste Management) + (96% x monies listed in Price List for Security Management)

2.6.4 All stakeholders in the FM ecosystem should establish and implement prompt payment practices to maintain financial stability throughout the value chain. Payment claims should be certified and paid promptly at every level of the supply chain, with clear payment timelines tied to the completion of agreed KPIs or service milestones. A tiered payment approach across the supply chain is one such mechanism — see sample clauses below.

Sample clauses on tiered payment approach

- The monthly amount payable for maintenance works and services shall be based on works completed and accepted. The annual amount for recurring services such as cleaning and landscaping shall be distributed equally over 12 months and may be subject to change under these conditions: (a) change in scope of works; (b) newly constructed or demolished buildings; or (c) change in frequency of services.
- The Service Provider will be paid X% (e.g. 70%) of the total monthly assessed amount. The balance 30% will be paid based on the score achieved for the monthly performance assessment.

Example on service performance measurement and result framework

Key terms	What it means
Service Expectations	The FM outcomes and qualitative requirements the Organisation expects to be achieved under this Contract, which are captured under the Specifications of this Contract.
Service Results (SR)	The measurable results used to assess whether the Service Expectations have been met and is measured by the weighted score representing the aggregated performance of the FMC across all trades for the relevant period.
Key Service Achievement (KSA)	A positive performance trigger that rewards the FMC for sustained excellence, innovation, or improvement beyond baseline Service Results.
Key Service Lapse (KSL)	A negative performance trigger that results in deduction of payment due to underperformance, breach, or failure to meet service requirements. • Immediate (Monthly): A KSL applied within the same month the lapse occurs. • Deferred (Six-Monthly): A KSL applied at the next Six-Monthly Assessment Date, based on sustained underperformance or recurring lapses.
Six-Month Performance Block	A fixed performance assessment period of six (6) consecutive calendar months, commencing from the Contract Commencement Date and recurring at six-month intervals thereafter, during which the FMC's performance results are measured and verified for the purposes of applying any KSA or KSL. Each Six-Month Performance Block concludes on a Six-Monthly Assessment Date.

The Organisation monitors the FMC's performance through a four-level scorecard:

Level	What it measures
Level 1 — Service Result (SR)	Represents the aggregated performance outcome for the contract period, derived through weighted consolidation of the Trade Scores.
Level 2 — Trade Scores	Reflects the performance of each trade category (e.g., Cleaning, M&E, Pest Control), consolidated from the underlying Key Results.
Level 3 — Key Results	Captures performance across key service outcome areas, each informed by the underlying Performance Indicators.
Level 4 — Performance Indicators	The foundational indicators that track specific metrics against agreed thresholds and form the data basis for the higher-level results.

Each trade is assigned a weightage reflecting its relative importance to the contract:

Trade	Weightage	Trade	Weightage
General property maintenance	3%	M&E	35%
Cleaning	30%	Sanitary and plumbing	10%
Pest control	5%	AV systems	10%
Landscape	5%	Carpark	2%
Total weightage: 100%			

The Service Result (SR) score is then mapped to a performance band:

Performance Band	Score	Description
A	≥95%	Exemplary performance demonstrating sustained excellence across trades.
B	90% - 94%	Good performance, generally consistent in meeting service expectations.
S (Satisfactory)	85% - 89%	Satisfactory performance meeting minimum service standards but requiring improvement.
U1 (Unsatisfactory 1)	80% - 84%	Unsatisfactory performance with recurring lapses or shortfalls below contractual thresholds.
U2 (Unsatisfactory 2)	<80%	Material failure to deliver service expectations; significant or systemic non-performance.

Examples of Key Service Achievements (KSA)

KSA	Criteria/ Measurement	Reward Basis	Incentive Quantum
Achieving high satisfaction for annual customer satisfaction survey	Obtained score of 92% and above for customer satisfaction survey (CSS) conducted annually	Monthly management fee	Equivalent of 10% of one month's Management Fee, payable once per six-month period achieved. (100% to core team)
Sustained A-Grade for trade scores (Cleaning and security only)	Specific trade achieves $\geq 95\%$ (Band A) for a continuous six-month performance block, measured from the Contract Commencement Date and recurring at six-month intervals for the duration of the Contract Term. Applies only to cleaning and security trades with dedicated site headcount	Trade Cost (per qualifying trade)	10% of validated trade cost for each qualifying trade, payable once per six-month period directly to trade workers.
Sustainability targets achieved	Annual 4% reduction in utilities (electricity or water) consumption year on year, where the FMC details its efforts and proves that the reduction arises from its efforts to the Corporation's satisfaction.	Manpower Cost	Equivalent of 15% of one month's Management Fee.

Examples of Key Service Lapses (KSL)

KSL	Trigger/ Criteria	Assessment Type	Deduction Basis	Typical Quantum
Regulatory non-compliance	Breach of statutory or regulatory requirements resulting in a notice, fine, or enforcement action.	Immediate (Monthly)	Manpower cost + profit	5% per occurrence
Delay in project time	Failure to manage the project resulting in delay to agreed milestones.	Immediate (Monthly)	Project management fee	0.1% of Project Management fee per day (capped at 10%)
Failure to carry out the technology implementation plan	Technologies listed under the plan are not meeting the agreed milestone.	Deferred (Six-Monthly)	Monthly management fee	Up to 15% of monthly FMC management fee
Untrained guard deployed	Deployment of a security guard without the required training (e.g., basic security, emergency response protocols).	Deferred (Six-Monthly)	Trade cost	10% of monthly trade cost per occurrence per month

2.7 Other Optional Performance Management Practices

2.7.1 Building owners can consider exploring other performance management practices to encourage service providers to perform beyond the required standard.

Tip

- ✓ It is more effective to encourage good performance through incentives than penalties.
- ✓ Close contract monitoring and transparent feedback of service provider's performance ensures better service delivery and achievement of desired outcomes.

Monetary incentives

2.7.2 Service buyer can consider providing a monthly or yearly percentage of bonus payment to service provider for exceeding performance for certain key outcomes. This is to motivate them to play a proactive role, work towards meeting the performance target and achieving continuous improvement through their service of work. Service buyers can set their own criteria and requirements for service provider to meet to be eligible for the bonus payments.

For example:

- Service provider's average KPI score of a year meets the respective yearly target
- Annual reduction in energy/ water consumption by 5%. Service buyers to include mechanism of measuring and verifying the savings in energy/ water consumption.
- Annual Customer Satisfaction survey to meet the respective yearly target.
- Achieve zero lift breakdown/ complain/ defect service request
- No breach of the terms and conditions in the contract.

To align interests and goals, service providers can share a percentage of the bonuses with operational staff as a form of reward and even extend the incentives to the relevant sub-contractors (e.g. cleaning, landscape or security companies).

Example of monthly and yearly incentives (reference from JTC)

Monthly Performance Target	Monthly Bonus
Achieve zero (0) lift breakdown/ complaint / defect service requests (within a stipulated timeframe)	1% of Management Fee
Achieve zero (0) conservancy, refuse removal and pest control complaints / service requests	1% of Management Fee
Annual Performance Target	Annual Bonus
92% Customer Satisfaction based on Survey	0.5% of Annual Management Fee
4% reduction in energy / water consumption	0.25% of Annual Management Fee
Consistent achievement of targets throughout the year	0.5% of Annual Management Fee

Stage 3: Tender Evaluation Stage

3.1 Value-For-Money

- 3.1.1 To ensure the best value, service buyers will evaluate tenders based on both price and quality (non-price) components. The term “best value” does not refer to the cheapest option, but rather the option that provides an optimal balance of benefits and costs based on total cost of ownership.
- 3.1.2 A structured tender evaluation framework on price and quality should be adopted to assess tenderers’ proposals. In line with the Government’s efforts to transform the FM sector, a higher emphasis is placed on the assessment of quality component. For public sector procurement of IFM tenders involving cleaning and/or security services, the weightage for the quality component is required to be equal or greater than the price component.

$$\text{Total Score} = \text{Price Score} + \text{Quality Score}$$

3.2 Tender Submissions

- 3.2.1 Service Buyers can adopt one-envelope or two-envelope system.
 - a) One-envelope System. Tenderers submit the Price and Quality together in one envelope. The Price and Quality scores shall be computed at the same time. The one-envelope system can be adopted for projects whereby the scoring of the specified quality attributes is based on quantified templates with no subjective judgment.
 - b) Two-envelope System. Tenderers submit the Quality envelope separately from the Price envelope. Service buyers would open and compute the Quality score first, before opening the Price envelope to compute the combined score. This ensures that the Quality score is not influenced by the Price.

3.3 Weightage for Price and Quality Components

- 3.3.1 The commonly adopted price-quality weightages for FM tenders areas shown below. Where possible, service buyers should place higher emphasis on quality by specifying higher weightage for quality during tender evaluation.

Component	Weightage
Price	40% - 60%
Quality	60% - 40% correspondingly

3.4 Price Component

- 3.4.1 The tender price refers to the total bid including base and optional years. The lowest tender price will be given the maximum Price score. The Price scores of the other tenderers will be inversely proportional to the lowest tender price as shown in the formula below.

$$\text{Price Score} = \frac{\text{Lowest tender price}}{\text{Tenderer's price}} \times \text{Price weightage}$$

- 3.4.2 When computing the P-score, the tenderer's price should not include provisional sums and/or prime costs.
- 3.4.3 To deter price diving, service buyers can include either one of the following “Abnormally-low-bid Curbing Mechanism” (ACM):
- Impose a price-score cap where tenderers with prices that are more than 20% below the average of tenderers' price will not be given further advantage⁸; or
 - Investigate and consider disqualifying tenderers with prices that are more than 20% below the average of tenderers' price; or
 - Other similar ACM.

⁸ Refer to Quality Fee Method framework on similar fee-diving mechanism.

Example of price-diving scenario

When the lowest qualifying tender price is lower than $0.8 P_{\text{average}}$

$$\text{Price Score} = \frac{0.8 P_{\text{average}}}{\text{Tenderer's Price}} \times \text{Price Weightage}$$

$$\text{Where, } P_{\text{average}} = \frac{\sum \text{Tender Price of all Qualifying Bids}}{\text{No. of Qualifying Bids}}$$

Any price quoted lower than $0.8 P_{\text{average}}$ will get the maximum Price-score.

3.5 Quality Component

- 3.5.1 The tenderer with the highest total raw quality points will be given the maximum Quality score. The Quality score of the other tenderers will be calculated proportionally to the highest total Quality points. The formula below shall be used to compute the Quality score.

$$\text{Quality Score} = \frac{\text{Tenderer's total raw quality points}}{\text{Highest total raw quality points}} \times \text{Quality weightage}$$

- 3.5.2 Under the quality component, service buyers have the flexibility to decide which quality attributes are relevant for their project, assign the maximum points for each quality attribute and set out the scoring method accordingly in the tender documents. Evaluation criteria should reward and encourage technology adoption whilst allowing service providers flexibility to propose optimal solutions based on their expertise. Attributes under the quality component could include:

- a) Relevant track records of tenderer and past performance⁹ to demonstrate firm's competencies or capabilities;
- b) Organisation structure and quality of proposed Operations Team on site;

⁹ Development of a standard performance appraisal system is in progress.

- c) Proposed operational strategy in terms of manpower and resource deployment plan, technology adoption, subcontractor management plan and quality of proposed subcontractors, etc to meet the KPIs set out;
- d) Proposed innovation and smart FM solutions¹⁰ which add value to the project;
- e) Firm's commitment to environmental sustainability based on proposals for upcycling, recycling or waste reduction solutions, etc.;
- f) Firm's past safety performance and proposed safety proposals or audit system;
- g) FM recognised certification scheme by FM trade associations to better discern the quality of FMCs;
- h) Relevant track records in technology and innovation projects with client's testimony showing how technology has been implemented to achieve key outcomes in areas such as improved productivity through workforce optimisation, enhanced safety and enforcement, better user experience etc.; and
- i) Other attributes such as current workload if any. For example, assign less points if the service provider is undertaking too many ongoing service contracts.

¹⁰ Refer to BCA's Guide to Smart FM

 Tip

Evaluating organisational capability and technical proposals

- ✓ When evaluating organisational capability, service buyers should also consider the service providers' recruitment strategies, staff retention track record, talent pipeline, and mobilisation plan for key positions, in addition to submitted CVs of personnel.
- ✓ Service buyers should evaluate the technical validity, operational feasibility, and site-specific applicability of proposals over presentation materials.

Evaluating smart FM proposals

- ✓ The smart FM solutions proposed should demonstrate that it will add value and meet the needs of the service buyer's desired outcomes. For e.g. a proposal to use drones in a "no fly zone" does not add value to the project and should not be considered.
- ✓ Service buyers should distinguish between technologies that are available upon contract commencement (e.g. incident reporting and essential operational systems) and those requiring phased implementation (e.g. new IoT deployment, asset tagging, analytics calibration and predictive maintenance) and set realistic timelines and expectations accordingly.

3.6 Information Required in Tender Documents

3.6.1 The following items should be clearly made known at tender stage:

- a) Weightage for Price and Quality;
- b) Quality attributes applicable and their assigned maximum points;
- c) Scoring method for each attribute e.g. benchmark performance method or ranking method¹¹, etc. Benchmarks used in the benchmark performance method must be made

¹¹ Please refer to the Price-Quality Method Framework on the Benchmark performance and ranking methods.

known, together with how tenderers which perform better or worse than the benchmark will be scored;

- d) Any minimum qualifying criterion for a specific quality attribute, which, if not met, would disqualify the tenderer (optional); and
- e) Any minimum total quality points below which tenderers will not be further considered (optional).

! Tip

Service providers should declare all active contracts, contracts awarded and awaiting mobilisation within the next 6 months, pending preferred-bidder tenders, and committed key personnel. This would allow service buyers to assess if the service provider possesses sufficient corporate capacity, resources, and supervisory bandwidth to execute the works.

Stage 4: Post-Tender Stage (FM Performance Appraisal Framework)

4.1 General

- 4.1.1 The performance of the FMCs should be assessed regularly throughout the contract lifecycle, on a yearly basis and upon completion of the contract. This can be done by assigning performance scores based on achievement of the KPIs set by service buyers in the contract. The performance appraisal will provide a quality feedback loop on FMCs' performance and allow those which had performed well in past contracts to be recognised during tender evaluation.

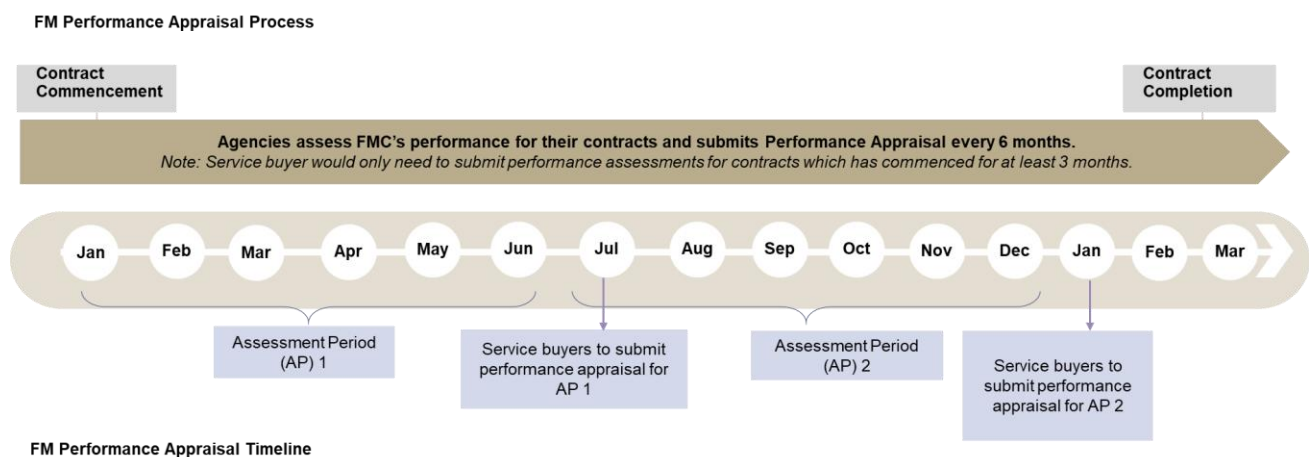
4.2 Key Principle and Features of the FM Performance Appraisal Framework

Key principle	Features of FM performance appraisal framework
Distinguish and encourage good performance of firms	Firm-level scoring of FMC to reflect its overall performance of FM contracts ¹² handled
	6-monthly performance assessment throughout contract duration to collect more regular data and to encourage good performance by FMC
	Evaluation Framework a) Fixed criteria as a common yardstick for performance among different contracts b) Flexibility for service buyers to decide the Key Performance Indicators (KPIs) to meet the desired outcome under each contract

¹² IFM refers to the provision of at least two distinct maintenance services by the same company. Contracts for integrated Mechanical and Electrical (M&E) maintenance services (i.e. amalgamation of few M&E services) will also be required to submit the performance appraisal.

4.3 Process flow of FM Performance appraisal framework

- 4.3.1 Service buyers would need to assess and submit the performance appraisal on a half-yearly basis. This allows regular monitoring of FMC to encourage better performance. The information collected from the performance appraisals will help form a database of FMCs' performance which will be used for future tender evaluation.



4.4 Overview of FM Performance Appraisal

Firm level rating- FMC overall performance rating

- 4.4.1 Firm's overall performance rating will be based on the average of the cumulative performance ratings of applicable projects. The FM performance appraisal will allow service buyers to apply filter fields for more accurate comparison between different contracts of similar fields when sufficient data are collated. (i.e. comparing performance of different firms with contracts of similar type of FM service, building type). Refer to Annex A for examples of deriving FMC overall performance rating and applying filter functions.

$$\text{Firm's Overall Performance Rating} = \frac{\text{Sum of all applicable projects' performance ratings}}{\text{Total no. of applicable projects}}$$

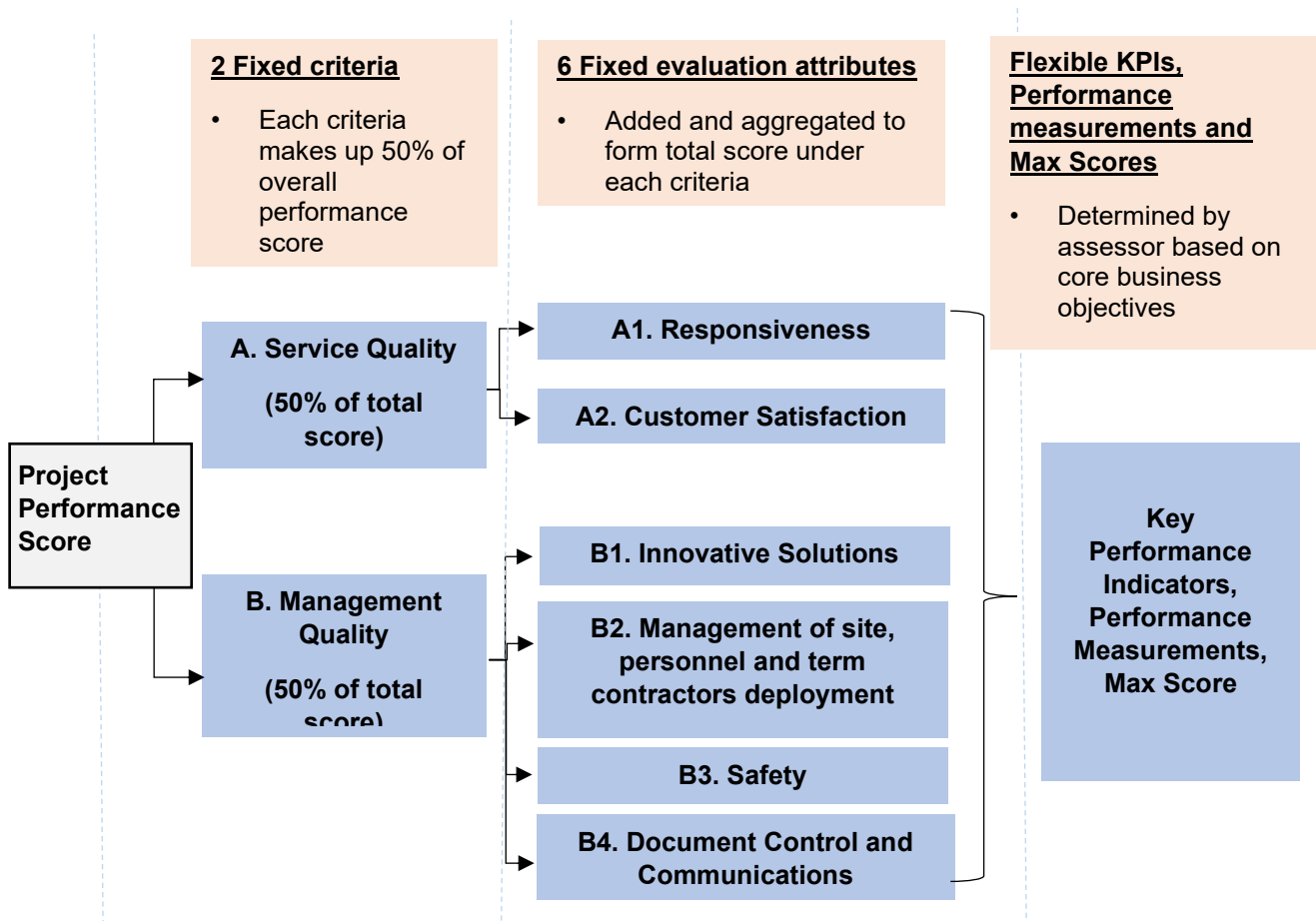
Project level rating

- 4.4.2 The performance grade of the FMC will be determined by benchmarking the total performance scores against the performance target set by service buyers under the contract. There will be 6 performance grades (Excellent, Very Good, Good, Satisfactory, Poor, Very Poor), to be assigned according to how well the FMCs have performed against the performance target.

Project Performance Appraisal Grade (table below as seen in guide on FM procurement)		Project Performance Rating
Project Performance score attained by FMC	Project Performance Grade	Performance Rating
PT + (>5 points)	Excellent	6
PT + (>3 points to 5 points)	Very Good	5
PT + (up to 3 points)	Good	4
PT - (up to 2 points)	Satisfactory	3
PT - (>2 points to 10 points)	Poor	2
PT - (>10points)	Very Poor	1
Illustration		
PT set by service buyer	80 pts	
Performance score attained by FMC	88 pts which is 8 pts higher than the PT of 80pts, (i.e. PT + 10%)	
Performance grade	Excellent	
Performance Rating	6	
PT refers to Performance Target		

Determining project performance score

- 4.4.3 The performance scores are calculated based on the achievement of the key performance indicators (KPIs) set by service buyers under the contract. To provide a common yardstick for performance measurement among different contracts, service buyers will be required to set their specific KPIs against 2 common evaluation criteria (i.e. service quality and management quality) and 6 corresponding fixed evaluation attributes under the performance appraisal framework.



4.5 Evaluation Framework

For Illustration only

Fixed (a)	Fixed (b)	To be determined by service buyers under contract			
Criteria	Evaluation attributes	Key Performance Indicators (KPI) (click link to view sample list of KPIs)	Measurement of KPI	Max. score	FMC Performance Score
Service Quality (50%)	Responsiveness	% of cases responded/ closed within stipulated time	>95% = 20 pts 90%-95% = 10 pts <90% = 0 pt	20 pts	20 pts
	Customer Satisfaction	Customer satisfaction survey	>90% of 'good and above performance service' = 20 points 85-90% = 16 pts 80-85% = 12 pts 75-80% = 8 pts 70-75% = 4 pts <70% = 0 pts	20 pts	16 pts
		Number of cases of complaints	0 complaints = 10 pts 1-2 complaints = 7 pts 3-4 complaints = 4 pts > 4 complaints = 0 pt	10 pts	7 pts
Management Quality (50%)	Management of site, personnel and term contractors deployment	No. of lapses resulting in significant impact on operations	5 pts deduction per case	15 pts	45 pts
	Safety	No. of major accidents	15 pts deduction per case	20 pts	
	Document Control & Communications	Audit on data system to ensure data Integrity (e.g. no. of data breaches, misuse, missing data, etc.)	5 pts deduction per non-compliance	10 pts	
	Innovative solutions	Improvement initiatives or enhancement work to resolve FM issues	Quality of solutions and implementation (assessment metric determined by service buyers)	5 pts	
Total performance scores					88 pts

- a) **Criteria- 2 fixed criteria (Service Quality and Management Quality)**, to standardise evaluation of firms' performances across all contracts. Both criteria are equally weighted, with each forming 50% of the FMCs total performance score. This is to provide a basis of comparison across different projects and service buyers.
- b) **Evaluation attributes- 6 Fixed evaluation attributes** to provide common areas of evaluation for all projects. The scores of each evaluation attribute under each criteria will be added together and aggregated to form the 50%. E.g. Service Quality Score = (Responsiveness Score + Customer Satisfaction Score) will have a maximum of 50 points.
- c) **KPIs- The KPIs and Performance Measurements**, which are determined by service buyers, give flexibility to service buyers in assessing areas critical to their core business objectives. Scores of the KPIs under each evaluation attribute will be totalled to form the evaluation attribute's score.
- d) **Scoring of KPIs- The Maximum Achievable Score and FMC's Performance Score** are determined by service buyers to give flexibility in meeting their needs. Allocating higher maximum achievable score for individual critical KPIs would increase their weightage to total score. Service buyers will assess the FMC's performance and enter the score achieved.

FMC Project Performance Score:

Overall Score (max 100 points) = 50 points for Service Quality + 50 points for Management Quality =

50 points for (Responsiveness Score + Customer Satisfaction Score) +

50 points for (Management of site personnel and term contractors deployment + Safety + Document Control & Solutions + Innovation Solutions)

4.6 FM Performance Dashboard

4.6.1 The data submitted from the performance appraisal will form a database of the FMC's performance which can be used for future tender evaluation. Subsequently when sufficient data are collated, service buyers can apply filters in deriving the performance ratings of FMCs. The list of applicable filters include:

- a) Firm's overall performance rating
- b) Type of FM services (e.g. cleaning, security, M&E)
- c) Type of building
- d) Project status (ongoing or completed) Projects' Duration (Commencement and Completion Date)
- e) Annualised contract sum (range)
- f) Awarded contract sum
- g) Agency

4.7 Annex- Deriving FMC Overall Performance Rating Using Filters

Example 1- Calculating FMC overall performance rating (based on all projects):

Projects	Building Type	FM Services Provided	Cumulative Performance Grade	Project Performance Rating
Project 1	Office Building	M&E Maintenance, Cleaning, Security, Building Maintenance	Excellent	6
Project 2	School	Integrated M&E Maintenance	Good	4
Project 3	Shopping Complex	Cleaning, Security	Very Good	5
Project 4	Industrial Complex	M&E Maintenance, Building Maintenance	Satisfactory	3
Overall Performance Rating = $\frac{6+4+5+3}{4} = \frac{18}{4} = 4.5$				

Example 2- Calculating FMC overall performance rating (based on building typology):

If service buyers choose to view overall performance rating of an FMC for contracts dealing with office buildings, the filter will select the applicable projects in deriving the FMC overall performance ratings.

Projects	Building Type	FM Services Provided	Cumulative Performance Grade	Project Performance Rating
Project 1	<u>Office Building</u>	M&E Maintenance, Cleaning, Security, Building Maintenance	Excellent	6
Project 2	School	Integrated M&E Maintenance	Good	4
Project 3	Shopping Complex	Cleaning, Security	Very Good	5
Project 4	Shopping Complex	M&E Maintenance, Building Maintenance	Satisfactory	3
Overall Performance Rating = 6				

Example 3- Calculating FMC overall performance rating **(based on type of FM services)**

If service buyers choose to view overall performance rating of an FMC for contracts dealing with cleaning services, the filter will select the applicable projects in deriving the FMC overall performance ratings.

Projects	Building Type	FM Services Provided	Cumulative Performance Grade	Project Performance Rating
Project 1	Office Building	M&E Maintenance, Cleaning , Security, Building Maintenance	Excellent	6
Project 2	School	M&E Maintenance	Good	4
Project 3	Shopping Complex	Cleaning , Security	Very Good	5
Project 4	Shopping Complex	M&E Maintenance, Building Maintenance	Satisfactory	3
Overall performance rating = $= \frac{6+5}{2}$				
= 5.50				

4.8 Adhoc Feedback Channel for FM Value Chain

To foster a more collaborative FM environment and improve overall procurement standards, an adhoc feedback channel is available for service providers and subcontractors to share project-specific feedback and concerns at any time. Firms may submit feedback on both positive experiences and areas for improvement, including their contact details and project information to ensure bona fide feedback and to facilitate follow-up where necessary ([Feedback on Procurement Practices in Public Sector Facilities Management \(FM\) Projects | FormSG](#)).

Conclusion

We seek the active participation of all our stakeholders – the firms, industry associations, and the unions, in the implementation of this Guide together with the support of the Government. We hope that with the application of outcome-based contracting, collaborative contracting and IFM, the existing FM processes can be streamlined, giving rise to a more efficient operation and improved service delivery, that we envisioned. We welcome any new suggestions and ideas that can further enhance the operations and execution to meet the evolving needs of this industry as we embark on this journey to transform the FM sector.

For suggestions and clarifications, please send them through [Building & Construction Authority](#).

What early adopters for IFM and OBC say?

“An integrated FM approach has proven to enable businesses **to remove traditional operational silos, synergise operations and create the best in-house experience for their customers.** Especially after COVID-19, an integrated FM approach backed by best-fit technology and propelled by ops-tech processes is crucial for businesses to adapt to the new normal, to be at the forefront of the competition.

Certis IFM has evolved into a one-stop solution provider of the full suite of FM services. We develop and implement tech systems that allow us to **orchestrate and synergise FM operations in mega-FM projects across multiple sites.** Monitoring and surveillance data is consolidated and analysed in real-time, **enabling us to implement predictive and preventive maintenance, optimise resources, and increase cost-savings for customers.**

Mr Lee Hock Heng
Head, Certis Integrated Services

“The outcome-based approach allowed CBRE to **re-engineer the work process through higher utilisation of specialised skills and future-proofing the workforce.** We are also highly motivated to support Singapore IFM transformation agenda by serving clients above and beyond the contract through innovation and productivity improvements. **CBRE is inspired by the flexibility afforded by IFM as this empowered us to create and effect innovative solutions that result in a win-win solution** for our clients. The outcome-based and IFM approaches have enabled CBRE-JTC team to be recognised as the Facilities Management Team of the Year in 2020.”

Mr Loh Wei Loon
Senior Managing Director, Singapore and South East Asia
CBRE | Global Workplace Solutions

“As our assets grow into larger portfolios, we can leverage **IFM as a force multiplier to procure and manage more strategically.** The amalgamation of FM works has enabled us to manage our products at a portfolio level thus, **opening new possibilities** to conduct big-data analytics to **enable financially and fundamentally sound FM contracting decisions.**”

Mr Jason Foo
Director, Facilities Planning & Advisory Division
JTC Corporation