Hong Kong-Shenzhen Innovation and Technology Park Limited

Tender Document
Provision of Western Bridge Whitelist Registration System – Application Service

Tender Reference:
FD-03-06-02(377)

Tender Closing Date:
1 December 2026
5:00 p.m. (HKSAR)

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

IMPORTANT NOTICE

This tender document is issued by Hong Kong-Shenzhen Innovation and Technology Park Limited ("**HSITPL**") and contains confidential information regarding the potential purchase by HSITPL as detailed in this tender document. The purpose of this tender document is to identify potential Tenderers. All information supplied by HSITPL in connection with this tender document shall be treated as confidential and strictly for the use by the recipients in response to this tender document only.

In consideration of receiving this tender document, the recipients agree and acknowledge that the tender document and any other information that may be provided to the recipients by or on behalf of HSITPL will be maintained in strict confidence and will not be disclosed to any third party. In particular, your attention is drawn to the fact that your receipt of this tender document and any discussions relating to its contents must be kept confidential at all times.

Please note that this is not an offer and it is only an invitation to interested parties to submit tenders to HSITPL for consideration.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

PART I: Terms of Tender

1. General

(a) Recipients (each a "**Tenderer**") are invited to submit tenders for the supply and installation for the application services of Western Cross-River Link Bridge ("**Western Bridge**") whitelist registration system ("**Whitelist Registration System**") including but not limited to design specifications, prototype, supply and development, delivery, platform deployment, installation, interface works, testing and commissioning, defect correction maintenance, training, documentation, and other work tasks as more particularly described in the requirement and technical specification and the design diagram for Hong Kong-Shenzhen Innovation and Technology Park ("**HSITP**", or the "**Park**") (the "**Whitelist Registration System Application Services**" or the "**Services**") in accordance with the requirements of this Invitation to Tender ("**Tender Documents**"), in particular, Submission Requirements as set out in Part III of this Invitation to Tender.

(b) All information provided by HSITPL or any other representatives, agents or consultants of HSITPL for the purpose of inviting a tender in response to the Tender Documents (the "**Tender**") shall be treated as private and strictly confidential and must not be disclosed or transferred to any other party without the prior written permission of HSITPL. The information provided in the Tender Documents is strictly for the use by the Tenderers in response to this Invitation to Tender only. Confidentiality must be maintained by all Tenderers even after the appointment of the successful Tenderer.

(c) All costs and expenses incurred by the Tenderer in preparing a Tender shall be entirely borne by the Tenderer.

(d) HSITPL reserves the right at its sole and absolute discretion to modify, amend, revise or cancel this Invitation to Tender without any liability for any cost, expenses and losses whatsoever which may be incurred by the Tenderers.

(e) Tenders may not be considered if false or incorrect information is provided by the Tenderer.

(f) This Invitation to Tender is merely an invitation and shall not in any way be construed as an offer by HSITPL nor constitute a contractual relationship between HSITPL and the Tenderers.

2. Accuracy and Validity of Offered Prices

(a) Tenderers shall ensure that all information (including quoted prices) in the Tenders is accurate. Under no circumstances will HSITPL accept any request to amend or revise or modify any information (including price) in the Tender.

(b) Tenderers are requested to submit its cost proposal in Hong Kong Dollars. All Tenders shall be valid for a period of **three (3)** months from the Tender Closing

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Date (the "**Tender Validity Period**"). The Tenderer agrees that, should HSITPL so request in writing, the Tenderer shall abide by this Invitation to Tender for a further **three (3)** months, and the Tender may be accepted by HSITPL at any time before the expiration of this extended period. If an award cannot be made within the Tender Validity Period (or extended Tender Validity Period), a request may be made to some or all of the Tenderers to further extend the Tender Validity Period, at which time they may elect to extend or withdraw their Tender or may agree a further extended Tender Validity Period with HSITPL in writing.

(c) Each and every Tender shall constitute an unconditional and irrevocable offer from the Tenderer capable of being accepted by HSITPL on the terms and conditions contained in the Tender Documents.

3. Tender Enquiries, Requests for Clarifications and Addenda

(a) All enquiries or requests for clarifications relating to the Tender Documents should be submitted in writing at least four (4) calendar days before the Tender Closing Date to:

Reema Kui – Assistant Manager, IT Operations
Email: reema.kui@hsitp.org
Telephone No.: (852) 3189 1575

The Tenderer shall state in the email subject heading "Tender Enquiry – **Provision of Western Bridge Whitelist Registration System – Application Service (Ref. No. FD-03-06-02(377))**" and provide full contact details in the email message. HSITPL reserves the right not to respond to any enquiry or request for clarification submitted after the deadline specified above.

(b) Should HSITPL wish to clarify the Tender Documents in response to any enquiries or requests for clarifications, such clarifications will be made in writing and sent to all Tenderers by email. Such emails containing Tenderer's enquiries or requests for clarifications and HSITPL's answers will be bound in with, and shall become part of, the documents forming the contract for the appointment of the selected Tenderer (the "**Contract**"). Save as aforesaid and unless otherwise expressly stated by HSITPL, any other statement, whether oral or in writing, made and any action taken by HSITPL or its consultants or any of their officers in response to any query made by a Tenderer is for guidance and reference purposes only and will not be deemed to form part of the Tender or Contract or in any way alter, negate, waive or otherwise vary any of the terms and conditions contained in the Tender Documents.

(c) Prior to the Tender Closing Date (which may be extended in accordance with the terms of the Tender Documents), addenda (each, an "**Addendum**") may be issued to clarify or modify the Tender Documents. A copy of each Addendum will be issued to every Tenderer via email and shall become a part of the Tender Documents.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

4. Submission of Tender

(a) The deadline for submitting a Tender ("Tender Closing Deadline") is 5:00 p.m. on 1 December 2026 (the "Tender Closing Date").

(b) Tenderers shall follow a two-envelope system, as set out below, in submitting their Tenders:

(i) **Technical Proposal**

The front cover of the Technical Proposal envelope shall be clearly marked with the subject of the Tender and the tender reference:

"Technical Proposal: Provision of Western Bridge Whitelist Registration System – Application Service (Ref. No. FD-03-06-02(377))"

and the Tenderer's company name.

(ii) **Price Proposal**

The front cover of the Price Proposal envelope shall be clearly marked with the subject of the Tender and the tender reference:

"Price Proposal: Provision of Western Bridge Whitelist Registration System - Application Service (Ref. No. FD-03-06-02(377))"

and the Tenderer's company name.

(c) Tenderers shall ensure that their Technical Proposal and Price Proposal are prepared in accordance with the Submission Requirements provided in the Tender Documents.

(d) Tenderers shall submit their Technical Proposal and Price Proposal separately in 2 sealed envelopes from 9:00 a.m. to 5:00 p.m. on the Tender Closing Date in the tender box located at:

Hong Kong-Shenzhen Innovation and Technology Park Limited
Unit 710, 7/F, Lakeside 1, 8 Science Park West Avenue, Hong Kong Science Park, Hong Kong

Attention: Procurement Department (Tender Box)

(e) HSITPL reserves the right to disqualify any Tenderer if price information is disclosed in the Technical Proposal.

(f) If the Tender contains any qualification and/or alternative proposal, HSITPL reserves the right to disqualify such Tender. Further, such qualifications or alternative proposals are generally not accepted.

(g) Any late submissions or Tenders not submitted in accordance with the provisions in Clauses 4b) to f) above will not be accepted.

(h) In the event that typhoon signal no. 8 or above or a black rainstorm warning is hoisted or an announcement on extreme conditions is issued in Hong Kong between 9:00 a.m. and 5:00 p.m. (Hong Kong Time) on the Tender Closing Date, the Tender Closing Deadline will be extended to 12:00 noon (Hong Kong Time) on the next Business Day.

(i) Tenderers may be required to make a formal presentation at their own cost of their Tenders in the week of 1 December 2026 (tentative date). HSITPL shall advise the exact time, date and issue a formal invitation to the Tenderers.

(j) Each Tenderer can only submit one Tender. In the event that more than one Tender is submitted by the same Tenderer, all Tenders submitted by such Tenderer will not be considered.

(k) All submitted documents and materials will not be returned to the Tenderers regardless of the results of the Tenders and all the said materials will become the property of HSITPL.

5. Assessment Criteria

(a) All Tenderers shall be evaluated according to the following criteria:

- 70 % Technical Capability (maximum technical score: 70)
- 30 % Pricing (maximum price score: 30)

(b) As a prerequisite, all terms as set out in the Submission Requirements in the Tender Documents must be fulfilled before the Tender will be evaluated. Tenders which fail to comply with any of such terms will not be considered any further.

(c) Tenders which comply with all the terms as set out in the Submission Requirements will be evaluated based on the following non-exhaustive criteria (which are not ranked in any order of importance). The Tenderer must demonstrate the technical merits of the submitted Tender. Assessments will be based on all materials of the submitted Tender and any presentation or demonstration given by the Tenderer.

A. Corporate experience, track record and project delivery capacity;

B. Resource qualifications and professional accreditations;

C. Whitelist registration & integration to e-Gates solution (as further detailed in Paragraph 1.3.4 of Tender Schedule 5) and third-party systems technical expertise;

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

D. System architecture & integrations and application hosting, deployment and platform-compatibility expertise;

E. Project implementation and governance capability;

F. Testing & quality assurance capability;

G. Security and compliance;

H. Log management & analytics, defects liability period ("**DLP**") support and service-level agreement ("**SLA**") commitments; and

I. Price offer

(d) Technical Score shall be assessed by the tender assessment panel members based on the criteria below:

Technical Capability Assessment		**Technical Score (Points)**
A. Corporate experience, track record and project delivery capacity	**Evaluation of the Tenderer's enterprise-scale / government-scale Information and Communications Technology ("ICT") project delivery capability within the past 5 years:** • Proven expertise in providing comprehensive application services for high-availability and mission-critical ICT systems, preferably experience in cross-border systems, whitelist registration systems, and integration with multiple internal and external systems. • Demonstrated technical capability to deploy and support ICT systems.	10
B. Resource qualifications and professional accreditations	**Evaluation of the proposed execution team's business and technical competencies and certified profiles:** • Project manager ("**PM**"): review of the proposed PM's curriculum vitae ("**CV**"), certified technical / project management credentials (e.g., Project Management Professional ("**PMP**"), Projects IN Controlled Environments ("**PRINCE2**")). At least 15 years of information technology experience including at least 10 years of project management experience upon information technology development projects, of	15

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Technical Capability Assessment		Technical Score (Points)
	which at least 5 years upon systems handling personal data or facial enrolment or involving integration with systems of, or serving government authority. • Business analyst ("**BA**"): review of the proposed BA's CV, with enterprise-scale / government-scale ICT project delivery; preferably experience in cross-border systems, whitelist registration systems, and integration with multiple internal and external systems. At least 6 years of information technology experience including at least 3 years in requirements analysis and workflow design for approval or case-management systems. Proficient in written Traditional and/or simplified Chinese and spoken Cantonese and/or Mandarinand English. • System Architect & System Analyst ("**SA**"): review of the proposed SA's CV, with enterprise-scale / government-scale ICT project delivery; preferably experience in cross-border systems, whitelist registration systems, and integration with multiple internal and external systems. At least 10 years of information technology experience, including at least 8 years in the architecture of web-based transactional systems with multiple external system interfaces. • Developer Team ("**DT**"): review of the proposed front-end, back-end, integration / interface, database developer's CV, with enterprise-scale / government-scale ICT project delivery, including system architecture, application development, systems integration, testing, deployment and stakeholder management; preferably experience in cross-border systems, whitelist registration systems, and	

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Technical Capability Assessment		Technical Score (Points)
	integration with multiple internal and external systems. At least five (5) years of information technology experience, including at least three (3) years in application development, database development, system integration, and testing for enterprise-scale and/or government-scale systems, of which at least 3 years upon systems handling personal data or facial enrolment or involving integration with government or authority systems. • Cybersecurity Lead ("**QL**"): review of the proposed QL's CV, hold a recognized cyber security certification (e.g. Certified Information Security Manager ("**CISM**") / Certified Information Systems Auditor ("**CISA**") / Certified Information Systems Security Professional ("**CISSP**")) or equivalent; preferably experience in securing critical infrastructure systems, data protection and privacy compliance, security architecture and risk assessment. At least 6 years of information security experience including at least 3 years in secure application design or security assurance of systems processing personal data. Recognised professional information security certification required.	

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Technical Capability Assessment		Technical Score (Points)
C. Whitelist registration & integration to e-Gates solution and third-party systems technical expertise	**Evaluation of the comprehensive understanding and experience of business and technical expertise:** • Demonstrated business expertise on registration & cross-border business scenario, operation flow, business as usual ("**BAU**") and contingency plan. • Demonstrated technical expertise on whitelist registration system, cross-border system, access control system with facial recognition and dynamic QR code scanning.	20
D. System architecture & integrations and infrastructure architecture expertise	**Evaluation of system architecture & integrations and infrastructure architecture expertise:** • Demonstrated deep understanding and technical expertise on enterprise-scale / government-scale architecture knowledge, System code-level & database-level design, integration design, application programming interface ("**API**") integration, and secure file transfer protocol ("**SFTP**") over secure shell ("**SSH**"), and secured email experience, security architecture, cloud and hybrid architecture.	10

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Technical Capability Assessment		Technical Score (Points)
E. Project implementation and governance capability	**Evaluation of project implementation and governance expertise:** • Proven expertise in managing enterprise-scale and/or government-scale application development and system integration projects throughout the project lifecycle. • Proven expertise in applying appropriate project management methodologies, digital project management tools, development governance and project documentation standards. • Proven expertise in requirements management, project risk and issue management, change and configuration management, deployment and fallback planning, quality assurance, acceptance procedures, production rollout and operational handover. • Demonstrated capability in coordinating application interfaces, dependencies, testing and implementation activities with clients, platform providers, external system owners and other contractors.	10
F. Testing & quality assurance capability	**Evaluation of testing & quality assurance expertise:** • Demonstrated expertise in test case formulation and testing strategy for system integration test ("**SIT**"), user acceptance test ("**UAT**"), performance test, failover testing, covering business and technical aspects with digital management tools. • Demonstrated understanding and experience in security risk assessment and audit ("**SRAA**") and privacy impact assessment ("**PIA**"). • Demonstrated expertise in formulating acceptance criteria, defects / issue log management.	15

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Technical Capability Assessment		Technical Score (Points)
G. Security and compliance	**Evaluation of security and compliance expertise:** • Proven expertise in personal data protection compliance experience and government security projects. • Demonstrated expertise in security architecture review, data privacy compliance and cybersecurity supervision; preferably experience in a project certified with ISO 27001 or equivalent.	10
H. Log management & analytics, DLP and SLA commitments	**Evaluation of logs management & analytics, DLP and SLA:** • Demonstrated expertise in Identification of abnormal activities, incident & alert management, defects logging and tracking, and root cause analysis reports. • Official acceptance-linked DLP and licenses: signed commitment ensuring the 12-month DLP commence strictly from the date of official written sign-off production go-live, not delivery. • Support SLA commitment: guarantee of 24x7 support with 30 mins response & collaboration with related parties or vendors subject to incident priority.	10
	Total Technical Score (A+B+C+D+E+F+G+H)	=100 (passing score: 60)

Remark: An overall passing score of 60 out of 100 of the Total Technical Score in the table above shall be attained. Otherwise, the Tender will be considered failed in the Technical Capability Assessment and will not be considered further.

(e) Evaluation

An assessment panel ("**Tender Assessment Panel**") shall be formed by HSITPL to evaluate all Tenders received by HSITPL. The Tenders must meet all Mandatory Assessment Criteria (as defined in Part 1 of Tender Schedule 6) and attain a score equal or higher than the passing score in the Technical Capability Assessment abovementioned. Failure to declare and submit supporting documents confirming

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

compliance with any of the Mandatory Assessment Criteria may result in **disqualification of the Tender**. HSITPL shall evaluate the Tenders in strict confidence.

f) Score Calculation Methodology

HSITPL shall adopt the following formula in calculating the overall score for each Tender:

(i) Technical Score

Tenderer's technical score = (Tenderer's point score / Highest point score among all Tenderers) x (Maximum technical score)

(ii) Price Score

Tenderer's price score = (Lowest tender price among all Tenderers / Tenderer's tender price) x (Maximum price score)

Tender price refers to the Total Contract Amount as set out in Tender Schedule 4.

(iii) Overall Score = Technical Score + Price Score

6. Acceptance / Rejection of Tender

(a) HSITPL is not bound to accept the Tender which is of the lowest price and/or has the highest overall score and reserves the right in its absolute discretion to decline any offer or cancel this Invitation to Tender at any time without any obligation to explain its decision.

(b) HSITPL may, at its sole discretion, accept all or any terms proposed by the Tenderer in the Tender.

(c) HSITPL shall not be responsible for or liable to any Tenderer for any cost and/or expense and/or disbursements incurred by the Tenderers in preparing the Tender and/or any presentation or demonstration given by the Tenderer.

(d) Without prejudice to the generality of other clauses in the Tender, HSITPL may reject a tender which, in the opinion of HSITPL, is unreasonably low in terms of price and may therefore affect the tenderer's capability to carry out and complete the Contract and/or deliver work of the quality required in accordance with the terms of the Contract.

7. Negotiation

HSITPL reserves the right to negotiate the terms proposed in the Tender with any Tenderer.

8. Acceptance Notification

(a) The successful Tenderer shall receive a purchase order ("**PO**") generated from the system of HSITPL within the Tender Validity Period.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

(b) Tenderer(s) who do not receive any notification within the Tender Validity Period shall assume that their Tenders have not been accepted.

9. Cancellation of Invitation to Tender

Where there are changes in requirements after the Tender Closing Date for operational or whatever reasons, HSITPL is not bound to accept any conforming Tender and reserves the right to cancel this Invitation to Tender and/or re-issue a new invitation to tender on such other terms and conditions as HSITPL deems fit.

10. Intellectual Property Rights

By submitting the Tender, the Tenderer represents and warrants to HSITPL that none of the information or ideas in the Tender infringes the copyright, trade secrets, or intellectual property rights of any third party, and the Tenderer is deemed to have agreed to indemnify HSITPL against all costs, claims, demands, expenses and liabilities that may be incurred by HSITPL as a result of or in connection with any claim that any information or ideas provided or submitted by the Tenderer infringes the copyright, trade secrets or intellectual property rights of any third party.

11. Offering Gratuities

(a) A Tenderer shall not, and shall procure that its directors, employees, and agents involved in preparing the Tender shall not offer any financial or other advantage or benefit to any director or employee of HSITPL, or engage in any activity, practice or conduct which would be in violation of any applicable anti-bribery laws or regulations in connection with the Tender Documents and any matter contemplated herein.

(b) Tenderers are warned that offering or giving any gratuity, bonus, discount, bribe, loan or any other gift or consideration as an inducement or reward to any employee or agent of HSITPL in relation to this Invitation to Tender may constitute an offence contrary to the Prevention of Bribery Ordinance (Cap. 201), and that if any Tenderer is found to have made such an offer, HSITPL shall be at liberty to cancel his Tender or terminate the Contract and shall hold such Tenderer liable for any losses or damages which HSITPL may suffer.

12. Non-collusion

(a) Tenderers must ensure that the Tender is developed genuinely, independently and made with the intention to accept the Contract if awarded, and is prepared without any agreement, arrangement, communication, understanding, promise or undertaking with any other person (except as provided in paragraph 3 of the Non-collusive Tendering Certificate (as defined in Clause 12 d) below), including regarding price, Tender submission procedure or any terms of the Tender. In the event of any breach of this clause by any Tenderer, HSITPL reserves the right to invalidate the Tender submitted by the Tenderer and/or terminate the Contract entered with the Tenderer based on the Tender submitted by that Tenderer and seek damages.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

(b) All anti-competitive practices are strictly prohibited and the Tenderer's attention is drawn to its obligations under the Competition Ordinance (Cap. 619) (the "**Competition Ordinance**").

(c) Bid-rigging is inherently anti-competitive and is considered serious anti-competitive conduct under the Competition Ordinance. Tenderers who engage in bid-rigging conduct may be liable for the imposition of pecuniary penalties and other sanctions under the Competition Ordinance.

(d) Upon Tender submission, the Tenderer shall submit to HSITPL a non-collusive tendering certificate (in the form set out at Tender Schedule 2) (the "**Non-collusive Tendering Certificate**") duly signed by an authorised person on the Tenderer's behalf. The Contract is to be entered into in reliance on the statements made by the Tenderer in the Non-collusive Tendering Certificate and conditional upon the effectiveness and veracity of the Non-collusive Tendering Certificate. Any breach of any of the representations, warranties and/or undertakings given in the Non-collusive Tendering Certificate not only allows HSITPL to pursue damages and other forms of redress from the Tenderer but also is capable of amounting to a criminal offence and rendering the relevant personnel of the Tenderer liable to criminal prosecution (for instance, for the offence of conspiracy to defraud and upon conviction shall be liable to imprisonment for 14 years).

(e) Notwithstanding any provisions regarding disclosure of documents and information, HSITPL may, at its discretion, report and provide documents and information regarding any suspected anti-competitive collusive conduct to the Competition Commission and/or other relevant authorities.

13. Insurance

(a) The successful Tenderer shall, for the full term of the Contract, have in place the following insurance policies at its own cost with reputable insurer(s), on terms satisfactory to HSITPL, with HSITPL included as an insured, and in compliance with the laws of the Hong Kong Special Administrative Region ("**HKSAR**"):

(i) Public liability insurance for the sum of at least HK$10,000,000 for any one occurrence and unlimited in the aggregate for the period of insurance, covering legal liability in respect of death, bodily injury and property damage to third parties arising from the successful Tenderer's operations on site and in connection with the Services, and including a cross liability clause and a waiver of subrogation against HSITPL;

(ii) Employees' compensation insurance to cover legal liability under the Employees' Compensation Ordinance (Cap. 282) ("**EC Ordinance**") and common law in respect of legal liability for death or bodily injury of its employees engaged in the Services throughout the full term of the Contract, with coverage limits meeting the minimum requirements of the EC Ordinance and shall expressly cover all employees engaged in performing the Services, including those working at any construction site, work site, or premises related to the Contract.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

(b) The successful Tenderer shall, for the full term of the Contract and at its own cost, maintain a Technology Errors and Omissions ("**Tech E&O**") Insurance policy with reputable insurer(s), on terms satisfactory to HSITPL. HSITPL shall be named as principal under the policy. The policy shall cover the successful Tenderer's legal liability to pay compensation arising from any negligent act, error, omission, breach of security, or infringement of copyright in connection with the performance of the Services and/or provision of products under the Contract. The policy shall provide a minimum limit of indemnity of not less than HK$10,000,000 for any one occurrence. Where a standard Professional Indemnity or Errors and Omissions policy is maintained instead of a Tech E&O policy, the policy shall include a cyber affirmative extension providing coverage for cyber-related liabilities.

(c) The insurance for the works shall cover the period from the commencement date of the Contract ("Commencement Date") until and extended to cover the date of expiry of the DLP and until such time as no further works as being carried out.

(d) HSITPL may from time to time require the successful Tenderer to maintain any insurance policies against other insurable risks, which reasonable costs and expenses would be reimbursed by HSITPL provided that such costs and expenses are approved by HSITPL in writing.

(e) In addition to maintaining the required insurance policies, the successful Tenderer shall hold HSITPL harmless from any loss, damage, cost, expense, liability etc. and (without prejudice to the obligations to indemnify HSITPL as stipulated in Clause 9 of the PO T&C as defined in Part II below) fully indemnify HSITPL and HSITPL's representatives for any loss, damage, cost, expense, liability etc. that may result directly or indirectly from the negligence of the successful Tenderer, its employees, agents, servants or any tiers of sub-contractors in the carrying out of its obligations under the Contract.

(f) The successful Tenderer is liable for all policy excesses / deductibles under the insurance policies maintained pursuant to this clause.

(g) The successful Tenderer should produce satisfactory evidence to HSITPL prior to the Commencement Date showing that the insurances referred to in this clause have been affected and are in force, including but not limited to, producing a certificate of insurance. If the successful Tenderer fails upon reasonable request to produce satisfactory evidence to HSITPL or HSITPL's representatives, HSITPL may affect and keep in force such insurance policies and pay such premium or premiums as may be necessary for that purpose, and from time to time deduct the amount so paid from any monies due or to become due to the successful Tenderer or recover such amount from the successful Tenderer. If the successful Tenderer fails to produce any such satisfactory evidence as requested by HSITPL or HSITPL's representatives, HSITPL reserves the right to terminate the Contract.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

14. Payment Schedule

Subject to the work done to the satisfaction of HSITPL, payments due under the Contract will be made as per the following payment schedule (**"Payment Schedule"**). Please note the Payment Schedule is for reference only and does not amount to any representation and warranties. Tenderers shall not rely on any information set out in the Payment Schedule.

Any Deliverables by the successful Tenderer shall be reviewed, approved and signed-off by HSITPL to ensure they meet HSITPL's satisfaction level, which is at the sole and final discretion of HSITPL.

Milestone No.	Task	% of Payment of the Total Contract Amount as Specified in Tender Schedule 4 of the Tender Documents
1	**Project Kick-off** • Conducted project kick-off meeting. • Introduced and assigned project team members.	5%
2	**Sign-off of functional requirement & technical design** • Acceptance of detailed design, diagram and requirement and technical specification submission • Acceptance of the Interface requirement document for test and production environment	10%

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

3	**Sign-off of SIT** • Completion of application deployment, configuration & implementation to the coordinated Test environment for SIT • Completion on SIT with end-to-end SIT case and testing report, issue log & bug fix reports. • Acceptance of Integration Test with Facial Enrolment Software • Acceptance of Integration Test with e-Gates solution • Acceptance of Integration test with authority 1's System • Acceptance of Interface test with authority 2's System • Acceptance of Interface test with authority 3's secured email • Acceptance of Integration test with monitoring and event log to security tools.	10%
4	**Sign-off of UAT** • Completion of application deployment, configuration & implementation to the coordinated Test environment for UAT • Completion of unit testing and functional testing, with support for end-to-end UAT, including the testing reports, issue logs, and bug-fix reports.	10%
5	**Sign-off of production rehearsal** • Completion of application deployment to the coordinated production environment for production rehearsal • Health check for production rehearsal on all Integrations & interfaces • Health check for production rehearsal on Whitelist Registration System Application & Infrastructure • Support production rehearsal with rehearsal case and testing report, issue / task log & bug fix reports	20%

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

6	**Sign-off of Production Go-Live** • Support the clearance for SRAA including the provision of relevant documentation such as architecture diagrams, workflow diagrams, data flow diagrams, and other supporting information. • Support for SRAA to provide and implement the remediation of all high and medium risk findings attributable to the Whitelist Registration System. • Provide data migration checklist, preparation, execution and completion data migration for production go-live • Completion of Operational, User, and Administrator Training, including the provision of training manuals, BAU, Operations and Maintenance Standard Operating Procedures (SOPs), and a comprehensive handover package covering all system administration accounts and related documentation. • Completion of production go-live with deployment & installation checklist, fallback procedure and Production Health Check with production verification report.	20%
7	**Nursing Period** • Completion of 3-month nursing period ("Nursing Period") with system health check report and log management and analytics. • Provision and implementation of remediation for all high- and medium-severity / priority issues or findings attributable to the Whitelist Registration System.	10%

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

8	**Sign-off of Project Completion** • Completion of 9-month Maintenance Period with system health check report and log management and analytics. • Provision and implementation of remediation for all High-, Medium- and Low- severity/ priority issues or findings attributable to the Whitelist Registration System application services. • Provided finalized project completion documentation (e.g., operations, BAU, maintenance manual, contingency plan, incident log and report, production Issue log and bug fix reports, handover documents, knowledge transfer documents and final acceptance report).	15%
	Total	**100%**

Note:

1. HSITPL shall have the sole and absolute discretion to determine the Commencement Date of the Services.
2. The successful Tenderer shall submit invoice(s) only after completion and acceptance of the service item(s) to the satisfaction of HSITPL.

PART II: Purchase Order Terms and Conditions

HSITPL shall issue a PO to the successful Tenderer on the terms as set out in the General Terms and Conditions for Purchase Orders ("**PO T&C**") which is available on HSITPL's website or provided separately by HSITPL in PDF file format. Tenderers must read the PO T&C carefully before submitting the Tender.

In the event that the Tenderer wishes to propose any revisions to the terms of the PO T&C, the Tenderer should set out such proposed revisions in the Technical Proposal of the Tender, but HSITPL is not bound to accept any of such proposed revisions. For the avoidance of doubt, such proposed revisions shall not form part of the PO. In any event, HSITPL will not accept any proposed revisions to the PO T&C that are not submitted together with the Technical Proposal and come to HSITPL's attention after the Tender Closing Date.

HSITPL reserves the right to disqualify any Tenderer that submits any proposed revisions to the PO T&C in the Price Proposal or proposes revisions to the PO T&C after the Tender Closing Date.

PART III: Submission Requirements

The Tenderer is required to return a complete set of the following documents to HSITPL before the Tender Closing Date in ***separate envelopes***.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Price Proposal		Tender Schedule No.
1.	Price Schedule	4

Technical Proposal		Tender Schedule No.
1.	Tender Submission Information	1
2.	Non-collusive Tendering Certificate	2
3.	Form of Tender	3
4.	Requirement Specifications	5
5.	Proposed Solution for Tender	6

Number of documents required:

a) 2 sets of the "Technical Proposal" in hard copy;

b) A universal serial bus ("**USB**") drive with an electronic copy of the "Technical Proposal" without any price information in PDF format; and

c) 1 set of the "Price Proposal", i.e. the Price Schedule (Tender Schedule 4), in hard copies.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Tender Schedule 1: Tender Submission Information

To: Hong Kong-Shenzhen Innovation and Technology Park Limited ("HSITPL")

Dear Sir / Madam,

"Provision of Western Bridge Whitelist Registration System – Application Service (Ref. No. FD-03-06-02(377))"

We provide the contact information below for this tender:

Representative:	
Job Title:	
Contact Phone Number:	(Office)
	(Mobile)
Contact Email:	

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Tender Schedule 2: Non-collusive Tendering Certificate

To: Hong Kong-Shenzhen Innovation and Technology Park Limited ("HSITPL")

Dear Sir / Madam,

Non-collusive Tendering Certificate for **"Provision of Western Bridge Whitelist Registration System - Application Service (Ref. No. FD-03-06-02(377))"** (the "**Contract**")

1. We, _____ of
(name(s) of the Tenderer(s))

_____

(address(es) of the Tenderer(s))

refer to the tender for the Contract (the "**Tender**") and our bid in relation to the Tender.

Non-collusion

2. We represent and warrant that in relation to the Tender:

a) Our bid was developed genuinely, independently and made with the intention to accept the Contract if awarded;

b) Our bid was not prepared with any agreement, arrangement, communication, understanding, promise or undertaking with any person (including any other tenderer or competitor) regarding:

(i) prices;

(ii) methods, factors or formulas used to calculate prices;

(iii) an intention or decision to submit, or not submit, a bid;

(iv) an intention or decision to withdraw a bid;

(v) the submission of a bid that does not conform with the requirements of the Tender;

(vi) the quality, quantity, specifications or delivery particulars of the products or services to which the Tender relates; and

(vii) the terms of the bid,

and we undertake that we will not, prior to the award of the Contract, enter into or engage in any of the foregoing.

3. Paragraph 2(b) of this certificate shall not apply to agreements, arrangements, communications,

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

understandings, promises or undertakings with:

a) HSITPL;

b) a joint venture partner, where joint venture arrangements relevant to the bid exist and which are notified to HSITPL;

c) consultants or sub-contractors, provided that the communications are held in strict confidence and limited to the information required to facilitate that particular consultancy arrangement or sub-contract;

d) professional advisers, provided that the communications are held in strict confidence and limited to the information required for the advisers to render their professional advice in relation to the Tender;

e) insurers or brokers for the purpose of obtaining an insurance quote, provided that the communications are held in strict confidence and limited to the information required to facilitate that particular insurance arrangement; and

f) banks for the purpose of obtaining financing for the Contract, provided that the communications are held in strict confidence and limited to the information required to facilitate that financing.

Disclosure of sub-contracting and beneficial ownership

4. We represent and warrant that there is no intended sub-contracting arrangement relating to the Tender, including those which are to be entered into after the Contract is awarded.

OR*

We represent and warrant that the following sub-contracting arrangements are all the intended sub-contracting arrangements relating to the Tender, including those which are to be entered into after the Contract is awarded:

[Please set out the details of such sub-contracting arrangements here. Please use supplemental sheets where appropriate.]

We understand that we are required to continue to disclose any of such sub-contracting arrangements to HSITPL as and when they arise.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5. We represent and warrant that the following is our beneficial ownership:

   (For a company other than a listed company or exempted company[1])
   [Please disclose the significant controllers register here, as defined in the Companies Ordinance, Cap. 622. Please use supplemental sheets where appropriate.]

   OR*

   (For a sole proprietorship or partnership)
   [Please disclose details of beneficial owner(s) here, including their name and the nature of their control over the firm. Please use supplemental sheets where appropriate.]

   OR*

   (For listed company)
   We are a listed company in Hong Kong and our corporate ownership has already been disclosed in the public domain.

6. We understand that HSITPL may request us to disclose further details regarding our shareholders or parent companies, or any other related, associated or controlling entities, to HSITPL. We agree to disclose such details to HSITPL if so requested, subject to such requests being reasonable in the circumstances.

Consequences of breach or non-compliance

7. We understand that in the event of any breach or non-compliance with any representations, warranties and/ or undertakings in this certificate, HSITPL may, at its discretion, invalidate our bid, exclude us in future tenders, pursue damages or other forms of redress from us (including but not limited to damages for delay, costs and expenses of re-tendering and other costs incurred), and/or (in the event that we are awarded the Contract) terminate the Contract.

8. Under the Competition Ordinance, bid-rigging is serious anti-competitive conduct. Further, any breach of any of the representations, warranties and/or undertakings given in this certificate is capable of amounting to a criminal offence and rendering our relevant personnel liable to criminal prosecution (for instance, for the offence of conspiracy to defraud and upon conviction shall be liable to imprisonment for 14 years). We understand that, notwithstanding any provisions regarding disclosure of documents and information, HSITPL may, at its discretion, report all suspected instances of anti-competitive conduct to the Competition Commission (the "**Commission**") and/or other relevant authorities and provide the Commission and/or other relevant authorities with any relevant information, including but not limited to information on our bid and our personal or corporate information.

[1] An exempted company is one which is not required to keep a register of its significant controllers (see further sections 653A (definition of "applicable company") and 653H of the Companies Ordinance).

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

For and on behalf of: _____
(Company Name)

Signature with Company Chop: _____
(Authorized Signature)

Name & Position: _____

Date: _____

Additional signature blocks will need to be used where the Tenderer is comprised of multiple parties.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Tender Schedule 3: Form of Tender

To: Hong Kong-Shenzhen Innovation and Technology Park Limited ("HSITPL")

Dear Sir / Madam,

"Provision of Western Bridge Whitelist Registration System – Application Service (Ref. No. FD-03-06-02(377))"

1. We undertake that, if our Tender is accepted, to commence the Services and complete and deliver the Services within the times stated in the Tender Documents.

2. We agree that this Tender shall be valid for a period of **three (3)** months from the Tender Closing Date specified in the Tender Documents. We agree that, should HSITPL so request in writing, we shall abide by this Invitation to Tender for a further **three (3)** months, and the Tender may be accepted by HSITPL at any time before the expiration of this extended period. If an award cannot be made within the Tender Validity Period (or extended Tender Validity Period), a request may be made to some or all of the Tenderers to further extend the Tender Validity Period, at which time they may elect to extend or withdraw their Tender or may agree a further extended Tender Validity Period with HSITPL in writing.

3. We confirm that this Tender has taken into consideration all tender addenda issued to us (if any) prior to the date hereof.

4. Unless and until a purchase order is issued by HSITPL to us, this Tender, together with your written acceptance thereof, shall constitute a binding agreement between us. The Tender should always form part of the binding agreement between HSITPL and us, while the order of precedence will be lower than the purchase order. We undertake to abide by the PO T&C enclosed with the Tender Documents in the event that our proposed revisions (if any) to the PO T&C are not accepted by HSITPL.

5. We understand and agree that HSITPL is not bound to accept the lowest or any tender you may receive.

6. We understand and agree that HSITPL is not responsible for any cost or expense incurred for and in connection with preparing the Tender and/or any presentation or demonstration given by us.

7. We confirm that we are not subject to any actual or potential conflict of interest save to the extent already expressly disclosed by us to HSITPL and we undertake to notify HSITPL immediately should any conflict arise.

8. We certify that, to the best of our knowledge and belief, all information and documents provided in and submitted with the Technical Proposal are true, accurate, and complete. Further, we understand and agree that if any information or document provided in or submitted with the Technical Proposal is found to be untrue, inaccurate, incomplete or misleading, HSITPL may, without limiting HSITPL's rights and remedies therein or at law, invalidate, reject and/or disqualify our Tender.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

For and on behalf of: _____
(Company Name)

Signature with Company Chop: _____
(Authorized Signature)

Name & Position: _____

Date: _____

Additional signature blocks will need to be used where the Tenderer is comprised of multiple parties.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Tender Schedule 4: Price Schedule

To: Hong Kong-Shenzhen Innovation and Technology Park Limited ("HSITPL")

Dear Sir / Madam,

"Provision of Western Bridge Whitelist Registration System – Application Service (Ref. No. FD-03-06-02(377))"

1. The quotation shall be valid for **three (3)** months from the Tender Closing Date specified in the Tender Documents. We agree that, should HSITPL so request in writing, we shall abide by this Invitation to Tender for a further **three (3)** months, and the Tender may be accepted by HSITPL at any time before the expiration of this extended period.
2. The price indicated in the tables below covers all the items specified in the Requirement Specifications of the Tender Documents.
3. HSITPL reserves the right to modify, amend or revise any Requirement Specifications and/or terms and conditions stated in the Tender Documents.
4. The Total Contract Amount is inclusive of all costs or charges which we will incur in the provision of the goods or services from the Commencement Date until the expiry of the DLP.
5. We acknowledge that only the Total Contract Amount in this Tender Schedule 4 will be assessed for the purpose of price score calculation for this Tender, whereas HSITPL will not consider any pricing information in "Optional Items" in this Tender Schedule 4 for the purpose of assessing the Tender.
6. Unless otherwise terminated, the Contract for our provision of the Services to HSITPL shall remain in force from the Commencement Date until the expiry of the DLP ("**Contract Period**").
7. We acknowledge that the price information provided in this Tender Schedule 4 shall remain fixed and binding throughout the Contract Period.
8. We acknowledge that (i) HSITPL will not accept any proposed revisions to the PO T&C that are not submitted together with the Technical Proposal and/or come to HSITPL's attention after the Tender Closing Date and (ii) HSITPL is not bound to accept any of such proposed revisions.
9. We acknowledge that HSITPL reserves the right to disqualify any Tenderer that submits any proposed revisions to the PO T&C in the Price Proposal or proposes revision to the PO T&C after the Tender Closing Date.

Item		**Price (HK$)**			
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Amount**
1	Provision of Whitelist Registration System – Application Service	Job	1		
				Total Contract Amount:	

Optional Items		**Price (HK$)**			
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Amount**
1	Additional man-days for additional installation, configuration, enhancement, requirement changes, etc.	Man-day	1		

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

2	Second year's system maintenance and support service (12-month)	Job	1		
3	Third year's system maintenance and support service (12-month)	Job	1		

We offer to provide the goods and/or services to HSITPL at the prices quoted above and in accordance with the Requirement Specifications and the terms and conditions stated in the Tender Documents. Acceptance of this offer shall be evidenced by the issuance of a purchase order by HSITPL.

_____

Authorised Signature (with company chop)

Name & Position: _____

Company Name: _____

Date: _____

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Tender Schedule 5: Requirement Specifications

To: Hong Kong-Shenzhen Innovation and Technology Park Limited ("HSITPL")

"Provision of Western Bridge Whitelist Registration System – Application Service (Ref. No. FD-03-06-02(377))"

The scope and specific requirements of the services which the Tenderer should provide are listed below.

1 INTRODUCTION AND SCOPE

1.1 Statement of Purpose

HSITPL hereby invites qualified and experienced tenderers to submit comprehensive, sealed technical and financial proposals for the provision of the Whitelist Registration System application service to provide end-to-end support, including but not limited to system design, development, integration, testing, deployment, training, operation, maintenance, and technical support, to ensure the successful delivery and operation of Whitelist Registration System and the achievement of HSITPL's project objectives.

HSITPL would like to invite interested parties to submit a Tender for the Services. The services will be accomplished as required in accordance with the Scope of Services / Deliverables, plus the other requirements, specifications, terms and conditions as stipulated in the Tender Documents.

1.2 About HSITP

HSITPL, a wholly owned subsidiary of Hong Kong Science and Technology Parks Corporation, is vested with the responsibility to develop, operate, maintain, and manage HSITP.

HSITP envisions to serve as the world's knowledge hub and innovation & technology ("**I&T**") centre, converging enterprises, research & development ("**R&D**") institutions and higher education institutions from local, Mainland and overseas, which can connect upstream and midstream research to downstream market, further enhancing collaboration among industry, academic and research sectors.

HSITP focuses on six I&T pillar industries including life and health technology, artificial intelligence and data science, new materials, new energy, robotics and microelectronics.

The Park covers an area of approximately 87 hectares and the development is divided into two phases. The estimated total floor area of the first phase will be approximately 1 million square metres, which will provide R&D (Wet Lab / Advanced Manufacturing) buildings, Dry Lab / Office buildings, Research, Academic and Industry buildings, Talent Accommodation, Visitor Lodges, Commercial and Ancillary facilities, etc. Apart from Batch 1, the remaining land in the first phase of the Park will be developed through enterprises investment, aiming to enhance the speed and quantity of project development by leveraging market forces to build high-quality research and industrial infrastructure.

Phase 1 will be developed by three batches, i.e., Batch 1, Batch 2 and Batch 3. The first development batch, Batch 1, has been further sub-divided into Batch 1A, Building 1, Batch 1B

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

and Batch 1C. Batch 1 is being developed by HSITPL which consists of eight buildings with a total gross floor area of approximately 116,000 square metres. Batch 1A consists of three buildings: Building 8 & 9 (wet laboratory enabled) and Building 11 (Talent Accommodation).

1.3 The Brief

1.3.1 The Western Bridge connects the Hong Kong Park (i.e. HSITP) and Shenzhen Park of Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone. To facilitate the cross-boundary flow of personnel between two parks, the Whitelist Registration System will be implemented which is critical to manage the authorized individuals of two parks to enjoy the convenience of travelling via the Western Bridge.

1.3.2 To strike a balance between the convenience of personnel flow and cross-boundary security, a physical bidirectional boundary control system, e-Gates solution, is compulsory which will allow individuals registered in the whitelist to go through the e-Gates located at the Building 2 and 3, 1/F podium by facial recognition with integration of the Whitelist Registration System.

1.3.3 HSITPL intends to commission a qualified supplier to design, develop, install, and implement the Whitelist Registration System, which includes an online registration platform and backend management system. This solution will enable users to complete self-registration prior to accessing the Western Bridge. The self-service registration process is expected to significantly streamline operations, enhance accuracy, and improve overall efficiency.

1.3.4 The e-Gates solution, which comprises the e-Gate facial enrolment system, e-Gate management system, e-Gate infrastructure and its associated subsystems that control and monitor them, is procured separately by HSITPL and does not form part of this service.

1.3.5 The Whitelist Registration System shall integrate with the e-Gates solution, interface with at least two (2) designated authority systems via API and SFTP over SSH, and support interface with designated authority through an email adaptor using secured email.

1.3.6 The Whitelist Registration System application shall be compatible with the hosting infrastructure and platform services provided under separate HSITPL contracts and backend application services to enable secure, reliable, and efficient operations.

1.3.7 In this Tender, “Platform_T” refers to the test / UAT infrastructure and platform services, while “Platform_P” refers to the production infrastructure and platform services. Both platforms are out of scope of this Tender and will be provided separately by HSITPL. The Tenderer shall be responsible for deploying, installing, configuring, and supporting the Whitelist Registration System application on both platforms, including integration with the e-Gates solution and other designated systems, to ensure seamless operation across the test / UAT, and production environments.

1.4 Purposes of Services

1.4.1 The tenderer shall be responsible for the design, development, implementation, integration, testing, deployment, operation, maintenance, and support of the Whitelist Registration System application service, including the whitelist registration platform, integration with the e-Gates solution, and interfacing with relevant authorities and third-party systems. The tenderer shall provide end-to-end project delivery and quality assurance services to ensure the successful implementation and operation of the Whitelist Registration System.

1.4.2 The tenderer shall provide all necessary project management, business analysis, application development, integration, testing, training, operational support, knowledge transfer and handover services necessary for the implementation of the Application Services.

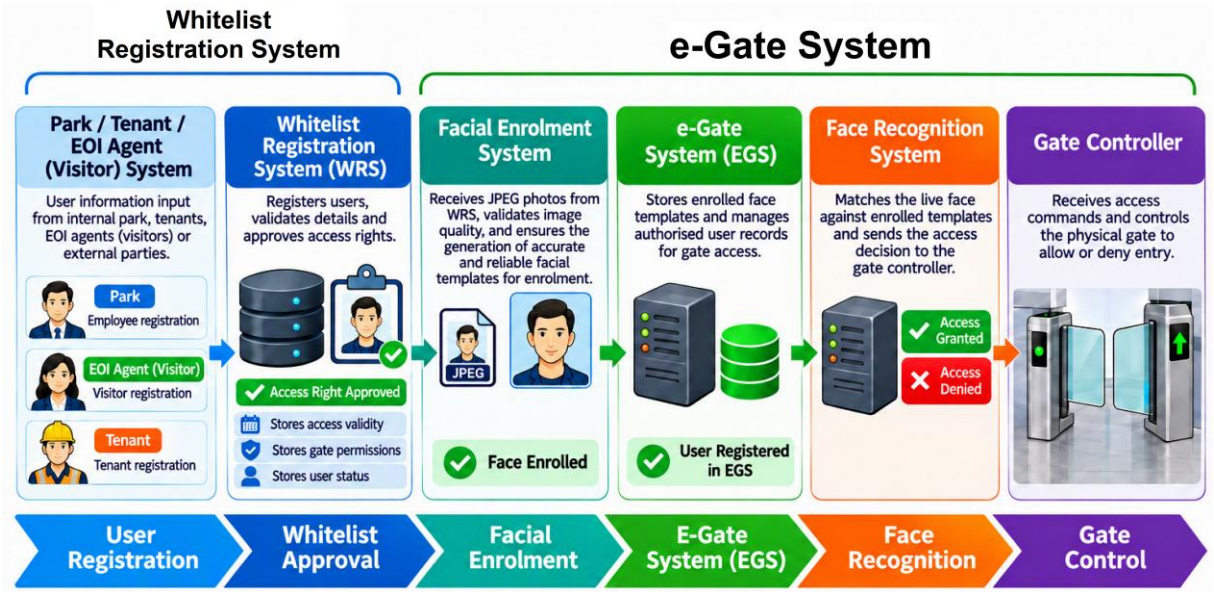
Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

1.4.3 The Whitelist Registration System shall support the registration of eligible companies and their representatives for authorized parties, including HSITPL personnel, tenants, contractors, subcontractors, entities operating within the park, incubates, Park residents, and other individuals involved in or invited to activities related to the development, management, and operation of HSITPL facilities and services.

1.4.4 The Whitelist Registration System shall support authorized representatives to login and submit, track and update the application for whitelist individuals, to streamline the process of granting access, and to reduce the relevant time spent and effort which provide validates the information, endorse & approves access rights, maintains access permissions and whitelist status.

1.4.5 During application submission, the whitelist individual's JPEG photo will be sent to the provided Facial Enrolment System for image quality validation and facial template generation. The enrolled facial template is then stored and managed by the e-Gates solution. When the individual approaches the e-Gate, the e-Gates solution compares the live facial image against the enrolled template and determines the access right. The e-Gate subsequently grants or denies entry based on the verification outcome, enabling secure and seamless access control.

1.4.6 The generic operation flow



1.5 Scope of Services / Deliverables

1.5.1 The tenderer shall design, develop, implement, install, test and commission, including but not limited to system configuration, platform deployment, complete integration and interfacing to the e-Gates solution and other designated authorities, provision of relevant documentation, training, maintenance and technical support to the following:

(a) the Whitelist Registration System Application Services shall cover the application components, business functions, integration, interfaces, deliverables, including but not limited to the application-side activities necessary to operate on the separately supplied platforms, front-end, back-end and database;

(b) the Registration Portal and the Administration Portal;

(c) the endorsement, approval, and whitelist lifecycle workflows for each application type;

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

(d) the notification module with email adaptor including but not limited to email notifications, automated reminders, and scheduled email;

(e) the integrations / interfaces to at least two designated authority systems by API, SFTP over SSH and secure email exchange;

(f) the integration with the e-Gates solution, which controls and monitors all Western Bridge facial e-Gates at Building 2 and 3, 1/F podium;

(g) the interface supporting the issue, revalidation and revocation of dynamic QR codes used as the manual operation;

(h) fulfil and support HSITPL's system security requirements and data security;

(i) lead and be responsible for all interface and coordination activities with other contractors, service providers, and stakeholders for the installation, configuration, testing and commissioning of the application on the client-provided servers and IT infrastructure;

(j) the project deliverable implementation and documentation, including but not limited to FRS, testing procedures, monitoring, log management and analytics, reporting, cybersecurity, backup and recovery functions; and

(k) the operational handover and documentation, including but not limited to the Operation and Maintenance ("**O&M**") manual & procedure, training, maintenance and technical support services.

1.5.2 The tenderer shall coordinate with the users to propose and confirm all the workflows required.

1.5.3 The tenderer shall include every other application service-related work, service, software, all subscription and license fees documentation, and activity described elsewhere in Requirement Specification for the completion of the production launch.

1.6 Exclusions

1.6.1 The following items are outside the scope of this tender and will be separately procured or provided by HSITPL. However, the tenderer shall include in-depth coordination with all integration and interface parties, all necessary integration / interface provisions, and design concepts to ensure compatibility with these components:

(a) the e-Gates solution including

(i) the Facial Enrolment System for photo quality verification to validate image quality and ensure the generation of accurate and reliable facial templates for enrolment.

(ii) the e-Gate management system and its e-Gate functional modules for facial capture, liveness detection, irregular event detection and real-time passage decisions; and

(iii) the e-Gate hardware equipment and its related infrastructure, installation, cabling, uninterruptible power supply and the manually operated emergency egress provision at the e-Gates.

(b) the development, configuration, unit testing and support of the e-Gates solution side of the interface described at Paragraph 6.4, which is performed by the e-Gates solution supplier;

(c) the SRAA and the PIA, which are arranged by HSITPL and conducted by an independent external cybersecurity firm appointed by HSITPL. The Tenderer shall provide all necessary support and rectify any issues identified;

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

(d) the hardware, IT infrastructure and system software associated with the Whitelist Registration System, other than the database directly supporting the Application Service.

1.6.2 An exclusion listed in Paragraph 1.6.1 does not relieve the Tenderer of its obligation to cooperate, to provide information and access, and to integrate Whitelist Registration System with the excluded item.

1.7 Interpretation

1.7.1 "Shall" denotes a mandatory requirement. "Should" denotes a desirable feature which will be assessed under the marking scheme but which is not mandatory. "May" denotes a permitted option.

1.7.2 Requirements marked as essential requirements are mandatory. A Tender which fails to satisfy an essential requirement will not be considered further.

1.7.3 Requirements are stated as outcomes. Where a specific protocol or standard is named, it is named because interoperability with an existing system or a statutory obligation requires it, and not as a preference for any supplier.

1.7.4 No brand, manufacturer or product name is specified in Requirement Specification. Tenderers are free to propose any solution which demonstrably satisfies the stated outcomes.

1.7.5 Words importing the singular include the plural and vice versa. Headings are for convenience only and do not affect interpretation. A reference to a Paragraph, Table or Annex is a reference to a Paragraph, Table or Annex of this Tender Schedule 5 unless otherwise stated.

1.7.6 Where a list is introduced by the words "including", "such as", "as a minimum" or similar, the list is illustrative and not exhaustive and does not limit the generality of the obligation which precedes it.

1.7.7 For the avoidance of doubt, the requirements set out in this Tender Schedule 5 are supplemental to, and shall be read together with, the Contract (including the PO T&C). Nothing in this Tender Schedule 5 shall limit or prejudice any rights or remedies available to HSITPL under the Contract.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

2 TENDERER RESPONSIBLITY

2.1 Design Responsibility

2.1.1 The Tenderer is wholly responsible for the design of Whitelist Registration System and for every part of it, including the application architecture, interface design, data model, security design, application hosting requirements and the manner in which the requirements of the Requirement Specifications are given effect.

2.1.2 The Requirement Specifications states the requirements of HSITPL and the outcomes which Whitelist Registration System shall achieve. It is not a design, and it shall not be read or relied upon as a design or as a representation that any particular design will satisfy those requirements.

2.1.3 Where a data schedule, process flow, workflow, table, register or diagram appears in the Requirement Specifications or in an Annex to it, it records a requirement of HSITPL or a business process already agreed between HSITPL and a third party. It does not constitute a design of Whitelist Registration System or of any part of it. The manner in which it is given effect in Whitelist Registration System is a matter for the Tenderer's design.

2.1.4 Neither HSITPL, nor any consultant, adviser, contractor or other person engaged by HSITPL, warrants the adequacy, completeness, buildability or fitness for purpose of any information, requirement, flow or diagram provided under or in connection with Requirement Specifications, save that HSITPL warrants it to be an accurate statement of its own requirement.

2.1.5 The review, comment, approval, acceptance, sign-off or certification of any submission, design, document, deliverable or item of work by HSITPL or by any consultant engaged by HSITPL shall not relieve the Tenderer of any obligation under the Contract, shall not transfer design responsibility, and shall not constitute a warranty or representation as to the adequacy or fitness for purpose of that submission.

2.1.6 The Tenderer shall not be entitled to rely upon HSITPL, or upon any consultant engaged by HSITPL, having verified the adequacy of the Tenderer's design, and shall satisfy itself in all respects as to the sufficiency of its design to meet the requirements of the Requirement Specifications.

2.1.7 The Tenderer shall carry out the investigation, verification and analysis necessary for the Application Services, including verification of interface behaviour, data volumes, data formats, application hosting constraints and designated authority requirements.

2.1.8 This Paragraph is without prejudice to the warranty of fitness for purpose at Paragraph 3.2.1.

2.1.9 The Tenderer shall bear full responsibility for identifying, validating and implementing all interface, protocol, security, data exchange and connectivity requirements necessary for successful integration with designated authority systems and third-party systems, whether expressly stated in the Requirement Specifications or reasonably required to achieve the intended outcome of Whitelist Registration System.

2.1.10 The Tenderer's design shall be demonstrably security-by-design and privacy-by-design.

2.2 Responsibility Boundaries

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

2.2.1 The Tenderer shall provide and be responsible for a complete end-to-end solution, ensuring that all components and services related or supported to Whitelist Registration System are fully coordinated, integrated, compatible, tested, commissioned, and ready for operational use.

2.2.2 The tenderer shall be deemed to have included in its Tender Price all works, services, materials, equipment, software, licences, interfaces, connections, configurations, installation, information, documentation, coordination, testing and commissioning, support and all other items reasonably necessary for the complete and proper execution of the Services and for the successful integration and operation of the overall solution, whether or not each such item is expressly identified, described or repeated in the relevant Tender Package.

2.2.3 Any omission, ambiguity, discrepancy, inconsistency, overlap or gap within or between the Tender Packages, including any unallocated or inadequately defined interface responsibility arising from the division of the Services into separate tender packages, shall not relieve the Tenderer of its obligations nor constitute grounds for refusal to perform the necessary Services, additional payment, variation, extension of time or other claim against HSITPL. Such requirements shall be deemed included in the tenderer's Tender Price.

2.2.4 Where any requirement or interface involves two or more contractors, each contractor shall be responsible for the portion relating to its goods and/or services and shall fully cooperate, coordinate and exchange all necessary information with HSITPL, other contractors and relevant parties to achieve the required end-to-end functionality. No contractor shall rely upon the boundary, omission or wording of an individual tender package as a basis for excluding any interface, coordination or associated obligation reasonably necessary for the proper completion, integration, testing and commissioning, acceptance and operation of the overall solution.

2.2.5 Where responsibility for any omitted, unclear or unallocated interface requirement cannot be readily determined from the Tender Documents, HSITPL shall be entitled to determine the appropriate allocation of interface and coordination responsibilities amongst the relevant contractors, having regard to their respective services and system responsibilities. Such determination shall not relieve the relevant contractors of their obligations to cooperate and achieve the required overall system functionality.

2.3 Information to be Submitted with the Tender

2.3.1 The Tenderer shall submit with its Tender, as part of its proposed solution in Tender Schedule 6, the following information:

(a) the implementation plan in accordance with Paragraph 4.1;

(b) a statement of how the proposed solution satisfies each functional requirement of Paragraph 5, identifying for each requirement whether it is met by the Tenderer’s developed product, by configuration of that product or by custom development for HSITPL;

(c) the proposed approach to each interface in Table 6-1, and the effect upon the implementation plan of any delay in the issue of the interface documentation referred to in Paragraph 6.3.3 include a list of Whitelist Registration System’s standard API set and the proposed interface messages to be customized to meet the requirements, and the estimated development time required for each interface.

(d) include a system architecture schematic covering equipment, network, and communication links required for each testing and production environment to support the proposed application services and explain how the proposed system architecture

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

will ensure compatibility and high availability for continuous 24/7 operation. It shall cover at least the following descriptions:

1. System and network failover and fallback mechanism for the production environment;
2. Operation mode failover and switching / fallback mechanism;
3. Integration and Interface compatibility;
4. Open platform and modular design to meet compatibility requirements;

(e) a list of all compatible hardware and system software proposed for the deployment of Whitelist Registration System to each environment for Platform_T and Platform_P, including quantity, deployment specification, licensing model and licence term, the expected system performance parameters, and identifying separately any item which HSITPL is expected to provide;

(f) proposed registration workflow, site map, navigation and terminology for the portal;

(g) proposed interactive prototype to provide the end-to-end user journeys;

(h) the proposed log management and analytics capability, including the method of centralised collection, the analytics and alerting capability proposed and the reports to be produced;

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

3 GENERAL OBLIGATIONS OF THE TENDER

This Paragraph states the general obligations which apply to the whole of the Services. It is to be read as qualifying and extending every other Paragraph of the Requirement Specifications.

3.1 Complete and Operational System

3.1.1 The Tenderer shall provide a complete, fully functional, fully integrated and operational System which satisfies the requirements of the Requirement Specifications in every respect, together with everything necessary for Whitelist Registration System to be put into and kept in safe, reliable and lawful operation, whether or not each such item is expressly described in the Requirement Specifications.

3.1.2 Where any item of work, service, equipment, software, license, interface, configuration, testing, documentation or training is necessary for the proper and complete performance of the Services, or may reasonably be inferred from the Requirement Specifications as being necessary for that purpose, it shall be deemed to be included within the scope of the Contract and within the Contract Price, and shall be provided by the Tenderer without additional charge.

3.1.3 The enumeration of particular requirements in the Requirement Specifications shall not be construed as limiting the generality of Paragraphs 3.1.1 and 3.1.2, and no omission from the Requirement Specifications of any detail necessary for the proper performance of the Services shall relieve the Tenderer of its obligation to provide it.

3.1.4 The Tenderer shall provide all ancillary, incidental, preparatory, temporary and consequential works and services necessary to give full effect to the Services, including but not limited to site preparation attributable to its own works, making good, commissioning support and the removal of temporary installations.

3.2 Fitness for Purpose

3.2.1 The Tenderer warrants that Whitelist Registration System shall be fit for the purposes described in the Requirement Specifications, shall be of satisfactory quality, and shall comply with all applicable laws, regulations, codes of practice and standards in force in the HKSAR from time to time during the Contract Period and the DLP.

3.2.2 Where a change in law or in an applicable regulatory requirement during the Implementation Period affects Whitelist Registration System, the Tenderer shall notify HSITPL promptly and shall implement the consequential change. Where the change arises after the technical design sign-off and materially increases the scope, it shall be dealt with as a system change.

3.3 Tenderer's Due Diligence

3.3.1 Each Tenderer shall be deemed to have examined the Requirement Specifications and every other document forming part of the Tender Documents, to have satisfied itself as to the nature and extent of the Services, and to have obtained for itself all information necessary for the preparation of its Tender.

3.3.2 A Tenderer shall raise any ambiguity, omission, discrepancy or apparent error in the Tender Documents in writing during the tender clarification period. A Tenderer which does not do so shall be deemed to have priced upon the interpretation most favourable to HSITPL.

3.3.3 No claim for additional payment or extension of time shall be entertained upon the ground that the Tenderer misunderstood or was unaware of any matter which it could reasonably

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

have ascertained before submitting its Tender.

3.4 Discrepancies and Order of Precedence

3.4.1 In the event of any ambiguity, conflict or discrepancy within this Tender Schedule 5, or between Tender Schedule 5 and any other part of the Tender Documents, the Tenderer shall refer the matter to HSITPL in writing before proceeding, and HSITPL's written interpretation shall be final and binding.

3.4.2 Pending HSITPL's interpretation, and in the absence of any instruction to the contrary, the requirement imposing the higher standard, the greater quantity or the more onerous obligation upon the Tenderer shall prevail, and the Tenderer shall have no claim for additional payment in respect of that construction.

3.4.3 A requirement appearing in only one place in the Tender Documents is as binding as if it appeared in all.

3.5 Coordination with Other Parties

3.5.1 The Tenderer acknowledges that Whitelist Registration System is one element of an integrated cross-boundary facility involving the e-Gate contract, the building design and construction contract, the Shenzhen counterpart, designated Hong Kong authorities and other HSITPL contractors and service providers.

3.5.2 The Tenderer shall take the lead, cooperate fully with, coordinate its work with, and provide reasonable assistance, information and access to, every other party engaged upon the facility, and shall attend such coordination meetings and workshops as HSITPL directs.

3.5.3 The Tenderer shall be deemed to have allowed in its programme and in its price for the coordination effort described in Paragraph 3.5.2, and no claim for additional payment or extension of time shall arise from the ordinary requirements of such coordination.

3.5.4 Where the Tenderer considers that an act or omission of another party is delaying or obstructing its work, it shall notify HSITPL in writing promptly and shall propose mitigation measures. The Tenderer shall not suspend or reduce its own work without HSITPL's written direction.

3.6 Quality of Personnel and Sub-Contractors

3.6.1 The Tenderer shall employ personnel who are suitably qualified, experienced, competent and, where applicable, certificated, for the work they perform, and shall replace at its own cost any person whose performance or conduct HSITPL reasonably considers unsatisfactory.

3.6.2 The Tenderer remains fully responsible for the acts, omissions, defaults and neglect of its sub-contractors, suppliers and their personnel as if they were its own.

3.7 No Additional Payment

3.7.1 Except where the Requirement Specifications or the Conditions of Contract expressly provides otherwise, everything required of the Tenderer by the Requirement Specifications shall be provided within the Contract Price, and no additional payment shall be made.

3.7.2 Where the Tenderer is required to rectify a defect, a non-conformity, a security finding attributable to its design, code or configuration, or a failure to meet a requirement of the Requirement Specifications, it shall do so at its own cost and without extension of time.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

4 IMPLEMENTATION PLAN AND SERVICES

4.1 Implementation plan

4.1.1 The Tenderer shall submit with its Tender, and shall maintain throughout the Contract, a detailed implementation plan demonstrating how the project timeline set out in Paragraph 14 of Tender Schedule 5 will be met. The implementation plan shall include key milestones, deliverables, resource allocation, the critical path, all dependencies on HSITPL and third parties, available float, testing and commissioning activities, and risk mitigation measures.

4.1.2 The Tenderer shall list in the implementation plan every assumption upon which the programme depends. As a minimum, the Tenderer shall state the latest date by which it requires the readiness of the Platform_T and Platform_P for the deployment of Whitelist Registration System, HSITPL to issue the interface specifications for the e-Gates solution and for each designated authority system (Paragraphs 4.3.3 and 6.3.1), and shall demonstrate that, on the basis of those dates, the production rehearsal and production go-live dates stated in Paragraph 4.2.4 will be achieved.

4.1.3 The Tenderer shall complete the production rollout of Whitelist Registration System in accordance with the implementation plan. All milestone dates and completion deadlines specified in the Contract shall be deemed essential requirements, and the Tenderer shall treat such dates as fixed and incorporate them into the final implementation plan.

4.1.4 All activities shall be performed by the Tenderer unless otherwise expressly specified.

4.2 Contract Programme

4.2.1 The DLP, comprising the Nursing Period and the Comprehensive Maintenance Period, shall be as specified in Paragraph 12.1. The Tenderer shall submit a detailed project implementation plan, including key date ("**KD**"), milestones, deliverables, resource allocation, dependency management, testing and commissioning activities, and risk mitigation measures.

4.2.2 The Tenderer shall ensure that all project activities, including all interface works, are properly planned and executed to achieve the production rehearsal target date, tentatively no later than **31 January 2027 ("KD1")** and ready for production go-live no later than **28 February 2027 ("KD2")**, exact KDs subject to HSITPL's written confirmation. The condition for production rehearsal is the acceptance of the integration test between the Whitelist Registration System and the e-Gates solution. The condition for ready for production go-live is acceptance of the joint end-to-end UAT for go-live.

4.2.3 The successful Tenderer shall achieve the milestone dates for readiness for SIT, readiness for rehearsal and production go-live. Failure to achieve any such milestone shall constitute a delay in performance. Without prejudice to any other rights or remedies of HSITPL under the Contract, including but not limited to the recovery of liquidated damages under Clause 4.3 of the PO T&C, the successful Tenderer shall promptly notify HSITPL of any actual or anticipated delay, submit a recovery plan acceptable to HSITPL and, at its own cost, take all reasonable measures, including the deployment of additional resources, to recover the delayed milestone. Failure to achieve any such milestone may be regarded by HSITPL as a material breach of the Contract.

4.3 Alignment with the e-Gates solution

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

4.3.1 The e-Gates solution will be delivered under a separate contract. Tenderers shall submit a proposed project implementation plan with interface milestones aligned to the e-Gates solution master programme. Such alignment is an essential requirement.

4.3.2 Whitelist Registration System shall be ready for joint integration testing with the e-Gates solution by **January 2027**. Readiness means that Whitelist Registration System side of Interface I-01 is developed, unit tested and deployed to an environment accessible to the e-Gates contractor, together with the interface test data and the Interface Control Document.

4.3.3 The Tenderer shall comply with the interface requirements set out in Paragraph 6.4 and any subsequent interface specifications issued by HSITPL for integration with the e-Gates solution. Such requirements do not constitute a design. The Tenderer shall remain wholly responsible under Paragraph 2.1 for the design, development, implementation, testing and operation of Whitelist Registration System-side interface, and shall support all activities necessary to achieve successful interoperability with the e-Gates solution.

4.3.4 The Tenderer shall attend the joint integration testing, rehearsal and commissioning activities of the e-Gate contract as required and shall make its Integration and Interface Engineer available for that purpose.

4.3.5 Where the e-Gates contractor is unable to proceed with joint integration testing upon the date required, the Tenderer shall notify HSITPL in writing and shall not thereby be entitled to suspend its own work. The Tenderer shall demonstrate its own readiness by testing against a simulated counterparty.

4.3.6 The Tenderer shall support Whitelist Registration System demonstration of the standard operational workflow planned for **Jan 2027**, notwithstanding that full functional testing and exception handling will not be completed at that stage.

4.4 Soft Launch and Contingency Arrangements

4.4.1 Whitelist Registration System shall support the creation and use of a predefined test whitelist, fully segregated from production data, so as to permit a soft launch and to allow interface and rehearsal testing before the full whitelist population is available.

4.4.2 Whitelist Registration System shall support temporary whitelist entry as a contingency measure, with a defined validity period, full audit trail and automatic expiry, to be used only where authorised in writing by HSITPL.

4.4.3 The Tenderer shall support the production rehearsal, including the demonstration of the standard operational workflow, and shall provide on-site attendance throughout the rehearsal period.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

4.5 Project Management

4.5.1 The Tenderer shall be responsible for overall project management and quality assurance and shall attend progress meetings, workshops and briefings as required by HSITPL.

4.5.2 The Tenderer shall produce a Project Charter, a business case supplement where required by HSITPL, and a project organisation structure, and shall maintain a checklist of project documentation throughout the Contract Period.

4.5.3 The Tenderer shall maintain and submit a project progress report at intervals not exceeding one month, together with a regularly updated project timeline, a submission log, a risk register and an issue register.

4.5.4 The Tenderer shall produce a technical risk assessment at the design stage and shall update it upon each material change to the design.

4.5.5 The Tenderer shall nominate a single point of contact for the Contract and shall ensure that a responsible representative is contactable at all times during the Implementation Period and the DLP.

4.6 System analysis and design

4.6.1 The Tenderer shall conduct system analysis and design, shall produce the deliverables listed for design stage in Table 4-1, and shall obtain HSITPL's sign-off before proceeding to build.

4.6.2 The security architecture shall be reviewed in order to assess the design and implementation of security measures and to identify gaps or vulnerabilities and shall be shown to align with recognised practice and with the regulatory and government security requirements applicable to HSITPL.

4.6.3 The Tenderer shall produce a contingency design and plan at the design stage for review by HSITPL.

4.6.4 The Tenderer shall confirm during design all assumptions carried in the Tender and shall identify any consequential impact.

4.6.5 Sign-off of a deliverable by HSITPL shall not relieve the Tenderer of responsibility for the correctness, completeness, buildability or fitness for purpose of its design, nor of any obligation under the Requirement Specifications. Paragraph 2.1 applies to every review, comment, approval, acceptance and sign-off given under this Paragraph, and the Tenderer shall not treat any such act as an approval of its design.

4.7 Testing and Commissioning

4.7.1 The Tenderer shall develop comprehensive test plans covering all levels of testing, including unit, function, link, system integration, user acceptance, load, stress, security and system failover testing. Each test plan shall clearly specify detailed test cases, test data and expected outcomes so as to validate successful system integration.

4.7.2 The Tenderer shall execute and co-ordinate testing activities and shall support HSITPL and all other relevant parties in conducting such testing.

4.7.3 The Tenderer shall provide issue logs and bug fix reports at each test stage and shall provide quality assurance upon SIT, UAT and production rehearsal.

4.7.4 Acceptance criteria for each test stage shall be agreed with HSITPL during design. Whitelist Registration System shall not be presented for UAT until all preceding stages have been

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

completed and evidenced.

4.7.5 Where a test fails, the Tenderer shall rectify the cause and shall repeat the test in full at its own cost. Repeated testing shall not of itself entitle the Tenderer to an extension of time.

4.8 Rollout Services

4.8.1 The Tenderer shall prepare a rollout and cutover plan incorporating a go-live and deployment checklist, a production verification report and a documented fallback procedure.

4.8.2 The Tenderer shall not proceed to go-live without HSITPL's written go-live approval.

4.9 Training

4.9.1 The Tenderer shall prepare and deliver training for HSITPL approving representatives, operations users, system administrators and technical support personnel.

4.9.2 Training shall be delivered in Cantonese with materials provided in Traditional Chinese and English unless HSITPL directs otherwise.

4.9.3 The Tenderer shall provide training plans, manuals and course materials and shall permit HSITPL to reproduce them for internal use without further charge.

4.9.4 The Tenderer shall provide refresher or supplementary training where a system change materially affects the manner of operation, at no additional charge during the DLP.

4.10 Documentation

4.10.1 The Tenderer shall provide the documentation listed in Table 4-1. All documentation shall be delivered in editable electronic form as well as in portable document format.

4.10.2 Documentation shall be maintained and updated throughout the DLP and re-issued upon each material change.

4.11 Operation and Maintenance (O&M) Manual

4.11.1 The Tenderer shall prepare, maintain, and deliver comprehensive O&M Manuals covering the operation, administration, maintenance, security, search, reporting, audit, and whitelist management functions of Whitelist Registration System.

4.11.2 The O&M Manuals shall, at a minimum, document:

a) end-to-end procedures for the verification, creation, modification, suspension, reactivation, and revocation of whitelist records;

b) authorisation, authentication, approval, and access control procedures;

c) search, reporting, audit trail, and data export functions;

d) data synchronisation, interface monitoring, and reconciliation procedures;

e) exception handling, incident management, troubleshooting, backup, recovery, and maintenance procedures; and

f) operational roles, responsibilities, and escalation procedures.

4.11.3 The Tenderer shall establish and maintain revision control for all O&M Manuals. Each revision

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

shall include a version number, revision date, change description, approval record, and distribution history. Updated manuals shall be provided whenever there are changes to Whitelist Registration System, configuration, operational procedures, security controls, or interfaces.

4.11.4 The O&M Manuals shall contain sufficient detail to enable the HSITPL's personnel to independently operate, administer, maintain, monitor, troubleshoot, and audit Whitelist Registration System following handover.

4.12 Handover and Knowledge Transfer

4.12.1 The Tenderer shall provide complete handover documentation and knowledge transfer documents, shall transfer all credentials, keys and administrative access under controlled procedure, and shall provide knowledge transfer to HSITPL's nominated personnel.

4.12.2 All credentials and keys transferred shall be changed by HSITPL upon handover and the Tenderer shall securely destroy any copy remaining in its possession.

4.12.3 The Tenderer shall provide a final acceptance report for Whitelist Registration System and for its integration with the e-Gates solution.

4.12.4 Upon expiry or termination of the Contract the Tenderer shall provide reasonable assistance to HSITPL or to any succeeding contractor in effecting an orderly transition, including the provision of data extracts, documentation and briefings.

4.13 Deliverables

4.13.1 The successful Tenderer shall provide the documentation deliverables set out below, including a full set of system and project management documentation and technical manuals. Such documentation and manuals shall at least include the following:

Table 4-1 – Key Documentation Deliverables

Project Stage	Key Documentation Deliverables
Project Initiation Stage	• Project Charter, Business Case and Project Organisation Structure • Project plan and detailed Implementation plan • Quality plan • Checklist of project documentation • Project timeline and milestone schedule (regular updates) • Interface requirements document for the Platform contractor • Project progress reports

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

	• Risk register and issue register • Security plan and preliminary risk analysis report
Design stage	• System analysis and design report • Review Report on requirements and technical specifications • System architecture and deployment and interface diagram • Database design and Data Dictionary • Interface Control Documents • Workflow Specification, including State Transition diagram, Swimlane Process diagram and Exception Catalogue • Integration Design and Specification • Security design and Controls Matrix • Application Security design and Self-Assessment Report • User Interface and Accessibility design • Technical Risk Assessment • Environment Build and Promotion Procedure • Data Conversion and Migration plan • Application Deployment and Installation plan • Review Report on Installation and Configuration Procedures • Review Report on Contingency design and plan • User requirement Sign-off • Technical design Sign-off
Development & Build Stage	• Programming Standards and Program Specifications • Source Code, Object Code and Command Code • Build Artifacts

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

	• Unit, function and link test Cases and results • SIT plan and results • Conversion Programs and mapping specifications • Test data management plan
T&C, SIT, UAT & rehearsal Stage	• Internal Testing and Commissioning plan and results report • Installation test plan and results report • Comprehensive End-to-End T&C, SIT and UAT cases and reports • Issue log and bug fix reports • End-to-End rehearsal Scenario and Results report • Migration rehearsal and Reconciliation report • Load test report • Stress test report • Resilience and Failover test results • Accessibility Conformance Evidence • SRAA Supporting Information and Remediation Evidence • SIT Sign-off • UAT Sign-off • Rehearsal Sign-off • Performance Sign-off
Security Assessment Stage	• Support and Coordination Records for Security Risk Assessment and Audit (SRAA) and Privacy Impact Assessment (PIA) • Remediation Evidence • SRAA Sign-off • PIA Sign-off
Production Deployment Stage	• Rollout and Cutover plan

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

	• Go-live and Deployment Checklist • Go-live Approval • Production verification report • Fallback Procedure • System Manual • Program Manual • Application Operations Procedures Manual • Installation and Setup Procedures • Application Software, Libraries, Licences and Platform Dependency Inventory • Training plan, Training Manual and Course Materials • Security Incident Handling Manual • Disaster recovery plan • Business continuity plan • Contingency plan • Operations and Maintenance (O&M) Manual
DLP Stage	• Monthly Progress and Support Service reports • Monthly Log Management and Analytics reports • Root cause analysis reports • Defect Log and Rectification Records • Production issue log and bug fix reports • Incident log and report • Change request and test acceptance records • Operations, BAU and Maintenance Manual • Post-Implementation review report • Outstanding issues list
Project Completion Stage	• Handover documents

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

	• Knowledge transfer documents • Final acceptance report for Whitelist Registration System and its Integration with the e-Gates Solution

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5 FUNCTIONAL REQUIREMENTS

5.1 System Objectives

Whitelist Registration System shall meet, but shall not be limited to, the following objectives:

(a) to provide an accurate, auditable and authoritative record of every person authorised to use the Western Bridge, together with the period and conditions of that authorisation;

(b) to provide public-facing and self-service registration and application facilities for companies, institutions, and their appointed representatives.

(c) to provide an administration portal for HSITPL representatives with efficient endorsement, approval, review, suspension and revocation facilities and search, review, reporting, configuration and audit functions;

(d) to provide a workflow engine implementing the whitelist record status lifecycle and associated business rules throughout the application, approval, activation, amendment, renewal, suspension, and expiry processes.

(e) to provide an integration layer for the secure, reliable, and traceable exchange of whitelist records with designated authorities via APIs, SFTP over SSH, and secure email, with support for monitoring, error handling, retransmission, and audit logging;

(f) to supply the e-Gates solution with complete, current and correctly versioned authorisation data so that passage decisions at the e-Gates are made against accurate entitlements;

(g) to be of high availability and capable of providing round-the-clock service without disruption;

(h) to be modular, scalable and expandable such that additional e-Gates, buildings, record types and user volumes can be accommodated without re-design;

(i) to fulfil both fundamental end-user and administrative functions through configurable settings and parameter-driven configuration, without requiring code-level modifications;

(j) to be secure by design, having regard to the sensitivity of cross-boundary personal information and the applicable regulatory expectations;

(k) to support the display of user interface text and messages in Traditional Chinese, Simplified Chinese and English;

(l) to minimize privacy risk through front-end and back-end data masking, data minimization, role-based access and comprehensive audit and event logging.

(m) to support an initial capacity of 10,000 records and be scalable to accommodate at least 50,000 records without major system redesign; and

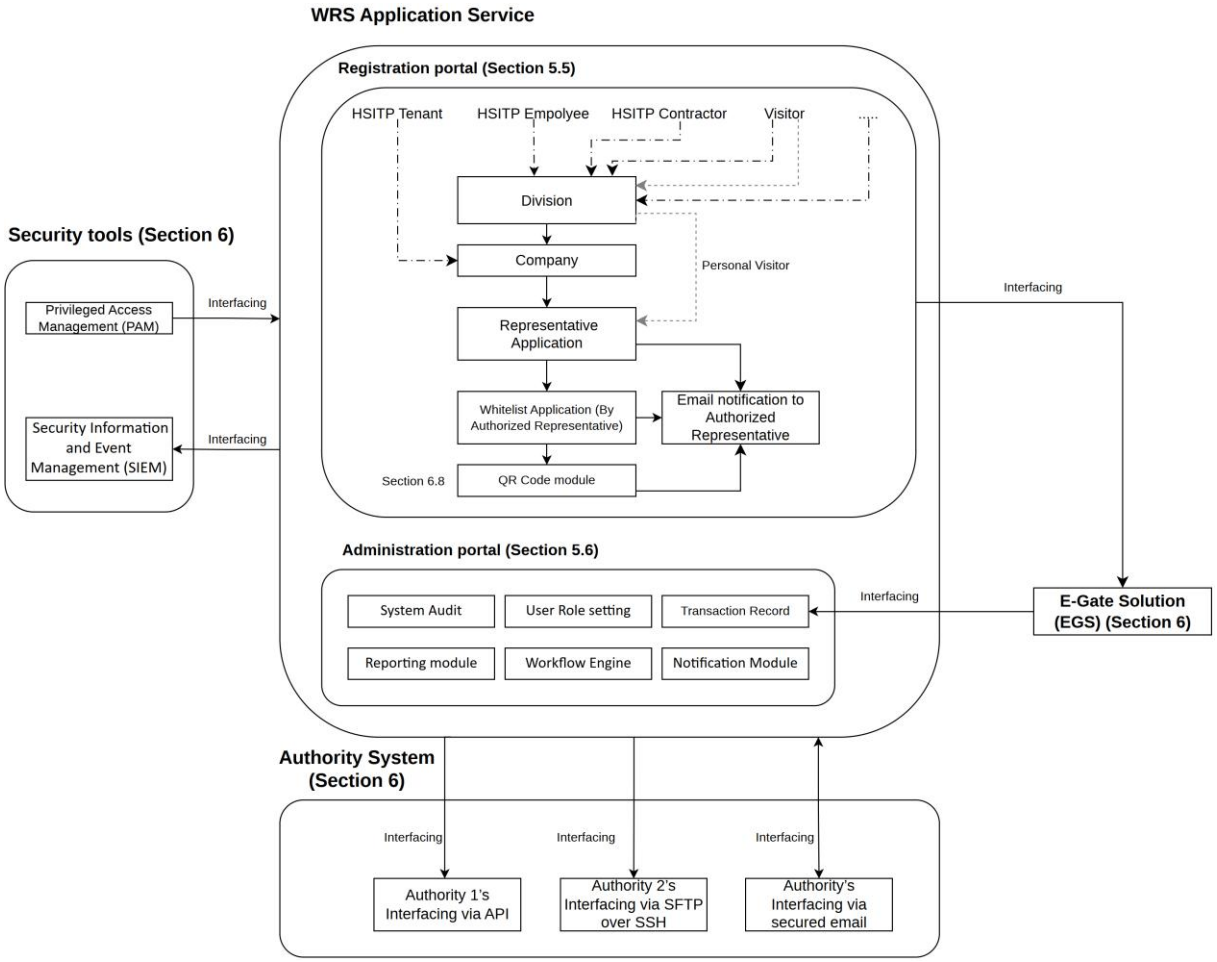
(n) to define the interface requirements for the historical data storage and retrieval facilities for a retention period of ninety (90) calendar days local backup with encryption and twelve (12) months' offsite copy with encryption using a tape library; testing of restoration of data storage shall be conducted regularly.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5.2 System Overview

The proposed Whitelist Registration System architecture and its interfaces are illustrated in Figure 1.

Figure 1 – System flow diagram



5.2.1 The Tenderer shall provide a configurable Representative Application workflow supporting multiple application initiation methods. The methods illustrated in Figure 1 are indicative only and shall not limit the Tenderer's design responsibility to deliver a complete and operational solution meeting all requirements of the Requirement Specifications. The final number of methods, workflow arrangements, user categories, approval requirements, and detailed procedures shall be subject to HSITP review, decision, and approval during design workshops, requirements finalization, or other project stages. Whitelist Registration System shall be sufficiently flexible to accommodate such changes without major redesign.

5.2.2 Whitelist Registration System shall be deployed on-premises. Whitelist Registration System shall be supplied, installed, configured, tested, commissioned, operated and supported on infrastructure located within HSITPL-designated on-premises facilities.

5.3 System Environments

5.3.1 The Tenderer shall design and define the requirements for not fewer than four (4) separate environments, namely a development environment, a test environment capable of supporting

SIT, UAT and security testing, a pre-production environment, and a production environment. Other than the test and production environments, others shall be provided and maintained by the Tenderer.

5.3.2 The test environment shall be functionally equivalent to production and shall be sized so that load, stress and failover testing produce results representative of production behaviour.

5.3.3 Environments shall be logically and physically segregated. Production data shall not be copied into a non-production environment except as permitted by Paragraph 9.5.8.

5.3.4 The Tenderer shall provide a documented promotion procedure by which a release moves from development to test and from test to production and shall not deploy to production otherwise than through that procedure.

5.4 User Roles

5.4.1 Whitelist Registration System shall support, as a minimum, the roles including but not limited to Table 5-1, each with distinct and configurable permissions.

Table 5-1 – User Roles

Role	Principal functions	Portal
Applicant company or institution	Submit company or institution registration and representative registration; provide supporting documents; maintain company or institution particulars; and enquire about application status.	Registration Portal
HSITP Division representative	Log in; manage contractor companies and visitor registrations sponsored by the relevant HSITP division; maintain division-related records; enquire about individual whitelist applications.	Registration Portal
Company representative	Log in; manage company or institution data and the representative's own account; submit, amend and enquire about individual whitelist applications; manage sponsored individual records; and receive workflow notifications and reports.	Registration Portal
HSITPL endorsing/ approving representative	Review, endorse, approve, reject, return, suspend, reinstate and revoke company registrations, individual whitelist applications and whitelist records in accordance with the approved workflow; view application details, supporting documents, workflow history and decision records; and access reports and dashboards for applications and records under the user's authority.	Administration Portal
HSITPL Operations user	Perform operational processing, data maintenance, document verification and enquiry handling; search and view records; handle exceptions, monitor application status, workflow progress and notifications; and access operational	Administration Portal

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Role	Principal functions	Portal
	reports and dashboards relevant to the user's responsibilities, manage representative user account	
authority user	Search and view records; access operational reports and dashboards relevant to the user's responsibilities.	Administration Portal
System administrator	Manage user accounts, roles, permissions and data access scopes; configure system parameters, workflows, notifications, interfaces, reference data and operational settings; and access authorised system administration, monitoring and maintenance functions. A System Administrator shall not approve, reject, suspend, reinstate or revoke a whitelist record unless separately assigned an authorised approving role in accordance with the segregation-of-duties requirements.	Administration Portal
Auditor	Access audit logs, workflow histories, transaction records, interface records and system activity reports in read-only mode; and search, review and export audit records, user activities, endorsement histories and approval histories for audit, investigation and compliance purposes. An Audit User shall have no data modification or workflow action rights.	Administration Portal

5.4.2 Access shall be role-based, shall follow the principle of least privilege, and shall be capable of segregation of duties such that no single user can both create and approve a whitelist record.

5.4.3 Each user identity shall uniquely identify one user. Shared or group user identities shall not be implemented.

5.4.4 Whitelist Registration System shall permit an authorised administrator to create additional roles and to vary the permissions of existing roles without change to program code.

5.4.5 All creation, amendment, activation, suspension or deletion of user roles, permissions and data access rights shall be recorded in the tamper-evident audit trail.

5.5 Registration Portal

5.5.1 Registration Function

5.5.1.1 The Portal shall support multiple distinct application workflows, including but not limited to Tenancy, HSITP Employee, HSITP Contractor, and HSITP Visitor applications.

5.5.1.2 The Portal shall allow an applicant company or institution to submit, in a single online transaction, the company or institution particulars and the particulars of its appointed representative, together with the required attachments.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5.5.1.3 The Portal shall validate the applicant company or institution name against the tenancy agreement record and the business registration number against the uploaded business registration certificate.

5.5.1.4 On submission the Portal shall generate and display a unique application reference in a structured format.

5.5.1.5 On endorsement and approval of representative application, the Portal shall create and activate the representative user account and shall notify the representative by email at the registered representative address.

5.5.1.6 The Portal shall provide an application enquiry function allowing the status of a submitted registration to be checked without logging in.

5.5.1.7 The Portal shall allow an authenticated company representative to submit a whitelist application for an individual with the individual's consent document attached.

5.5.1.8 On endorsement and approval of the individual applicant's application, the Portal shall activate the applicant whitelist record and shall notify the representative and individual applicant by email. The email notification to the individual applicant shall include the associated dynamic QR code via a hyperlink.

5.5.1.9 The Portal shall, through integration with the e-Gate facial enrolment tools, validate each uploaded facial photograph against the facial enrolment and image quality requirements of the e-Gates solution. Any facial photograph that does not meet the validation criteria shall be rejected at the time of application submission.

5.5.1.10 The Portal shall provide configurable parameters to enable or disable limits on the number of whitelist individual applications permitted under each distinct application workflow, including but not limited to Tenancy, HSITP Employee, HSITP Contractor, and HSITP Visitor applications.

5.5.1.11 The Portal shall ensure that the whitelist start date is on or before the whitelist end date and shall assign the whitelist end date in accordance with predefined business rules.

5.5.1.12 The Portal shall provide authenticated representatives with management, amendment, and enquiry for records associated with their accounts.

5.5.1.13 The Portal shall permit representatives to save an incomplete application as a draft and to resume it and shall retain drafts for a configurable period before automatic deletion.

5.5.1.14 The Portal shall support the batch upload of multiple whitelist applications and their associated supporting documents using a predefined bulk import template, enabling records to be imported in bulk without the need for manual re-entry.

5.5.1.15 The Tenderer shall provide facilities for bulk import of initial whitelist records at system initialization and Production go-live using the predefined bulk import template. The solution shall support efficient onboarding of whitelist records and minimise manual data entry activities.

5.5.2 Portal, client and accessibility requirements

5.5.2.1 The Portal shall be accessible from a standard web browser without the installation of any plug-in, applet or client software, and shall support the current and immediately preceding major versions of the four most widely used desktop browsers in the HKSAR at the date of design sign-off.

5.5.2.2 The Portal shall be responsive and shall be fully usable upon desktop, tablet and mobile form

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

factors, including the submission and upload functions.

5.5.2.3 The Portal shall conform to the Web Content Accessibility Guidelines at Level AA, and the Tenderer shall provide evidence of conformance before UAT.

5.5.2.4 The user interface shall support Traditional Chinese, Simplified Chinese and English. The user shall be able to switch language at any point without loss of entered data, and the selected language shall persist for the session.

5.5.2.5 The Portal shall support configurable dynamic watermarking of information displayed through the Portal. The watermarking function shall be configurable by authorised administrators and shall support deterrence and traceability of unauthorised disclosure of information. The watermark shall not materially affect the usability or readability of the user interface.

5.5.2.6 The Portal shall store, process, transmit and display Chinese characters without corruption or substitution, shall support the Hong Kong Supplementary Character Set, and shall use a Unicode encoding throughout.

5.5.2.7 All dates and times displayed, recorded and exchanged shall be expressed in Hong Kong Time, and the Portal shall record time to a precision of not less than one second.

5.5.2.8 The Portal shall present to the user, in each supported language, the statement that approval by the Portal does not of itself confer any right of entry to or exit from Hong Kong, in the terms approved by HSITPL.

5.6 Administration Portal

5.6.1 Endorsement, Approval and Lifecycle Workflows

5.6.1.1 The Portal shall provide a configurable workflow engine to implement and enforce endorsement, approval and lifecycle workflows. The workflow engine shall support states including, but not limited to, Draft, Submitted, Under Review, Endorsed, Approved, Rejected and Expired.

5.6.1.2 The workflow engine shall support configurable state transitions, approval rules, authorised roles, escalation rules, notification triggers and automated system actions. Subject to the configured workflow rules, Whitelist Registration System shall support the reactivation and subsequent processing of rejected, expired, suspended or otherwise deactivated records where such transitions are permitted.

5.6.1.3 The workflow engine shall support both manual and automated workflow actions, including application routing, endorsement, approval, rejection, counterpart processing, activation, suspension, reinstatement, expiry and revocation in accordance with the configured workflow rules.

5.6.1.4 All workflow actions and state changes shall be recorded in an immutable and tamper-evident audit log. Every state transition shall record the actor, actor role, timestamp, previous state, resulting state, reason and supporting remarks. The transition history shall be retrievable for any record and shall form part of the audit trail required by Paragraph 5.6.3.4.

5.6.1.5 Workflow definitions, approval steps, actor authorities, notification triggers, configurable periods, escalation rules and permitted state transitions shall be configurable by an Authorised Administrator without change to program code. All workflow actions, state changes and workflow configuration changes shall be recorded in the audit trail.

5.6.1.6 Transition reserved to an HSITPL approving representative shall not be capable of being

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

effected by an representative, by an operations user, by a system administrator, or by any automated process.

5.6.1.7 An individual whitelist application shall not be capable of submission unless the registration of the sponsoring company or institution has been approved and the representative account is active. The Portal shall enforce this dependency at the point of submission.

5.6.1.8 For records originating from the Shenzhen side, Whitelist Registration System shall receive, import and process the records in accordance with the established cross-boundary whitelist exchange procedures. Successfully imported records shall be activated, and the import result shall be returned to the originating system.

5.6.1.9 Where the Portal receives a negative counterpart result, it shall place the record in the Rejected state, record the reason supplied by the Shenzhen side, notify the representative, and not issue any entitlement to the e-Gates solution.

5.6.1.10 Where no counterpart result is received within a configurable period, the record shall remain in the Pending Counterpart state, Whitelist Registration System shall raise an escalation to the HSITPL operations user, and Whitelist Registration System shall not activate the record.

5.6.1.11 The Portal shall provide an exception management function for records that cannot be processed successfully. No record shall be discarded, overwritten or fail without trace. Each exception shall be recorded in an exception queue with a unique reference number, category, timestamp, affected record, assigned owner, age and severity, and shall only be closed upon recording the resolution action in Whitelist Registration System.

5.6.1.12 The Portal shall support and clearly distinguish the record categories “new record”, “record update” and “record cancellation” in both directions.

5.6.1.13 Record updates shall include change of applicant particulars, change of whitelist validity period and early termination.

5.6.1.14 Where a record update alters the identity particulars, the travel document particulars or the facial photograph of the individual, or extends the whitelist validity period, the Portal shall require re-approval by an HSITPL approving representative and shall re-transmit the record to the Shenzhen side. Where a record update alters only contact particulars or the position held, re-approval shall not be required. The classification of each data item as material or non-material shall be configurable by an authorised administrator.

5.6.1.15 The Portal shall support the maintenance of applicants' travel document information. The Portal shall automatically deactivate the associated whitelist record(s) upon expiry of the travel document and support reactivation following the update and verification of a valid replacement travel document, subject to the applicable workflow and approval requirements.

5.6.1.16 The Portal shall notify the Authorised Representative not less than one (1) month prior to the expiry date of the Applicant's travel document by email through the Notification Module

5.6.1.17 Upon expiry of an Applicant's travel document, the associated whitelist record shall be automatically deactivated regardless of the remaining whitelist validity period. The Portal shall support reactivation of the whitelist record following the successful update of the travel document information and completion of the required endorsement and approval workflow.

5.6.1.18 The Portal shall generate, retain, and transmit audit logs of all travel document updates and the corresponding whitelist record deactivation and reactivation activities. Such records shall be available for reporting, audit, and interfacing with authority systems.

5.6.1.19 The Portal shall support immediate suspension and revocation by an authorised HSITPL

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

approving representative and shall promptly issue the corresponding instruction to the e-Gates solution upon such suspension or revocation.

5.6.1.20 A record in the Suspended state may be returned to the Active state by an HSITPL approving representative, with a mandatory reason, provided that the whitelist validity period has not expired. Upon reinstatement, Whitelist Registration System shall promptly re-issue corresponding entitlement instruction to the e-Gates solution.

5.6.1.21 A dynamic QR code shall be capable of being issued under Paragraph 6.8 only in respect of a record in the Active state. Any transition out of the Active state shall immediately invalidate every dynamic QR code issued in respect of that record.

5.6.1.22 The Portal shall be capable of bulk import and bulk export of whitelist records using a defined template, so as to reduce manual entry and improve data accuracy. A bulk import shall be subject to the same transition rules, authorised roles, validation and audit requirements as a record created individually.

5.6.1.23 Where a whitelist record is marked as ineligible, rejected or cancelled, the Portal shall apply the retention and secure disposal rules of Paragraph 9.5.6 and shall record the disposal action in the audit trail.

5.6.1.24 The states, permitted transitions, approval steps, authorised roles, notification triggers and configurable periods shall be capable of amendment by an authorised administrator without changing to program code. Every such amendment shall be treated as a change under Paragraph 9.6 and shall be recorded in the audit trail.

5.6.1.25 The Tenderer shall submit, as part of Whitelist Registration System analysis and design report at the design stage, a workflow specification comprising workflow definitions, state transition diagrams, processing rules and an exception catalogue covering all workflow states, transitions and exception scenarios implemented by Whitelist Registration System. The workflow specification shall be subject to technical design sign-off under Paragraph 4.6.1, and the Tenderer shall not proceed with system build activities until such sign-off has been obtained.

5.6.2 Notifications

5.6.2.1 The Portal shall provide a Notification Module to manage the creation, scheduling, delivery, monitoring, and auditing of all system-generated notifications associated with whitelist records and workflow activities, and shall issue automated notifications to representatives, including but not limited to submission acknowledgements, approvals, rejections, activations, upcoming expiries, expiries, suspensions, and revocations.

5.6.2.2 The Notification Module shall support configurable notification templates, recipients, delivery channels, trigger events, trigger conditions, reminder schedules, and lead times, all of which may be maintained by an authorised administrator without any change to program code.

5.6.2.3 Notifications shall not contain personal identifiers beyond those necessary to identify the application, and shall not contain any password, credential or decryption key.

5.6.2.4 The Portal shall record the dispatch, delivery outcome and any failure of every notification, and shall permit re-issue by an authorised user.

5.6.2.5 The Notification Module shall maintain a notification history, including notification type, recipient, delivery channel, dispatch time, delivery status, retry status, and associated whitelist record reference, and shall provide monitoring and reporting functions for notification delivery, failures, retries, and pending notifications.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5.6.2.6 The Notification Module shall support integration with email services and other notification channels specified by HSITPL.

5.6.2.7 The Portal shall automatically notify the authorised representative of the sponsoring company or institution when an individual whitelist record is due to expire within a configurable period. The notification shall include, as a minimum, the information necessary to identify the affected whitelist record and any actions required for renewal or replacement. The lead time for such expiry notifications shall be configurable by an Authorised Administrator without any change to program code.

5.6.2.8 The Portal shall automatically generate and issue a regular summary report and reminder to each authorised representative showing, including but not limited to:

(a) the total number of Active whitelist records sponsored by the company or institution;

(b) the number of whitelist records due to expire within the configurable notification period;

(c) the number of whitelist records suspended, expired or revoked during the reporting period.

5.6.2.9 The monthly summary report shall be delivered through the Notification Module and shall be capable of being issued by email via the Email Adaptor and made available for download through the Portal.

5.6.2.10 The Portal shall record the generation, dispatch, delivery outcome and any failure of expiry reminder notifications and monthly summary reports as part of the audit trail required by Paragraph 5.6.3.4.

5.6.2.11 All email notifications, expiry reminders and monthly summary reports generated by the Notification Module shall be transmitted through the Email Adaptor specified under Whitelist Registration System integration architecture. The Notification Module shall obtain delivery status and failure information from the Email Adaptor and record such information as part of the audit trail.

5.6.3 Search, reporting and audit

5.6.3.1 The Portal shall provide search across all record types by, including but not limited to application reference, company, representative, individual name, document number, status and validity period.

5.6.3.2 The Portal shall provide standard summary reports including but not limited to active whitelist population, applications by status and aging, approvals and rejections by period and by approver, expiring records, exception and failed-import log, and integration/ interface log.

5.6.3.3 The Portal shall provide an ad-hoc reporting facility and shall permit export in a common structured format. Export of Confidential Data shall be restricted to authorised roles and shall itself be recorded in the audit trail.

5.6.3.4 The Portal shall maintain a complete and tamper-evident audit trail of all data creation, modification, deletion, endorsement action, approval action, export, interface transaction and administrative action.

5.6.3.5 The audit trail shall be retained in accordance with Paragraph 10.2.7 and shall be exportable in a form suitable for production in legal or regulatory proceedings.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5.6.3.6 The Portal shall maintain a complete transaction record of all whitelist-related transactions, including application submission, endorsement, approval, rejection, activation, suspension, reinstatement, revocation, Shenzhen-side exchanges, e-Gates solution entitlement instructions, QR code issuance and system-generated actions.

5.6.3.7 Each transaction record shall include, as a minimum:

1. Transaction reference number;
2. Transaction type;
3. Related whitelist record reference;
4. Initiating actor or source system;
5. Transaction status;
6. Date and time of initiation;
7. Date and time of completion;
8. Result code and message; and
9. Associated error or exception details, where applicable.

5.6.3.8 The Portal shall provide search, filtering and reporting functions for transaction records and shall permit export by authorised users.

5.6.3.9 Transaction records shall be retained, protected and audited in accordance with Paragraphs 5.6.3.4.

5.6.3.10 The Portal shall provide a reporting module enabling authorised users to generate, view, filter, schedule and export standard and ad-hoc reports, together with graphical dashboards showing operational, endorsement, approval, exception and cross-boundary exchange statistics.

5.6.3.11 The reporting module shall support configurable report templates, date ranges, filtering criteria and export in PDF, Excel and CSV formats.

5.6.3.12 Access to reports and dashboards shall be controlled by user role and recorded in the audit trail.

5.6.3.13 The Portal shall maintain logs for user authentication, system activities, health monitoring events, administrative actions, file access activities, interface transactions and security-related events. Log retention periods shall be configurable in accordance with HSITPL requirements.

5.6.3.14 The Portal shall maintain a complete and tamper-evident history of all additions, modifications and deletions performed within the Portal, including the affected record, previous value, new value, user identity, date and time of change.

5.6.3.15 The Portal shall support retrieval, search and reporting of archived workflow records, transaction records and audit logs throughout the applicable retention period.

5.6.4 User Role and Access Management

5.6.4.1 The Portal shall implement Role-Based Access Control (RBAC) and restrict access to functions, data, reports and configuration settings according to assigned user roles.

5.6.4.2 The Portal shall support, as a minimum, the user roles and principal functions specified in Table

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5-1. Each role shall have distinct and configurable permissions appropriate to its assigned functions and authority.

5.6.4.3 The Portal shall permit a System Administrator to create, modify, activate, suspend and deactivate user accounts and assign or remove user roles specified in Table 5-1.

5.6.4.4 The Portal shall enforce role permissions and actor authorities defined in the Requirement Specifications. Users shall not perform actions outside their assigned permissions.

5.6.4.5 The Portal shall maintain a configurable role-permission matrix and permit amendment by a System Administrator without change to program code.

5.6.4.6 All user account administration, role assignments, permission changes and access control modifications shall be recorded in a complete, immutable and tamper-evident audit trail.

5.6.4.7 The Portal shall provide search and reporting functions for user accounts, role assignments, account status and privileged administrative activities.

5.6.4.8 Any amendment to user roles, permissions or access control policies shall be treated as a controlled change under Paragraph 9.6 and recorded in the audit trail.

5.6.4.9 The Tenderer shall submit, as part of Whitelist Registration System analysis and design report at design stage, a Role-Based Access Control Matrix defining the user roles specified in Table 5-1, permissions, approval authorities and segregation-of-duty controls.

5.6.4.10 The Portal shall integrate with HSITPL's platform to support Single Sign-On (SSO) authentication for HSITPL employees accessing the Administration Portal.

5.6.4.11 The Portal shall enforce Multi-Factor Authentication (MFA) for all HSITPL employee accounts authenticated through the SSO service. Access to the Administration Portal shall not be granted unless successful MFA verification has been completed by the HSITPL identity provider.

5.6.4.12 The Portal shall support local user accounts for contingency, administrative and emergency access purposes. Such accounts shall be subject to the password management, access control and audit requirements of the Requirement Specifications.

5.6.4.13 User roles and permissions shall be mapped automatically from the authenticated user identity and associated attributes provided by the HSITPL identity provider. The Portal shall enforce RBAC in accordance with this Paragraph and the principle of least privilege.

5.6.4.14 The Portal shall support configurable session timeout, automatic session termination after inactivity, account lockout and re-authentication policies in accordance with HSITPL security requirements.

5.6.4.15 All authentication events, including successful logins, failed logins, logout activities, MFA challenges, account lockouts, SSO authentication failures and privilege escalation activities, shall be recorded in the audit trail and retained in accordance with Paragraph 5.6.3.5.

5.6.4.16 The tenderer shall provide a detailed authentication and access management design, including SSO integration architecture, user provisioning and de-provisioning procedures, role mapping, MFA enforcement mechanisms and contingency access arrangements, as part of Whitelist Registration System analysis and design report at design stage.

5.6.4.17 The Portal shall support configurable data-level access controls in addition to Role-Based Access Control (RBAC). User Administrators shall be able to define data access scope based on company, institution, organisation unit, department, grade, level, manager, employee, whitelist category and other attributes specified by HSITPL.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

5.6.4.18 The Portal shall restrict the visibility, searchability, reporting and export of records according to the user's assigned data access scope and permissions.

5.6.4.19 The Portal shall support periodic review of user accounts, role assignments, data access scope and privileged access rights by authorised administrators.

5.6.4.20 The Portal shall provide reports showing user accounts, assigned roles, access permissions, data access scope, account status, privileged access assignments and last login information.

5.6.4.21 For local user accounts, the Portal shall support configurable password policies including minimum password length, maximum password length, password complexity requirements, password history retention, password expiry period, account lockout thresholds, case sensitivity, non-alphanumeric character requirements, password encryption, password reset, password recovery and forgotten password functions, in accordance with HSITPL security requirements.

5.6.4.22 The Portal shall support user provisioning, modification, suspension, reactivation, de-provisioning and automatic access revocation in accordance with HSITPL security and operational requirements.

5.6.4.23 The Portal shall protect sensitive information using industry-standard cryptographic controls. All data in transit shall be protected using TLS 1.3 or above and all Confidential Data at rest shall be protected using AES-256 or higher encryption standards in accordance with HSITPL cybersecurity requirements.

5.6.4.24 The Portal shall be accessible only through HTTPS and shall support TLS certificates meeting HSITPL security requirements. Cryptographic algorithms and key lengths shall provide security equivalent to AES-256 or higher.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

6 INTERFACE REQUIREMENTS

6.1 Tenderer's Responsibility

6.1.1 Tenderers shall take the role of leading the interface, responsible for all the framework of the interface control document, describe the proposed approach and details to each interface in Table 6-1, and shall state the effect upon the implementation plan of any delay in the issue of the interface documentation referred to in Paragraph 6.2.

6.1.2 The interfaces which Whitelist Registration System shall provide are listed in the Interface Register at Table 6-1, and the requirements of this Paragraph apply to each of them.

6.2 General

6.2.1 The Tenderer shall design, develop, configure, test and commission, and support the application interfaces necessary for Whitelist Registration System to exchange approved registration and whitelist information at a minimum with the interfaces listed in Table 6-1 and shall produce an Interface Control Document for each.

6.2.2 All interfaces shall be based on open, published and non-proprietary protocols. The Tenderer shall not implement any interface in a manner which creates dependency upon a particular supplier's proprietary technology beyond that already inherent in the counterparty system.

6.2.3 All interface transactions shall be logged with timestamp, direction, record count, outcome and, where applicable, a content integrity value. Maintain traceability from the originating business transaction to each external exchange.

6.2.4 All interfaces shall implement guaranteed delivery with retry, duplicate detection and reconciliation, such that no record is silently lost or applied twice, and that unapproved records are not distributed. An inbound function shall not be assumed to exist merely because outbound transmission is supported. Failure of one external interface shall not unnecessarily block other interfaces or core Whitelist Registration System workflows.

6.2.5 Classified Information shall be encrypted whenever transmitted over an untrusted communication network. Where an interface traverses a public network, encryption of not less than 128-bit cipher strength shall be applied.

6.2.6 Connection of Whitelist Registration System to any information system under the control of another party shall be subject to the prior approval of HSITPL. The security level of Whitelist Registration System being connected shall not be downgraded by the connection.

6.2.7 Where an interface listed in Table 6-1 is subsequently confirmed by HSITPL as not required, or is replaced by an alternative mechanism, the consequence shall be dealt with as a System Change.

Table 6-1 – Interface Register

Ref.	Counterparty	Direction	Purpose	Mechanism
I-01	e-Gates Solution	Bi-directional	Enrolment request and tracking; entitlement issue; status and event receipt	API protocol
I-02	authority 1's System	Outbound	Designated authority	API protocol

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Ref.	Counterparty	Direction	Purpose	Mechanism
			interface	
I-03	authority 2's System	Outbound	Designated authority interface	SFTP over SSH
I-04	authority 3's System	Bi-directional	Exchange of approved whitelist records and import results	Secured Email Exchange
I-05	HSITPL directory and identity services	Inbound	SSO and MFA authentication for HSITPL employees accessing Whitelist Registration System	SAML 2.0, OpenID Connect/OAuth 2.0, or another HSITPL-approved identity federation mechanism.
I-06	Email relay	Outbound	Dispatch of notifications and Interfaced correspondence	HSITPL-approved relay
I-07	Privileged Access Management (PAM) solution provided by HSITP	Inbound	Enforce secure, controlled, and auditable privileged access to system infrastructure, databases, applications, and administrative functions	Syslog, API or other standard interfaces
I-08	Security Information and Event Management (SIEM) platform provided by HSITP	Outbound	Enable centralized collection, correlation, monitoring, analysis, and retention of security logs and events	Syslog, API or other standard interfaces

6.2.8 Interfaces shall prevent repeated or retried transmissions from creating duplicate business effects, and Whitelist Registration System shall verify transaction status before retransmission

6.3 Interface Dependencies

6.3.1 The Tenderer shall issue the API document for the designated interface parties' endpoint development, and/ or develop the required API according to the coordinated interface application need. It is the Tenderer's responsibility to identify any work that requires a long development time and may affect achievement of the target Go-Live date. The minimum application development period shall be the basis for the implementation schedule.

6.3.2 The Tenderer shall coordinate with the e-Gates solution contractor for the agreed interface requirements and finalize the details by the end of week 4. The Tenderer shall allow for end-point interface development to achieve the KD1 as defined in Paragraph 4.2.2 without delay.

6.3.3 The Tenderer shall participate in joint interface testing with each counterparty and shall make its personnel available for that purpose at the times reasonably required.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

6.4 Interface with the e-Gates solution

6.4.1 The Tenderer is responsible for Whitelist Registration System side of this interface. The e-Gates contractor is separately responsible under its own contract for the design, configuration, testing and support of the e-Gates solution side. The Tenderer shall cooperate fully with the e-Gates contractor to meet the operational needs for the integration between Whitelist Registration System and e-Gates solution. The integration shall be implemented via coordinated APIs provided by each Contractor.

6.4.2 The e-Gates solution is supplied under a separate contract and its specification, design material and meeting records are subject to confidentiality obligations owed by HSITPL to the e-Gates solution supplier. Such material does not form part of the Tender Documents and shall not be relied upon by Tenderers. Except that the e-Gates solution API end-point document will be available for consolidating the integration between Whitelist Registration System and e-Gates solution.

6.4.3 The Tenderer shall be ready for joint integration testing with the e-Gates solution by the date stated in Paragraph 4.3.2, shall participate in joint interface testing, defect investigation and rehearsal activities, and shall make its personnel available for those purposes.

6.4.4 Whitelist Registration System shall request credential enrolment from the e-Gates solution and shall track the enrolment outcome for each whitelist record.

6.4.5 Whitelist Registration System shall issue versioned authorisation instructions to the e-Gates solution. Each instruction shall carry a unique and monotonically increasing version identifier such that the e-Gates solution can determine the current state unambiguously and can detect a missed instruction.

6.4.6 Whitelist Registration System shall receive status and event data from the e-Gates solution sufficient to support the reporting requirements of Paragraphs 5.6.3 and 10.3.5 and to confirm that issued entitlements have been applied.

6.4.7 Whitelist Registration System shall reconcile its entitlement register against the e-Gates solution at a configurable interval and shall report any discrepancy as an exception.

6.4.8 Whitelist Registration System shall process restrictions arising from suspension and revocation and shall track enforcement by the e-Gates solution.

6.5 Interface with authority 1 via API

6.5.1 The Tenderer is responsible for Whitelist Registration System side of this interface. The authority 1's interface system ("**A1IS**") supplier is separately responsible under its own contract for the development of the end-point client application. The Tenderer shall cooperate fully with the A1IS supplier to meet the delta synchronization of the whitelist operational needs for the interface between Whitelist Registration System and A1IS. The integration shall be implemented via coordinated APIs provided by the Tenderer.

6.5.2 The A1IS is supplied under a separate contract, and its specification, design material and meeting records are subject to confidentiality obligations owed by A1 to the A1IS supplier. Such material does not form part of the Tender Documents and shall not be relied upon by Tenderers. The Tenderer shall provide a standard set of APIs for the end-point development of A1IS, and develop the APIs if necessary.

6.5.3 The Tenderer shall be ready for joint integration testing with the A1IS by the date stated in the

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

contract programme submitted in accordance to **Paragraph 4.2**, shall participate in joint interface testing, defect investigation and rehearsal activities, and shall make its personnel available for those purposes.

6.6 Interface with authority 2 via SFTP over SSH

6.6.1 The Tenderer is responsible for Whitelist Registration System side of this interface. The authority 2's interface system (A2IS) supplier is separately responsible under its own contract for the development of the SFTP client application. The Tenderer shall cooperate fully with the A2IS supplier to meet the daily synchronization of the whitelist operational needs for the interface between Whitelist Registration System and A2IS. The interface shall be implemented via coordinated SFTP under SSH.

6.6.2 The A2IS is supplied under a separate contract, and its specification, design material and meeting records are subject to confidentiality obligations owed by A2 to the A2IS supplier. Such material does not form part of the Tender Documents and shall not be relied upon by Tenderers. The Tenderer shall provide a development environment for the interface test and development work of A2IS, and modify and amend the SFTP operation if necessary.

6.6.3 The Tenderer shall be ready for joint integration testing with the A2IS by the date stated in the contract programme submitted in accordance to **Paragraph 4.2**, shall participate in joint interface testing, defect investigation and rehearsal activities, and shall make its personnel available for those purposes.

6.6.4 The transport & security protocol shall be

a. Transport Protocol: SFTP over SSH;

b. Authentication: Client Authentication Private Key; and SFTP Host Public Key.

c. Internet IP whitelisting: The Whitelist Registration System SFTP server firewall must enforce strict inbound source IP restrictions.

d. Only A2's designated IP address(es) are permitted to establish SSH/SFTP connections. All other external connection attempts must be automatically dropped.

e. Encryption in Transit: All SFTP command channels and file transfers are protected by SSH encryption. XML and JPEG files are additionally encrypted at rest using the file-encryption envelope.

6.7 Interface with authority 3 via Secured Email Exchange

6.7.1 Pending agreement of an online protocol, Whitelist Registration System shall exchange whitelist records with the authority by controlled encrypted correspondence and shall automate the sending side so far as practicable in order to reduce manual handling risk.

6.7.2 The sending process shall satisfy, as a minimum, the following controls:

(a) transmission only from a designated official mailbox to a confirmed official recipient mailbox;

(b) the payload carried only as an encrypted attachment using AES-256 encryption;

(c) the protecting password being a system-generated complex password of not fewer than twelve (12) characters conforming to HSITPL's password construction requirements;

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

(d) the password never included in the message body and transmitted only by a separate independent channel to the designated recipient;

(e) the subject and a handover reference recorded upon each transmission on a defined cycle;

(f) the file generated and dispatched automatically by Whitelist Registration System;

(g) the file name and a content hash value recorded for each transmission; and

(h) the transmission time, both mailboxes, file name, hash and outcome recorded in an audit log retained for inspection.

6.7.3 The receiving process shall satisfy, as a minimum, receipt by an authorised designated person only; controlled decryption using the separately received password; access and decryption performed only upon the internal network and upon controlled equipment; transfer of the decrypted content into the controlled dedicated database; and deletion of local temporary copies following transfer.

6.7.4 Whitelist Registration System shall support a defined bulk import template so that received records may be imported as a batch without manual re-keying.

6.7.5 Whitelist Registration System shall store all whitelist records received through the secured email exchange interface in a dedicated database separate from the database containing records originating from the whitelist registration process. Whitelist Registration System shall maintain the source of origin, traceability and audit trail for all imported records and any subsequent updates.

6.7.6 Whitelist Registration System shall generate and transmit an import result reply for every batch received and shall reconcile replies received against batches sent.

6.7.7 The Tenderer shall support one-off batch import of initial whitelist records during system initialization, data migration, and Production go-live using the bulk import template specified in Paragraph 6.7.4, without requiring manual re-keying of records.

6.7.8 The architecture shall be designed such that the secured email mechanism may be replaced by online protocol without change to the workflow, data model or audit functions. Tenderers shall describe how this is achieved.

6.8 Dynamic QR Code Backup Access

6.8.1 Whitelist Registration System shall support the issue of a dynamic QR code as the backup access method for a person holding an active whitelist record.

6.8.2 Suspension, revocation or expiry of a whitelist record shall immediately invalidate any dynamic QR code issued in respect of that record.

6.8.3 Dynamic QR codes shall be time-limited, shall relate to a single identified person, shall not be transferable, and shall not embed Personal Data in recoverable form.

6.8.4 Hyperlink of the associated QR code shall be sent to the registered representative by email upon approval of the individual applicant.

6.9 Interface for the deployment of Whitelist Registration System to Platform_T and Platform_P

6.9.1 The Tenderer shall provide complete application hosting and connectivity requirements as an interface requirement document within 14 calendar days to support the Platform contractors

to comply with the joint master program.

6.9.2 The interface requirement document shall develop the accepted tender reference specifications into detailed requirements baseline and shall include but not limited to:

Table 6-2 – List of Minimum Required Information for interface requirement document

Interface area	Minimum required information
Architecture and sizing	Deployment topology, component locations, resource requirements, workload assumptions and capacity dependencies
Platform compatibility	Supported operating system, database, middleware, runtime and other platform versions; patch and support constraints
Network connectivity	Source and destination components, traffic direction, protocols, ports, DNS, routing, firewall, proxy and load-balancer requirements
Identity and security	Authentication, authorization, service accounts, privileged access, certificates, encryption and secrets-management requirements
Data and storage	Database connectivity, storage allocation and performance, file-transfer locations, permissions, retention and data-protection requirements
Deployment and configuration	Installation prerequisites, application packages, configuration parameters, deployment sequence and rollback requirements
Operations	Logging, monitoring, alerting, time synchronization, backup, restoration, patching and support interfaces
External systems	Connectivity and dependencies for the specified external interfaces, including API, SFTP and email where applicable
Responsibilities and acceptance	Responsible parties, prerequisites, deliverables, verification procedures and acceptance evidence

6.9.3 Requirements shall be measurable and permit technically equivalent solutions where practicable. Proprietary dependencies shall be identified and justified.

6.9.4 The Tenderer shall take the role of the leading to support and verify that application requirements are compatible with the approved Platform environments. The Tenderer shall be responsible for the interface change management within the Contract Period.

6.9.5 The Tenderer shall provide the hosting, runtime and capacity requirements, including the supported operating systems, runtimes, frameworks and required libraries, where applicable. The Platform contractor shall confirm the supported platform, provision the agreed resources and identify constraints.

6.9.6 The Tenderer shall provide a connectivity matrix covering every required application connection. The required items for the network and external connectivity shall include, at a minimum, source and destination, direction, protocol and port, environment, purpose, authentication, traffic profile, connection behavior, and security restrictions. The Platform contractor shall configure the corresponding network facilities within its control.

6.9.7 The Tenderer shall define and deliver the supported database engine and version requirements. The Platform contractor shall provide the contracted database service, administration, platform hardening and backup facilities. The Tenderer shall not require routine database-administrator privileges for normal application operation. Schema

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

deployment privileges shall be separately controlled.

6.9.8 The Contract shall specify user authentication and identity-provider integration requirements, at a minimum for:

a. the Required claims, attributes and role mappings.

b. Application authorization and session controls.

c. Service-to-service authentication requirements.

d. Application administrator roles and access restrictions.

6.9.9 The Tenderer shall be responsible for the Application roles, authorization decisions and session handling. The Platform contractor shall be responsible for the Platform accounts, host access and infrastructure privileges. HSITPL shall be responsible for user identity lifecycle and identity-service approvals, where applicable.

6.9.10 The Tenderer shall identify all application certificates, keys, passwords and tokens, then integrate with the agreed secrets-storage mechanism.

6.9.11 The Tenderer shall keep secrets out of source code, release packages and logs.

6.9.12 The Tenderer shall define its application requirements for any supporting services provided such as the API, SFTP and Email services, if applicable through the Platform contractor.

6.9.13 The Tenderer shall provide a controlled deployment package for each environment containing at a minimum:

a. Versioned application artifacts.

b. Dependency and prerequisite information.

c. Environment configuration templates without embedded secrets.

d. Database migration scripts.

e. Installation and upgrade instructions.

f. Health checks and post-deployment validation steps.

g. Release notes and known issues.

h. Application rollback or forward-recovery procedures.

The Platform contractor shall provide approved deployment access, platform prerequisites and infrastructure safeguards.

6.9.14 The Tenderer shall take the lead to define the joint deployment procedure. Where direct contractor access is prohibited, the Tenderer shall supply executable instructions and support the Platform contractor during deployment.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

7 DATA CONVERSION AND MIGRATION REQUIREMENTS

7.1 General

7.1.1 Data conversion and migration shall cover the initial load of whitelist, company, representative and reference data required to place Whitelist Registration System into production.

7.1.2 The Tenderer shall plan, develop, test and execute all data conversion and migration activities required to place Whitelist Registration System into production, and shall provide the conversion programs, mapping specifications and reconciliation reports.

7.1.3 The Tenderer shall perform at least one full migration rehearsal before go-live and shall report the results, including record counts, exception counts and reconciliation outcome.

7.1.4 The Tenderer shall provide a documented rollback procedure enabling the migration to be reversed without loss of data.

7.1.5 Migrated personal data shall be handled in accordance with Paragraph 9.5 throughout the conversion process. Data extracted for conversion testing shall be protected commensurate with its classification and shall be securely destroyed on completion.

7.1.6 The Tenderer shall reconcile migrated data against the source and shall obtain HSITPL's written sign-off of the reconciliation before go-live.

7.1.7 Where source data is found to be incomplete, inconsistent or of poor quality, the Tenderer shall report the defect, shall propose a remediation or exception-handling approach, and shall not silently discard or alter a record.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

8 APPLICATION SOFTWARE AND PLATFORM COMPATIBILITY REQUIREMENTS

8.1 Scope of Supply

8.1.1 The Tenderer shall identify all hardware and software, including but not be limited to computing, storage, network, operating system, database, middleware and cybersecurity requirements necessary for deployment and operation of Whitelist Registration System, including capacity, performance, resilience and interface requirements. The Tenderer shall supply, install and configure all application software necessary for Whitelist Registration System to meet the requirements of the Requirement Specifications, save for items excluded under Paragraph 1.6.1 or expressly stated to be provided by HSITPL.

8.2 Items Provided by HSITPL

8.2.1 Items to be provided by HSITPL are limited to those expressly stated in the Requirement Specifications. Any other item which the Tenderer assumes will be provided by HSITPL shall be identified in its Tender under Paragraph 2.3.1(e), and any item not so identified shall be deemed to be included in the Contract Price.

8.3 General requirements

8.3.1 All application software supplied shall be readily available with minimal development time, currently supported by the Tenderer or off-the-shelf products, and not scheduled for end of support within three (3) years of the date of go-live. The Tenderer shall state the published end-of-support date of each item. The Tenderer shall submit the proposed development time required for each application under the first review report.

8.3.2 All software licenses and subscriptions supplied shall be valid for not less than the period from the Commencement Date to the expiry of the DLP, shall be assignable to HSITPL or renewable by HSITPL upon expiry, and the renewal price for each subsequent twelve (12) month period shall be stated in the Tender and shall be held firm for the option periods referred to in Clause 12.1.5.

8.3.3 Licenses shall be sufficient for the scalability target, and the Tenderer shall state the incremental license cost of expansion to that target.

8.3.4 The Tenderer shall maintain an inventory of all application software, custom components, third-party libraries, licences and subscriptions supplied.

8.3.5 The Tenderer shall securely configure and harden all application components, application runtimes and application configurations within its scope. Hardening of network devices, operating systems, database engines and other platform components shall be performed by the relevant Platform contractor. The Tenderer shall define and support the application-related hardening requirements.

8.3.6 No item of software shall be supplied subject to a license condition which restricts HSITPL's use of Whitelist Registration System for its intended purpose, or which requires disclosure of HSITPL data to the licensor otherwise than as permitted by Paragraph 9.5.

8.4 Requirements for Custom Programs

8.4.1 The Tenderer shall deliver the source code, object code and command code of all custom programs to HSITPL on the joint user acceptance date and upon request thereafter.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

8.4.2 Custom programs shall be documented to a standard enabling a competent third party to maintain them without reference to the Tenderer.

8.4.3 The Tenderer warrants that all custom programs shall be free from defects and shall perform in accordance with the Requirement Specifications throughout the DLP and shall rectify any defect at no additional charge.

8.4.4 Custom programs shall be held under version control, and the version deployed into production shall be identifiable and reproducible from the source repository delivered to HSITPL.

8.4.5 Custom programs shall be free from any undisclosed function, back door, time lock, disabling device or code which would impair the operation of Whitelist Registration System or permit access otherwise as specified.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

9 SECURITY AND PRIVACY REQUIREMENTS

9.1 General

9.1.1 The requirements of this Paragraph apply to Whitelist Registration System, to the Tenderer and to its personnel and sub-contractors throughout the Contract Period and the DLP.

9.2 Compliance with HSITPL Policies and Procedures

9.2.1 Whitelist Registration System, and the Tenderer and all of its personnel in performing the Contract, shall comply with the HSITPL policies and procedures.

9.2.2 Within fourteen (14) calendar days of release of the documents following award, the Tenderer shall confirm in writing that its proposed design, development practice and support arrangements comply in full, and shall notify HSITPL of any respect in which they do not. No additional payment shall be made for any change required in order to achieve compliance.

9.2.3 Whitelist Registration System shall additionally be designed and implemented in accordance with the standards and guidelines referenced by those procedures, namely ISO/IEC 27001:2022, ISO/IEC 27002:2022, the Digital Policy Office Baseline IT Security Policy [S17], the Digital Policy Office IT Security Guidelines [G3], the Digital Policy Office Practice Guide for Security by Design and the Code of Practice for Critical Infrastructure Computer-System Security, each in the version current at the date of design sign-off.

9.2.4 The SRAA and the PIA will be arranged by HSITPL and conducted by an independent external cybersecurity firm appointed by HSITPL, covering the registration platform, the integration of the contactless e-Gates solution incorporating facial recognition technology, and integration with relevant third-party systems. The Tenderer shall cooperate fully, shall provide all information, access and environments required, and shall rectify all findings attributable to the Tenderer's design, code or configuration at its own cost. All critical and high findings shall be remediated and verified before Whitelist Registration System is placed into production.

9.2.5 HSITPL reserves audit and compliance monitoring rights over the Tenderer 's controls affecting HSITPL information systems, facilities and data.

9.2.6 Any departure from a requirement of the referenced policies shall be raised as a formal security exception supported by written justification, and shall not be implemented unless and until approved by HSITPL.

9.3 Security by Design

9.3.1 The Tenderer shall establish a security plan at project initiation covering the security objectives, scope and requirements for Whitelist Registration System; the governance structure and detailed responsibilities for security across the development lifecycle; the applicable security standards and regulations; and a timeline of key security milestones. The security plan shall be accompanied by a preliminary risk analysis report.

9.3.2 A security baseline shall be established and integral to the entire lifecycle of Whitelist Registration System and shall not be applied retrospectively.

9.3.3 The Tenderer shall implement, as a minimum:

(a) encryption of all Personal Data, including uploaded facial photograph, at rest and in transit using current recognised algorithms and key lengths, with proper management of cryptographic keys throughout their lifecycle;

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

(b) no credential, key, password or secret of any kind embedded in source code, configuration files, client-side code or any publicly accessible resource;

(c) secrets held in a controlled secret management facility with defined rotation;

(d) role-based access control enforcing least privilege, need-to-know and segregation of duties;

(e) multi-factor authentication for all administrative, privileged and approval accounts and for all remote access;

(f) account lockout after five (5) consecutive invalid log-in attempts;

(g) re-authentication or termination of the session after a configurable period of inactivity, and protection against session fixation and hijacking;

(h) revocation of accounts after a pre-defined period of inactivity, and immediate removal of access upon a user leaving or a role changing;

(i) input validation and output encoding sufficient to prevent injection and cross-site scripting;

(j) protection against automated enumeration and abuse of the public-facing portal;

(k) comprehensive and tamper-evident security event logging with defined retention;

(l) separation of non-production and production environments, with controls limiting development personnel access to production;

(m) secure software development lifecycle practice including peer code review and dependency vulnerability management; and

(n) hardening of all components to a recognised baseline.

9.4 Authentication and Password Requirements

9.4.1 Whitelist Registration System shall authenticate individual users and shall not authenticate groups.

9.4.2 Whitelist Registration System shall not store any password in clear text or in any easily reversible form and shall not transmit any password in clear text over any network.

9.4.3 Whitelist Registration System shall provide role management such that one user is able to assume the functions of another without knowledge of that other user's password.

9.4.4 Password construction shall be technically enforced. As a minimum Whitelist Registration System shall require a mix of at least ten (10) mixed-case alphabetic characters, numerals and special characters, and shall support passphrases of not fewer than fourteen (14) characters. Whitelist Registration System shall reject passwords consisting of dictionary words, personal information, simple number or keyboard patterns, or common default strings.

9.4.5 The Whitelist Registration System shall enforce password history of at least six (6) previous passwords and shall support a configurable periodic password change interval defaulting to ninety (90) calendar days.

9.4.6 All vendor-supplied default passwords shall be changed and all unnecessary default accounts removed or disabled before Whitelist Registration System is placed upon the network.

9.4.7 Where a password is disclosed to the Tenderer for maintenance or support purposes it shall be changed promptly upon completion of that activity.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

9.5 Data Classification, Privacy and Data Handling

9.5.1 All Personal Data held by Whitelist Registration System shall be treated as Confidential in accordance with HSITPL's Data Classification Policy. Where a data set contains items of differing classification, the handling requirements of the highest classification shall apply to the whole. Having regard to the inclusion of Hong Kong identity card numbers, travel document numbers and facial images, HSITPL may require a higher classification and correspondingly higher controls.

9.5.2 Confidential Data shall be stored only within HSITPL-managed systems or equipment, protected by access control and encryption, and shall not be stored upon removable storage media, or personal devices.

9.5.3 Confidential Data shall be encrypted in transmission through a secure channel, with file-based password protection where transmitted as a file, and shall always be encrypted when transmitted over a public network.

9.5.4 Whitelist Registration System shall collect only the personal data necessary for the purposes of whitelist registration and access control. The Tenderer shall not collect, retain or process any additional personal data without HSITPL's prior written approval.

9.5.5 Whitelist Registration System shall capture and record the data subject's consent to the collection of company and personal information at the point of submission, and shall retain evidence of that consent with the record.

9.5.6 Whitelist Registration System shall support configurable retention periods and secure deletion of Personal Data in accordance with HSITPL's instructions and applicable law. Electronic disposal shall use a method approved by HSITPL.

9.5.7 Facial photographs shall be held, transmitted and displayed only for the purposes of identity verification and passage management, shall be protected as the most sensitive class of data held by Whitelist Registration System, and shall be accessible only to roles expressly authorised.

9.5.8 Personal Data, and any data extracted from the production environment, shall not be used as test data. Where use of production-derived data is genuinely unavoidable it shall not proceed without HSITPL's prior written approval.

9.5.9 Upon expiry or termination of the Contract, or upon HSITPL's request, the Tenderer shall clear or destroy all HSITPL data held in the Tenderer 's own or any third party's environment and shall certify that it has done so.

9.5.10 The Tenderer shall not use any public artificial intelligence or similar external service in a manner which involves the disclosure of HSITPL's sensitive or confidential information.

9.5.11 The Tenderer shall comply with the Personal Data (Privacy) Ordinance (Cap. 486) in the performance of the Services, and shall not do or omit anything which would place HSITPL in breach of that Ordinance.

9.6 Change Control

9.6.1 From the date of first deployment into any HSITPL environment and throughout the DLP, all changes to Whitelist Registration System, whether to hardware, software, system components, operating processes or services, and whether permanent or temporary, shall be managed in accordance with HSITPL's IT Change or Configuration Management Procedure.

9.6.2 For each change the Tenderer shall submit a Change Request setting out the change details, the reason for the change, the potential impact, the test plan and validation procedures, the

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

backout plan and fallback validation procedures, and whether personal data is involved.

9.6.3 No change shall be implemented until it has been endorsed and approved through HSITPL's change approval process, and changes shall be implemented only by authorised personnel.

9.6.4 The Tenderer shall conduct sufficient testing in a test environment before implementation, including as appropriate unit testing, SIT, vulnerability testing or scanning and UAT. Test results shall be recorded upon a test acceptance record and signed off before the change is accepted.

9.6.5 The Tenderer shall maintain full documentation of every change and shall participate in post-implementation review.

9.6.6 A backup shall be taken before and after the implementation of any change to system configuration.

9.7 Security Incident Handling

9.7.1 The Tenderer shall observe and comply with HSITPL's Information Security Incident Handling Procedure and shall assist HSITPL in handling any information security incident affecting Whitelist Registration System, including the provision of relevant technical information, logs, records, access, investigation support, remediation assistance and recovery support.

9.7.2 Upon becoming aware of an information security event affecting Whitelist Registration System the Tenderer shall log the event and report it to HSITPL by email within thirty (30) minutes, providing the date and time of detection, Whitelist Registration System s affected, the observations made and the contact details of the reporting person.

9.7.3 Where the event affects a critical HSITPL service or a Specified IT System, or where the event may attract media attention, the Tenderer shall additionally notify HSITPL by telephone within fifteen (15) minutes and shall state the type of event with an assessment of its scope, damage and impact and the actions being taken.

9.7.4 The Tenderer shall provide the information required for the Initial IT security incident report within one (1) calendar day, and for the Full IT security incident report within five (5) calendar days, of the onset of the incident, in the formats prescribed by HSITPL.

9.7.5 The Tenderer shall assist HSITPL in containment, eradication and recovery, shall preserve evidence and obtain a system snapshot as soon as suspicious activity is detected so far as technically and operationally feasible, and shall not destroy or overwrite log or configuration evidence.

9.7.6 The Tenderer shall support root cause analysis and shall submit a post-incident report no later than one (1) week after the incident is resolved.

9.7.7 Where Personal Data is involved the Tenderer shall immediately identify the categories and volume of data affected and shall provide HSITPL with the information necessary to notify the Privacy Commissioner for Personal Data and affected individuals.

9.7.8 The Tenderer shall not disclose to any person other than those handling the incident any information concerning the incident, Whitelist Registration System s affected, the methods used or the vulnerabilities exploited.

9.7.9 The Tenderer shall provide a Security Incident Handling Manual aligned to HSITPL's Information Security Incident Handling Procedure and shall participate in incident response drills throughout the Contract Period and the Defects Liability Period.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

9.8 Security Testing and Assurance

9.8.1 The Tenderer shall provide all necessary technical support, information, documentation, access and assistance required for the independent SRAA and PIA under Paragraph 1.6.1(c) and 9.2.4, including but not limited to support for vulnerability scanning, penetration testing, configuration review and source code scanning, and shall rectify any findings attributable to the Tenderer 's Services.

9.8.2 Stress testing shall be performed, as Whitelist Registration System is a public-facing system.

9.8.3 The Tenderer shall remediate all critical and high findings before Whitelist Registration System is presented for UAT and shall provide evidence of remediation. Medium findings shall be remediated, mitigated or formally accepted in writing by HSITPL.

9.8.4 Any security scanning, port scanning or penetration testing conducted upon or from HSITPL infrastructure shall be notified to and authorised by HSITPL in advance. Unauthorised scanning is prohibited.

9.8.5 A security risk assessment shall be conducted at least once every year for so long as the Tenderer 's support obligations subsist.

9.9 Conduct of Tenderer Personnel

9.9.1 Tenderer personnel are designated users for the purposes of HSITPL's Acceptable Use Policy and shall comply with it when using HSITPL information, information systems, network resources or equipment.

9.9.2 Tenderer personnel shall not connect any device not managed by HSITPL to the HSITPL internal network without prior written approval, shall not disclose account credentials, shall not access data other than as required for the Contract, and shall report promptly any theft, loss or unauthorised disclosure of HSITPL information.

9.9.3 The Tenderer shall procure that each of its personnel having access to HSITPL information or systems is bound by confidentiality obligations no less onerous than those in the Contract, and shall maintain a current list of such personnel.

9.9.4 The Tenderer shall not disclose to any unauthorised person the nature or location of HSITPL information systems, or the controls in use or the manner of their implementation.

9.10 Post-Quantum Cryptography (PQC) and Cryptographic Security Requirements

9.10.1 The proposed solution shall be designed with cryptographic agility and support the replacement, upgrade and introduction of cryptographic algorithms, key lengths, certificates, and security protocols without material modification to the application architecture, source code or service availability.

9.10.2 The proposed solution shall encrypt all sensitive information and personally identifiable information ("**PII**") at rest, including databases, files, backups, archives and logs, using AES-256 or a higher security standard.

9.10.3 Cryptographic keys shall be securely managed separately from encrypted data. The proposed solution shall support integration with enterprise Hardware Security Modules (HSM) and/or centralized Key Management Systems (KMSs), and shall support secure key generation, storage, rotation, backup, recovery, revocation, and destruction. The Tenderer shall demonstrate the interface capability of the proposed solutions on the standard protocols for KMS, e.g. KMPI, PKCS#11, or other protocols proposed by the Tenderer and agreed by HSITPL

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

or its consultants.

9.10.4 The proposed solution shall support migration from quantum-vulnerable cryptographic algorithms, including RSA and ECC, to post-quantum cryptographic ("**PQC**") algorithms without material modification to the application architecture. The proposed solution shall also support hybrid deployment of classical and post-quantum cryptographic algorithms during the transition period. The Tenderer shall prepare and submit documentation that illustrates the works required for the transition from quantum-vulnerable cryptographic algorithms to PQC algorithms.

9.10.5 The requirements specified in this Paragraph shall be read in conjunction with all other cybersecurity, information security, data protection, system architecture, and infrastructure requirements in the technical specification.

9.10.6 In the event of any inconsistency, the requirement providing the higher level of security shall apply, and the specific requirements of this Paragraph shall prevail over any general cryptographic requirements elsewhere in the technical specification.

9.10.7 Any non-compliance, limitation or exception shall be clearly declared in the Tender submission; otherwise, the Tenderer shall be deemed to fully comply with this Paragraph.

9.11 PQC requirements for Application Communications

9.11.1 The proposed solution shall support Transport Layer Security (TLS) version 1.3 or higher for all external-facing application communications.

9.11.2 The TLS handshake for all external-facing application communications shall support post-PQC key exchange mechanisms, including but not limited to NIST FIPS 203 Module-Lattice-Based Key Encapsulation Mechanism (ML-KEM), or a hybrid deployment combining a classical key exchange algorithm with a NIST-approved PQC key encapsulation mechanism.

9.11.3 The requirement specified in Paragraph 9.11.2 may be satisfied through TLS termination at a Web Application Firewall (WAF), load balancer, reverse proxy, or equivalent security gateway, provided that the external communication path between the client and the TLS termination point is protected by TLS 1.3 or higher using PQC-enabled or hybrid PQC key exchange mechanisms.

9.11.4 The Tenderer shall clearly identify the proposed PQC-enabled TLS architecture, including any TLS termination points, cryptographic algorithms, certificate management arrangements, and migration approach from quantum-vulnerable cryptographic algorithms.

9.11.5 The proposed solution shall prevent the export of private keys in clear text under all circumstances, including but not limited to backup, replication, disaster recovery, maintenance, migration, administrative operations, fault recovery, or system restoration activities.

9.12 Protection of Personally Identifiable Information (PII) and Sensitive Data

9.12.1 All PII, confidential information, and other sensitive data processed, transmitted, stored, archived, or backed up by the proposed solution shall be protected using strong cryptographic controls in accordance with Paragraph 9.10 to 9.12.

9.12.2 Cryptographic keys used for the protection of PII and other sensitive data shall be stored and managed separately from the encrypted data and shall be protected using a centralized KMS, or equivalent secure key management platform.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

9.12.3 The proposed solution shall support integration with enterprise key management systems using industry-standard key management protocols, including but not limited to the OASIS Key Management Interoperability Protocol (KMIP).

9.12.4 Where standardized key management protocols are not supported by the proposed solution, all communications between the encrypted data repository, encryption client, encryption agent, application server, or other encryption endpoint and the KMS shall be protected using TLS 1.3 or higher with PQC-enabled key exchange mechanisms or hybrid deployment combining classical cryptography with NIST-approved PQC key encapsulation mechanisms.

9.12.5 The Tenderer shall clearly identify any components that do not support PQC-enabled communications or industry-standard key management protocols and shall provide a documented mitigation strategy and migration roadmap for achieving compliance with the requirements of this Paragraph.

9.12.6 The proposed solution shall support future migration to fully post-quantum cryptographic protection for data encryption, key management, and associated cryptographic services without material modification to the application architecture, system design, or service availability.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

10 LOG MANAGEMENT, ANALYTICS AND MONITORING REQUIREMENTS

10.1 General

10.1.1 The Tenderer shall provide a log management and analytics capability satisfying the requirements of this Paragraph throughout the Contract Period and the DLP.

10.2 Log Generation and SIEM Integration

10.2.1 Whitelist Registration System shall provide facilities for generating, recording, storing, searching, retrieving and exporting logs for all components within the scope of this Contract, including the Whitelist Registration System, interfaces, applications and databases supplied by the Tenderer. Including but not limited

- Authentication and login activity logs (successful and failed logins)
- User activity and audit logs
- Sensitive data access, download, modification, and deletion logs
- Role, privilege, and account management change logs
- Administrative and privileged user activity logs
- System configuration and security policy change logs
- Application and database access logs
- File access and integrity monitoring logs
- Security event, alert, and incident logs
- Network access and connection logs

10.2.2 Whitelist Registration System shall securely forward relevant logs and event data to the Security Information and Event Management (SIEM) system nominated by HSITPL. The Tenderer shall provide all necessary configurations, connectors, agents, interfaces and technical support required for integration with the SIEM.

10.2.3 Logs shall be forwarded to the SIEM in a format and through a secure transmission protocol acceptable to HSITPL. The Tenderer shall coordinate with HSITPL to configure the required log sources, log fields, event categories, forwarding frequency and transmission method.

10.2.4 Whitelist Registration System shall provide local buffering and automatic retransmission of logs where connectivity with the SIEM is temporarily unavailable. The buffering capacity shall be sufficient to prevent loss of logs during a temporary interruption, and log forwarding shall resume automatically upon restoration of connectivity.

10.2.5 System clocks across all components shall be synchronised with a common authoritative time source nominated or approved by HSITPL to ensure consistent and accurate event timestamps.

10.2.6 Whitelist Registration System shall securely forward logs to the HSITPL-provided SIEM for retention in accordance with HSITPL requirements. The Tenderer shall provide sufficient local buffering for temporary SIEM connectivity interruptions.

10.2.7 Transaction Logs shall be retained for a minimum of seven (7) calendar days, or such longer period as directed by HSITPL. During the retention period, the logs shall be protected against

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

unauthorised access, alteration and deletion, including alteration or deletion by users holding administrative privileges, and shall be accessible only to authorised persons. Logs containing Personal Data shall be securely destroyed when they are no longer required for the purposes for which the Personal Data was collected, subject to applicable retention requirements.

10.3 Analytics, alerting and reporting

10.3.1 Whitelist Registration System shall identify abnormal activity, including but not limited to repeated failed authentication, anomalous volumes of registration or approval transactions, anomalous export or download of Personal Data, interface failure patterns and privileged account activity outside expected hours.

10.3.2 Whitelist Registration System shall provide incident and alert management, including configurable alert thresholds, alert routing to nominated recipients, alert acknowledgement and closure tracking, and suppression of duplicate alerts.

10.3.3 Whitelist Registration System shall provide defect logging and tracking from first report through to closure, recording the reference number, time of notification, affected component, description, severity classification, actions taken, current status and closure details.

10.3.4 Whitelist Registration System shall support the production of root cause analysis reports, and the Tenderer shall produce such a report for every Critical and High severity incident.

10.3.5 Whitelist Registration System shall provide operational dashboards showing, as a minimum, system availability, transaction volumes and response times, interface health and reconciliation status, alert status and outstanding defects.

10.3.6 The Tenderer shall submit a monthly log management and analytics report throughout the DLP summarising the foregoing.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

11 RESILIENCE, BACKUP AND DISASTER RECOVERY REQUIREMENTS

11.1 General

11.1.1 Whitelist Registration System shall satisfy the resilience, backup and disaster recovery requirements of this Paragraph. Where the failover time, Recovery Time Objective or Recovery Point Objective committed by the Tenderer is better than that specified, the Tenderer's commitment shall be binding.

11.2 Resilience requirements

11.2.1 Whitelist Registration System shall be designed with no single point of failure in any component whose failure would prevent registration, approval or the issue of entitlement instructions to the e-Gates solution.

11.2.2 The Application Services shall support deployment across the resilient architecture provided by the Platform contractor and shall support automatic application service recovery or failover within the agreed recovery target. The Tenderer shall configure and test the application components necessary to achieve this requirement, subject to the availability and performance of the underlying platform services.

11.2.3 Loss of the interface to any single counterparty system shall not prevent the continued operation of the remaining functions of Whitelist Registration System. Transactions which cannot be dispatched shall be queued, retried and reported and shall not be lost.

11.2.4 System failover testing shall be performed and the results reported before go-live.

11.3 Backup and Recovery

11.3.1 The Tenderer shall provide functions and documented procedures for system and data backup and recovery and shall carry out backups at regular intervals commensurate with the criticality of the data.

11.3.2 The Recovery Time Objective shall not exceed four (4) hours and the Recovery Point Objective shall not exceed fifteen (15) minutes, unless HSITPL confirms otherwise following its business impact analysis.

11.3.3 Backups shall be encrypted, access-controlled and protected against unauthorised access, misuse or corruption including during transportation, and integrity copies shall be capable of being stored at a remote distance from Whitelist Registration System.

11.3.4 The Tenderer shall perform a full recovery test prior to go-live and at least once during the DLP and shall report the results.

11.3.5 Backup shall be performed following any change to system configuration and backup activities shall be reviewed regularly.

11.3.6 The Tenderer shall provide data archiving functions for the applications, supporting historical data storage and retrieval with a minimum retention period of ninety (90) calendar days local backup with encryption and twelve (12) calendar months offsite copy with encryption using a tape library. Restoration testing shall be conducted regularly to verify data recoverability and integrity.

11.4 Disaster Recovery and Business Continuity

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

11.4.1 The Tenderer shall provide a disaster recovery plan and a business continuity plan covering loss of the primary site, loss of a critical interface and loss of cross-boundary exchange capability. The Tenderer shall test and review both plans.

11.4.2 The Tenderer shall provide the information required by HSITPL in order to complete a business impact analysis before Whitelist Registration System is placed into production, including the proposed Maximum Tolerable Period of Downtime, Recovery Time Objective and Recovery Point Objective.

11.4.3 The Tenderer shall provide a contingency plan covering degraded modes of operation, including the procedure to be followed where Whitelist Registration System is unavailable and entitlements cannot be issued to the e-Gates solution.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

12 SYSTEM SUPPORT AND MAINTENANCE SERVICES

12.1 DLP

12.1.1 **The DLP shall be twelve (12) months** from the date of ready for use, commencing strictly from the date of official written sign-off acceptance by HSITPL and not from the date of delivery or installation. The DLP is without prejudice to any warranty obligations under the PO T&C.

12.1.2 The DLP shall comprise a Nursing Period of three (3) months immediately following go-live during which the Tenderer shall provide dedicated on-site support, followed by a Comprehensive Maintenance Period of nine (9) months.

12.1.3 During Whitelist Registration System Nursing Period, in addition to standard DLP defect rectification, the Tenderer shall:

a. Assign key implementation staff members (including the Technical Lead/System Architect) to work alongside the client's maintenance/operations team;

b. Conduct proactive daily system health checks, database/application performance tuning, log reviews, and capacity monitoring;

c. Provide dedicated standby support across at least one (1) complete month-end / statutory processing cycle; and

d. Complete structured knowledge transfer and hands-on operational shadowing so the client's maintenance team can independently manage routine operations upon conclusion of Month 3.

12.1.4 Nursing Period Sign-Off: At the end of Month 3, the Tenderer shall submit a system nursing closure report summarizing all resolved issues, tuning adjustments, and updated operational baselines for the client's written sign-off before transitioning to standard DLP support (Months 4–12).

12.1.5 Tenderers shall price, as separately identified optional items, the extension of support and maintenance services for each of two (2) further twelve (12) month periods following expiry of the Maintenance Period, together with the corresponding license and subscription renewal prices required by Paragraph 8.3.2. Optional item pricing will not be taken into account in the price assessment.

12.1.6 Where a defect notified during the DLP remains unrectified at its expiry, the Tenderer's obligation in respect of that defect shall continue until it is rectified and accepted.

12.2 Service Levels

12.2.1 The Tenderer shall provide comprehensive support and maintenance services twenty-four (24) hours a day, seven (7) calendar days a week, in accordance with the applicable service levels and response times for each incident severity.

12.2.2 The Tenderer shall meet the service levels in Table 12-1 throughout the Maintenance Period. Severity shall be determined by HSITPL acting reasonably, having regard to the incident classification matrix in the Information Security Incident Handling Procedure where the incident is a security incident.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Table 12-1 – Support Service Levels

Severity	Definition	Response time	Resolution target
Critical	System unavailable; or entitlement data cannot be issued to the e-Gates solution; or cross-boundary exchange has failed; or a suspected information security incident affecting Personal Data	Within 30 minutes, 24 x7	Within 4 hours
High	Major function unavailable or materially degraded, with no workaround	Within 1 hour, 24 x7	Within 8 hours
Medium	Function degraded with an acceptable workaround available	Within 4 hours	Within 3 Business Days
Low	Minor defects, cosmetic issue or enquiry	Within 1 working day	Within 10 Business Days

12.2.3 Support shall be available twenty-four hours a day, seven calendar days a week, with a guaranteed thirty (30) minute response for Critical and High severity incidents, and the Tenderer shall collaborate with all related parties and vendors subject to incident priority.

12.2.4 At least ninety-five per cent (95%) of incidents in each severity class in each calendar month shall be responded to and resolved within the stated times.

12.2.5 During the Nursing Period the Tenderer shall provide dedicated on-site support during HSITPL's operating hours in addition to the service levels in Table 12-1.

12.2.6 The service levels in Table 12-1 are without prejudice to the incident reporting obligations in Paragraph 9.7, which apply in addition and are not satisfied by meeting a response target.

12.2.7 Where a resolution target cannot be met, the Tenderer shall implement a workaround which restores service so far as practicable, shall notify HSITPL of the reason, and shall continue to work upon a permanent resolution.

12.3 Maintenance Obligations

12.3.1 The Tenderer shall perform corrective maintenance for all defects in Whitelist Registration System, including defects in interfaces to other systems, at no additional charge throughout the Maintenance Period.

12.3.2 The Tenderer shall perform preventive maintenance and system health checks at least once during each of the Nursing Period and the Comprehensive Maintenance Period, and upon request, and shall submit records within five (5) Business Days of each check.

12.3.3 The Tenderer shall apply security patches to all supplied components within a period commensurate with the severity of the vulnerability, and in any event shall apply patches addressing critical vulnerabilities within seven (7) calendar days of release. Proper risk evaluation and testing shall be conducted before patches are applied and patching shall be managed as a change under Paragraph 9.6.

12.3.4 The Tenderer shall maintain and update Whitelist Registration System Manual, Program Manual, Computer Operations Procedures Manual, operations and business-as-usual

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

procedures, maintenance manual, escalation procedures, inventory list and operating instructions throughout the DLP.

12.3.5 The Tenderer shall maintain a production issue log and bug fix reports and shall submit an incident log and report at project completion.

12.4 System Changes

12.4.1 The Tenderer shall provide an aggregate of not fewer than fifteen (15) man-days of manpower during the DLP as part of Whitelist Registration System Support Services for the implementation of system changes, at no additional charge.

12.4.2 Unused man-days shall be carried forward within the DLP without limit and shall be carried forward into any extension period taken up under Paragraph 12.1.5.

12.4.3 Impact analysis of a system change request shall be performed free of charge.

12.4.4 All system changes shall be implemented in accordance with Paragraph 9.6.

12.4.5 Tenderers shall state a daily rate for additional system change manpower beyond the allowance in Paragraph 12.4.1, which rate shall be held firm throughout the DLP and any extension period.

12.5 Interface Defects Liability

12.5.1 Where a defect manifests at the interface between Whitelist Registration System and the e-Gates solution, the Tenderer shall not decline to investigate upon the ground that the cause may lie with the e-Gates solution. The Tenderer shall investigate its own side of the interface, shall provide its findings and supporting evidence to HSITPL, and shall cooperate with the e-Gates solution supplier in the joint diagnosis of the defect.

12.5.2 Where joint investigation establishes that the cause lies within Whitelist Registration System, the Tenderer shall rectify the defect at its own cost. Where the cause lies within the e-Gates solution, the Tenderer shall provide reasonable assistance to HSITPL and to the e-Gates solution supplier and shall be entitled to be paid for that assistance at the daily rate stated under Paragraph 12.4.5 only where the assistance exceeds five (5) man-days in any calendar month.

12.5.3 The Tenderer shall not be relieved of its obligations under this Paragraph by the expiry of the DLP while the Maintenance Period subsists.

12.6 Post-Implementation Review

12.6.1 The Tenderer shall participate in a post-implementation review conducted after go-live and shall submit a post-implementation review report together with an outstanding issues list.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

13 STAFF RESOURCES REQUIREMENTS

13.1 General

13.1.1 The Tenderer shall provide an entire project team which shall be stationed in Hong Kong.

13.1.2 A person filling a Key Role shall not concurrently fill any other role in the same team.

13.1.3 Experience shall be determined as at the Original Tender Closing Date for nominees submitted at tender stage, and as at the proposed date of joining for any subsequent replacement or non-key nominee.

13.1.4 Any change to a Key Role after award shall be subject to HSITPL's prior written approval and the replacement shall hold qualifications and experience equal to or better than the person replaced.

13.1.5 Where additional individuals or additional man-months are required in order to complete the Implementation Services by the Completion Date or to deliver Whitelist Registration System Support Services, the Tenderer shall provide them at its own cost and no additional payment shall be made by HSITPL.

14 PROJECT TIMELINE

Tender invitation	24 November 2026 (tentative)
Tender Closing Deadline	1 December 2026 (tentative)
Tender presentation	Week of 1 December 2026 (tentative)
Contract award	Week of 1 December 2026 (tentative)
Project kick-off (i.e. Commencement Date)	Week of 1 December 2026 (tentative)
Readiness for SIT	24 January 2027
Readiness for rehearsal	31 January 2027
Readiness for Production go-live	28 February 2027
Commencement of the DLP	28 February 2027 (tentative)
Project completion / last day of the DLP	27 February 2028 (tentative)

Remark: The dates relating to tendering and contract award are indicative only and may be adjusted by HSITPL. The dates for readiness for SIT, readiness for rehearsal and readiness for production go-live are key project milestones and shall be achieved by the respective dates specified above unless otherwise approved in writing by HSITPL.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Tender Schedule 6: Proposed Solution for Tender

To: Hong Kong-Shenzhen Innovation and Technology Park Limited ("HSITPL")

"Provision of Western Bridge Whitelist Registration System – Application Service (Ref. No. FD-03-06-02(377))"

This section contains Parts 1 to 10 and should be duly completed by the Tenderer and included in tender proposal. The Tenderer is required to present all details of his/her proposed solution according to the guidelines specified under each Part.

Tenderers are reminded that no price information should be included in the Technical Proposal. Tenderers are expected to provide the following information in an A4-sized document.

Part 1: Mandatory Assessment Criteria

The Tenderer acknowledges and agrees that participation in this Tender requires compliance with the mandatory assessment criteria outlined in this Part 1 ("**Mandatory Assessment Criteria**"). By responding with "Y", the Tenderer hereby declares and confirms that he/she meets the Mandatory Assessment Criteria. Failure to declare and submit supporting documents confirming compliance with any of the Mandatory Assessment Criteria may result in the **disqualification of the Tender**.

Item	Description / Proven Experience	Declaration with supporting document(s) Yes (Y) / No (N)
Domain Knowledge and Relevant project track record	The Tenderer must have solid domain knowledge of cross-boundary system and whitelist registration system, access control system, including integration with biometric enrolment and verification process with relevant service contracts for a government-scale whitelist registration / enrolment application integrated with e-Gates solution, with an adjusted contract sum / works value of not less than **HK$2.0 million** each, within the past 10 years, counting back from and including the original date set for the close of tender, irrespective of any extension. (Submit client reference letters, project profiles, or handover certificates.)	

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Qualification of Project Team Members	The Tenderer must propose a project team comprising suitably qualified and experienced personnel covering: • Project management • System architecture and analysis • Business and requirements analysis • Front-end, back-end, interface and database development • Cybersecurity	

Part 2: Company Background, Technical Expertise and Experience

Please briefly describe the following about your company:

- Years of experience in application services and project management
- Types and sizes of similar projects completed
- Specific industry expertise relevant to your business
- Experience with similar-sized businesses or projects

Part 3: Past Case Reference

Describe past reference cases similar in nature (cross-boundary system and whitelist registration system, access control system, ICT project), with an adjusted contract sum/works value not less than HK$2.0millin, either in or outside Hong Kong, completed in the past 10 years.

Reference Client	Project Period	Technical Scope and Implementation Details	Contact Person (optional)	Contact Telephone No. (optional)

Part 4: Qualification of Project Team Members

Please list the key team members and their roles in the proposed project team structure. For each member, provide their certified qualifications and briefly describe how their technical background will directly contribute to successful project implementation.
Note: It is the Tenderer's contractual responsibility to assemble and maintain a replacement team with identical or superior qualifications in the event of personnel movement during the project period.

Name	Proposed Project Role	Professional Qualifications (e.g., PMP, CISM)	Years of Relevant Experience

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

Part 5: Whitelist registration & e-Gates solution business and technical expertise

- Proven technical and business expertise, industry experience, and a thorough understanding of whitelist registration, cross-boundary access management, and e-Gate operations
- Provide relevant project references, business process diagrams, operational workflows, lessons learned, and industry best practices from similar enterprise-scale and/or government-scale implementations, covering the following areas:
    a) Registration and onboarding processes, e.g. application, verification, approval, renewal, suspension, and revocation workflows.
    b) Cross-border and cross-boundary business scenarios, e.g. end-to-end user journeys, stakeholder interactions, regulatory considerations, and operational requirements.
    c) Business operation flows and process governance, e.g. exception handling, escalation procedures, audit requirements, and operational monitoring.
    d) BAU operating model, e.g. operational support, maintenance processes, incident management, and performance reporting.
    e) Contingency plan and business continuity arrangements, e.g. emergency procedures, failover mechanisms, disaster recovery, manual operations, and service recovery processes.
- Identify the critical success factors, key dependencies, constraints, and potential risks associated with the implementation and operation of the solution.
- Provide the corresponding mitigation strategy, contingency measures, and recommended best practices to ensure successful delivery and sustainable operation of the solution.

Part 6: System architecture & integrations and infrastructure architecture expertise

- Explain your deep understanding and technical expertise on enterprise-scale/ government-scale architecture knowledge,
- Provide the proposed methodology, governance framework, standards, and industry best practices for the review, quality assurance, and technical supervision of System architecture and design, including System code-level & database-level design, integration design, API integration experience, Security architecture, and cloud and hybrid architecture.
- Provide capability in review processes, design assurance approach, compliance standards, and governance mechanisms to ensure solution quality, scalability, security, maintainability, and operational resilience

Part 7: Project implementation and governance capability

- Proven experience and successful track record in managing enterprise-scale and/or government-scale application development and system integration projects throughout the project lifecycle, including:
    a) Requirements analysis and management.
    b) Application development and systems integration.

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

c) Testing, acceptance and production rollout; and

d) Operational handover and post-implementation support.

- Demonstrated expertise in project implementation and governance, including:

e) Appropriate project management methodologies, such as PRINCE2, Agile, Scrum or hybrid approaches.

f) Project planning, scheduling and progress monitoring.

g) Use of digital project management and collaboration tools; and

h) Project documentation, deliverable management and quality assurance..

- Proven methodology for risk and issue management, change and configuration management, deployment and fallback planning, solution acceptance, and coordination with clients, platform providers, external system owners and other contractors.

Part 8: Testing & quality assurance capability

- Proven expertise and practical experience in establishing comprehensive testing strategies, test planning, and quality assurance frameworks for enterprise-scale and/or government-scale systems.
- Outline the proposed methodology, tools, and best practices for the planning, execution, governance, and reporting of testing activities, covering but not limited to: SIT, UAT, Rehearsals, load testing, stress testing, and failover testing.
- Proven understanding and experience in SRAA and PIA activities for government and enterprise systems
- Proven expertise in establishing and managing quality acceptance processes throughout the project lifecycle, e.g. acceptance readiness assessment, sign-off procedures, and operational readiness verification.

Part 9: Security and compliance

- Proven expertise and successful project experience in personal data protection, privacy governance, and regulatory compliance for enterprise-scale and/or government-scale systems, e.g.:

a) Compliance with applicable personal data privacy and protection regulations.

b) Privacy-by-design principles and privacy impact assessment practices.

c) Sensitive data handling, retention, archival, and disposal policies.

d) Data governance, consent management, and auditability requirements.

e) Experience in delivering systems involving government, public sector, or highly regulated environments.

- Proven expertise in security architecture review, cybersecurity governance, and security assurance throughout Whitelist Registration System lifecycle, e.g.:

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599

f) Security architecture design and independent security architecture review.

g) Cybersecurity risk assessment and risk mitigation recommendations.

h) Identity and access management (IAM), role-based access control (RBAC), multi-factor authentication (MFA), and privileged access management.

i) Data protection controls, encryption, key management, secure data transmission, and audit logging.

j) Security monitoring, incident response, vulnerability management, and security compliance oversight.

k) Experience supporting SRAA and PIA.

- Demonstrate relevant experience in projects that have been certified against internationally recognized information security standards, e.g. ISO/IEC 27001 Information Security Management Systems (ISMS).

Part 10: Log management & analytics, DLP support and SLA commitments

- Proven expertise in designing, implementing, and operating centralized log management, monitoring, and analytics platforms for enterprise-scale and/or government-scale systems.
- Describe your approach, methodologies, tools, and best practices for:

  a) Centralized collection, aggregation, retention, and analysis of logs across the overall ICT environment, including but not limited to the Whitelist Registration System application, database and interface logs, and integration with the HSITPL-provided SIEM.

  b) Log retention, archival, audit trail management, and compliance with applicable security and regulatory requirements.

- Demonstrated expertise in Identification of abnormal activities, incident & alert management, defect logging and tracking, and root cause analysis reports.
- Provide a DLP support proposal.
- Provide comprehensive support and maintenance services with clearly defined SLA commitments: guarantee of 24x7 support with 30-minute response & collaboration with related parties or vendors, subject to incident priority.

< End of Document >

Hong Kong-Shenzhen Innovation and Technology Park Limited 港深創新及科技園有限公司
Unit 710, 7/F, 8 Science Park West Avenue, Hong Kong Science Park 香港科學園科技大道西8號7樓710室 | TEL 電話 +852 3189 1599