

CORENET X Connect: Understanding & Navigating the Submission Portal

30 July 2025



















Part 1 New Regulatory Approval Process for Building Works & the Submission Portal

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Part 2 Walkthrough of Submission Portal and its key features

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GovTech



CORENET X's new Regulatory Approval Process of Building Works (RABW)



Service Journey with the Industry

Co-created with industry stakeholders the new Regulatory Approval for Building Works (RABW) process

SERVICE JOURNEY 1.0

PHASE 0: DISCOVERY PHASE Service Journey Blueprint (mid Oct 18)

SERVICE JOURNEY 2.0 (26 WEEKS)

PHASE 2: KICK OFF: PHASE 1: Design Commission Envision (Oct 19) (mid Jul 19) (Aug 19)

IMPLEMENTATION

PHASE 3: **Implementation** (Since Dec 19)

~4 months

~4 wks

~8 wks

~10 wks

~4 wks

NOW

Kick-Off

Interviews







Visioning Checkpoint



Design Checkpoint

Endorsement of Action Plan

Visioning Workshop

C State

TIONGSENG

firms





















 Comprising Developers, Consultants (architectural, C&S and M&E), and Builders 7 Sessions involved

industry reps agency reps Consulted

BIM Managers

What can you expect in CORENET X?

CORENET X is the one-stop digital shopfront for regulatory approvals, enabling efficiency and productivity for stakeholders across the built environment

corenetx

- navigate different agencies' requirements through a **user centric journey**, streamlining multiple touchpoints on one platform for
 more **efficient regulatory clearance**
- promotes upfront collaboration & coordination among project teams & agencies, allowing them to spot and solve issues early, reducing construction risks and costly delays
- provides greater clarity of project timelines and hence quicker completion
- supports industry in navigating new process by providing (a) capability building & guidance & (b) 6-month extension of ABSD remission timeframe & PCP during transition period

KEY BENEFITS



Savings in Time & Cost



Obtain agencies' approvals in one go



Build with confidence & certainty

Vision of CORENET X

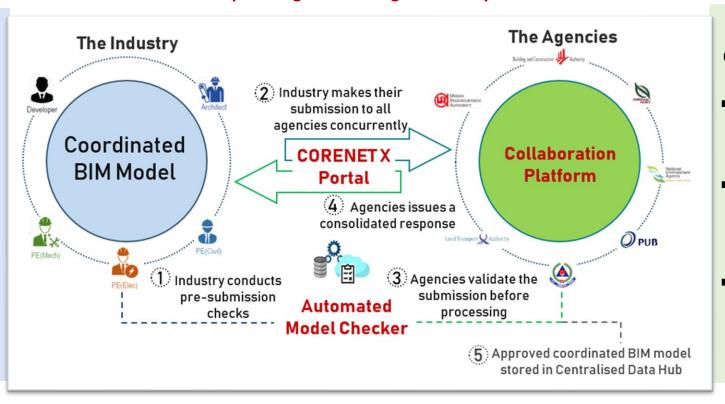
A future ecosystem of regulatory approval for building works that accelerates the transformation of the construction industry

FIRST IN THE WORLD

One-Stop Integrated Digital Shopfront

TRANSFORMATION of INDUSTRY

- Promote design coordination & teamwork
- Promote digitalisation of construction sector
- Support IDD¹ & DfMA² imperatives



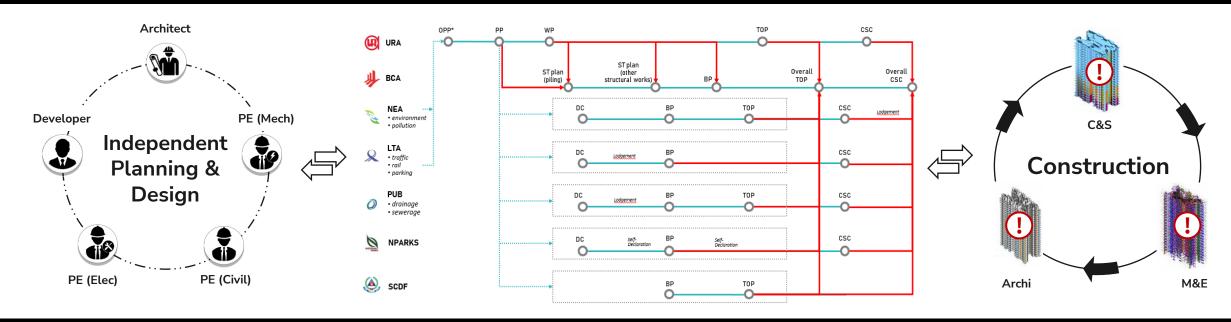
TRANSFORMATION of REGULATORY AGENCIES

- Reduce silos, iterations & regulatory gateways
- Embrace collaboration
 & raise productivity
 amidst rising demands
- Improve accessibility & centralise information towards a Single Source of Truth

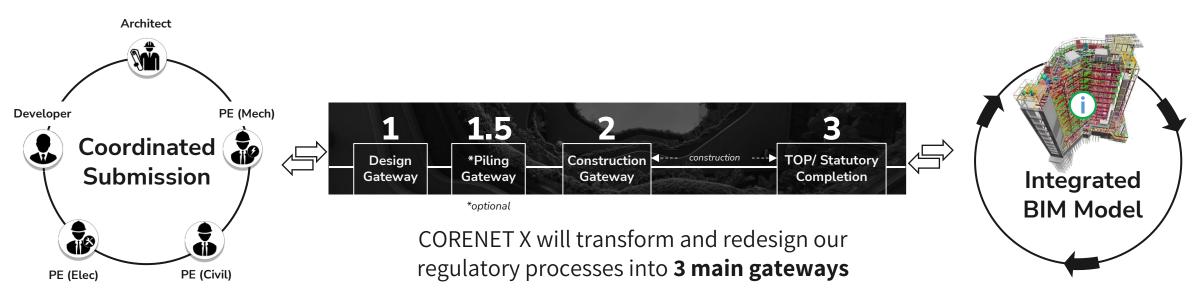
¹ IDD is the use of digital technologies to integrate work processes and connect stakeholders working on the same project throughout the construction and building life-cycle

² DfMA is a continuum of various technologies and methodologies that promote offsite fabrication from prefabricated components to fully integrated assemblies across the structural, architectural and Mechanical/ Electrical disciplines.

Today's Separate & Concurrent Approval Process



New Regulatory Approval Process for Building Works (RABW)



New Regulatory Approval Process for Building Works (RABW)



AT THE GATEWAYS

Coordinated submissions (consisting of various disciplines) will be submitted and reviewed collectively by agencies.

This helps to ensure cross-agency issues and conflicts are identified upfront.

1

Coordinated & consolidated response

- Agencies review, deconflict & respond collectively. Comments can be location-tagged on BIM model
- Industry no longer be required to produce comments/clearances from another Agency

2

Iterations through Written Directions

 With collective review and collaboration across Agencies, submissions should not iterate with more than 2 Written Directions at each gateway 20

Working days response time by Agencies

- Submissions go through Agencies' inter and intra-agency level reviews
- Agencies will collaborate to respond to industry collectively within 20 working days

3-Gateway Submission Process



Critical Design Parameters

"Showstoppers, non-negotiables"

Foundation Requirements

"Must-haves before Piling"

Detailed Design Requirements

"Must-haves before (Piling) & Launch of Sales"

Clearing of detailed design that have inter-agency dependencies, such as layout, accessible route for wheelchair users and fire escape route

All other Requirements

Independent (agency specific) technical requirements

Clearing of more detailed technical requirements or component level info to specific agencies. E.g.

- Structural design of localized works.
- Fire Protection (FP) and Mechanical Ventilation (MV) Plans
- Rainwater Collection System

Completion & Compliance to Approved Design

Ensure completed building is fit for occupation

Largely similar process as today. A set of TOP CSC checklists pertaining to agencies' requirements will be provided.

Clearing of multi agency critical design parameters, such as master plan land use, intensity, building massing, site layout. Clearing of piling design to allow piling works to commence (including pile caps, raft foundation, etc.)

Upfront Coordination

Reducing Downstream Abortive Reworks

Approvals under Consolidated CORENET X Gateways



"Showstoppers, non-negotiables"

Critical Design

Parameters

Foundation Requirements

"Must-haves before Piling"

Detailed Design Requirements

"Must-haves before (Piling) & Launch of Sales" All other Requirements

Independent (agency specific) technical requirements

Completion & Compliance to Approved Design

Ensure completed building is fit for occupation

Approvals at each Gateway consist of the following agencies' equivalent clearances today*:

- URA PP
- LTA Layout
 Plan, NEA and
 PUB DC
 Clearances
- NParks DG
 Approval including tree-cutting

- BCA ST Approvals for Permanent Piling Works
- LTA RPZ AIP for Pile Design and Layout Plan
- Independent clearances, e.g. NParks EMMP & PUB's Earth Control Measures Approval

- URA WP
- BCA BP and ST Approvals
- LTA Street Plan Clearance, BP (Parking), BP (Rails)
- NEA and PUB BP Clearance Cert
- SCDF BP Approval
- NParks CG Approval

Key Objective of Gateways
Resolve multi-agency
requirements concerning
design details that need to be
coordinated

^{*} Requirements at each Gateway may not be the same as requirements for clearances today. For more info, please visit https://info.corenet.gov.sg/regulatory-process/about-the-new-submission-process or refer to the Code of Practice

Approvals under Consolidated CORENET X Gateways



Detailed structural design and calculations of eligible projects can be submitted through a limited number of part ST submissions. Project teams should propose the Part ST Submission plan and seek agencies' concurrence during pre-submission consultations, before making any submissions

□ Building projects:

- 1. Any project with a **Gross Floor Area (GFA) > 40,000sqm** is eligible for part ST submission if
 - a. the project consists of 5 or more blocks of building of at least 4 storeys high each; or
 - b. the project consists of 3 or more blocks of building of at least 4 storeys high each, with common podium or basement.
- 2. Cluster housing projects with 40 or more landed units

■ Infrastructure projects:

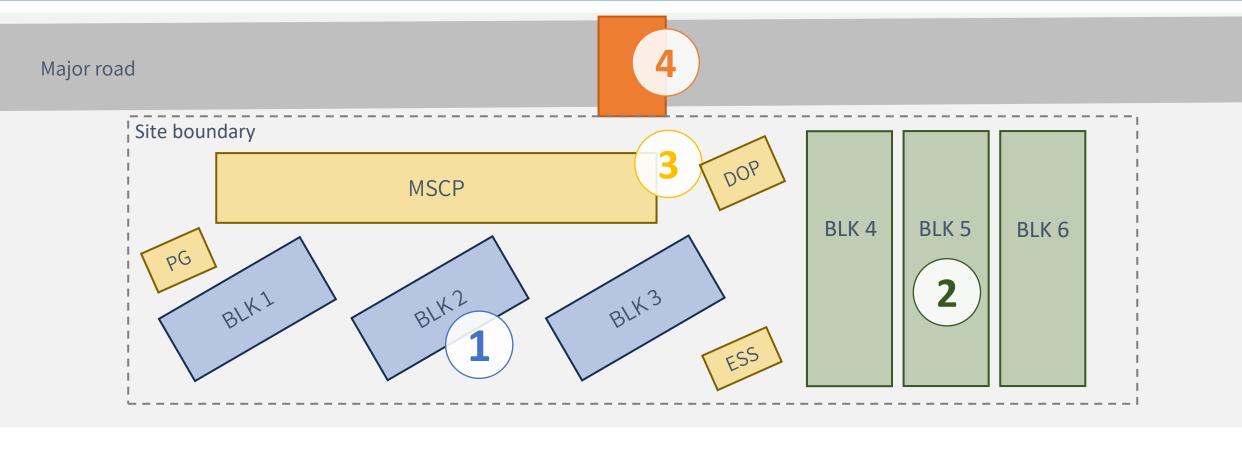
- Infrastructure works that <u>function like a building</u> with length > 150m (e.g. MRT stations, transport nodes/ interchanges);
- 2. Infrastructure works that are <u>mostly engineering works</u> with length > 400m (e.g. viaducts, large scale drains, sewers)
- 3. Infrastructure works that are <u>mostly coastal works</u> with length > 4,000m (e.g. land reclamation, revetment, sea wall, bund wall)

Part ST Submissions - Guidelines

Scope of Works	Number of Part ST Submissions Allowed		
Superstructure	1 no. of Part ST Submission for every 4 blocks (rounded to nearest unit) 1 no. of Part ST submission for every 40 landed units (rounded to nearest unit) Example: For a building project consisting of 9 tower blocks, 3 no. of Part ST Submissions of <u>equal GFA</u> is allowed. (i.e. if the total GFA is 105,000 sqm, each of the Part ST Submission should be about 35,000 sqm)		
Common Basement	1 no. of Part ST Submission		
Common Podium	1 no. of Part ST Submission		
All ancillary works	1 no. of Part ST Submission		
All external works	1 no. of Part ST Submission		
ERSS			
Cladding	Independent submission *No change from the standard RABW (without phasing)		
Façade			
Temporary Deck			

Part ST Submissions - Guidelines (Illustrated with example)

Example Project: 6 HDB blocks with MSCP and ancillary works





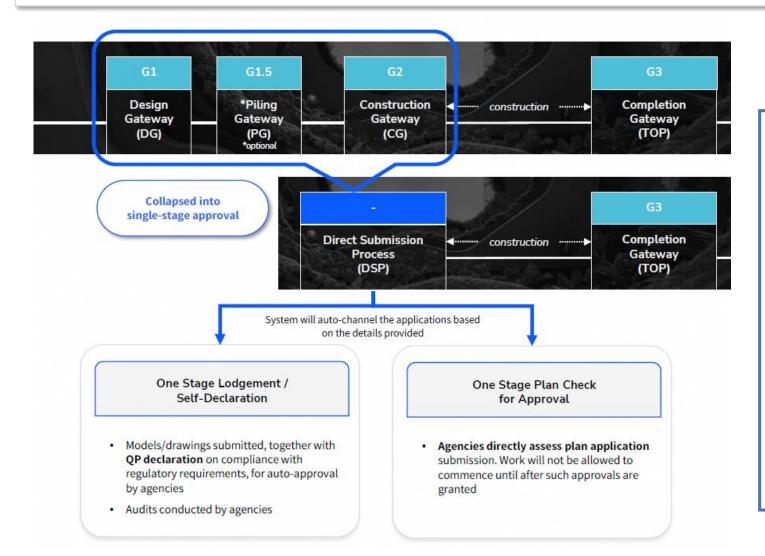
Part ST Submission 2: Block 4 – 6

Part ST Submission 3: Ancillary works within site boundary

Part ST Submission 4: External works outside site boundary

Direct Submission Process

Differentiated approach for simple building works that need not be subjected to the typical RABW 3-Gateway process (e.g. single-unit residential landed development, standalone pavilion/ linkway, taxi stands, bus shelters, eligible minor A&A works etc.)



Direct Submission Process

- Only eligible projects will be put under DSP
- Through a guided submission process, QP will answer a set of eligibility questions to determine whether project will be auto-channeled to either:
 - i. Lodgment/self-declaration/simplified submission scheme OR
 - ii. One-stage plan check

for the respective agencies

 Independent submission for agency-specific requirements is still available and supported under DSP

Supporting Mechanisms for the New RABW

PRE-SUBMISSION CONSULTATION

Industry can seek guidance from Agencies prior to and at any point in the Gateway submissions





WAIVERS

Industry may apply for deviations from compliance for Agencies' assessment and decision prior to Gateway submissions

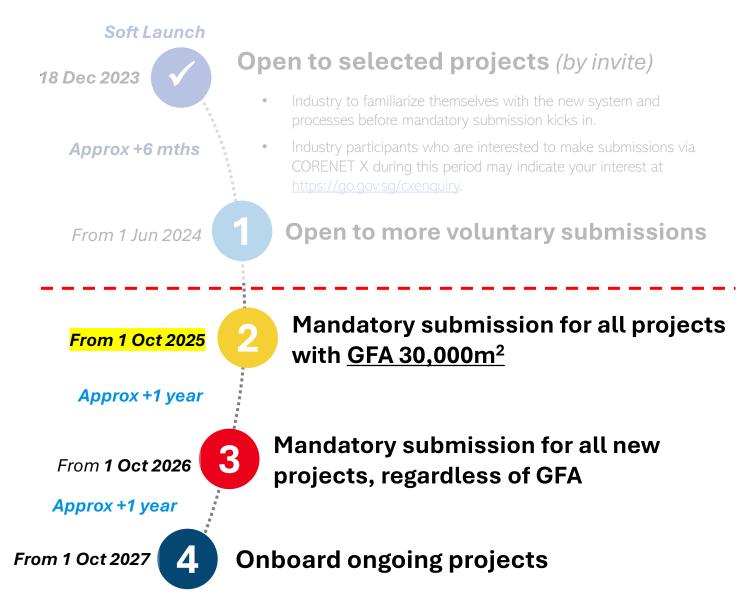
ESCALATION MECHANISM

Industry can seek upfront resolution on interagency regulatory conflicts at the Interagency Coordinating Committee (IACC)



Mandatory CORENET X Submission – commencing 1 Oct 2025





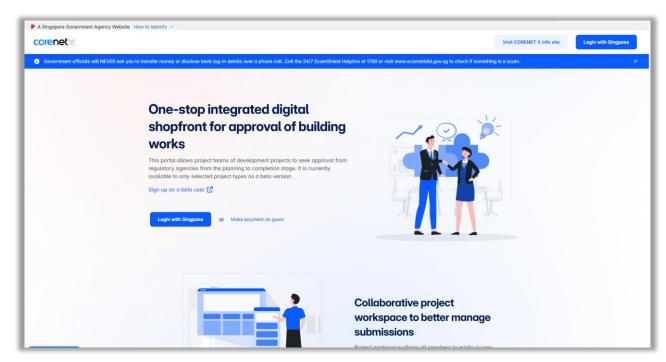
CORENET X Submission Portal



Submission Portal

Submission Portal will replace CORENET 2.0 as the platform to make submissions to agencies for approvals

- The Submission Portal is our web-based front-facing portal where industry practitioners and their assistants interact with to make submissions
- CORENET X is developed through agile methodology that progressively delivers new features and improvements to enhance the system
- The system is designed with users at its core, intended for a guided submission process. It incorporating regular feedback from user testing and live submission users to enhance its usability and create a more intuitive experience



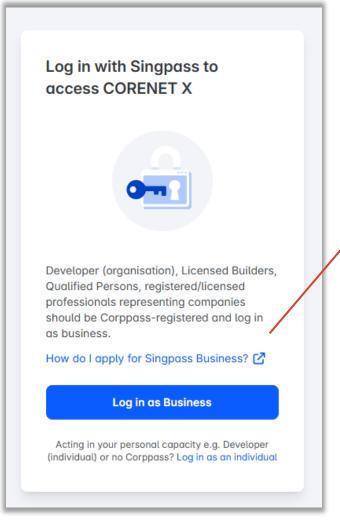
- ✓ Dashboards for greater visibility
- √ Guided submission process
- ✓ Auto fee computation to plan ahead
- ✓ Centralised payments to all agencies

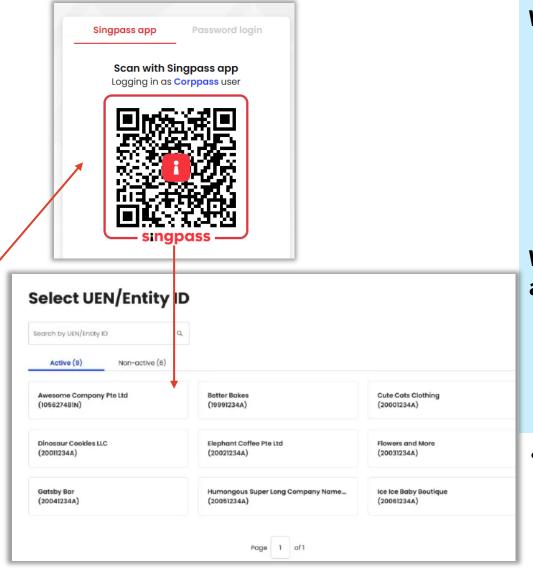
Key differences between Submission Portal (CX) and ESPro (CN2.0)

Area	Current CORENET 2.0	CORENET X	
System	Thick client app on desktop	Web-based system where QPs may access the system as long as internet connection is available	
Appointment	QPs attach authorisation letters documenting the appointment of members in submissions	Appointment of members must be done before QPs can access submission forms of their respective scope of works	
Submission Responsibilities	QPs indicate their own scope of works in authorisation letters	Project Coordinator (lead QP) of the system to collate respective QPs' submission scopes and indicate them as part of appointment process	
Joint submissions vs independent submissions	Each submission made separately to different agencies	At key gateways, submissions (DC and BP) are prepared and made jointly to all applicable regulatory agencies All other submissions remain independent	
Project members	Parties such as developer, RE/RTO, Accredited Checker do not interact with CORENET	Developer, RE/RTO, Accredited Checker to login and interact with the system to perform appointment, declare and submit	

Logging in - Singpass for Business vs Singpass individual

Similar to all other government systems, CORENET X login mechanism is Singpass. As CORENET X is primarily a Government-to-Business system, users are strongly encouraged to use Singpass Business





Who needs to access CORENET X?

- Developer (including owner)^{New}
- Qualified Person
- Fire Safety Engineer^{New}
- AC, ACO^{New}
- Licensed Builder^{New}
- Site Personnel (RE, RTO)^{New}

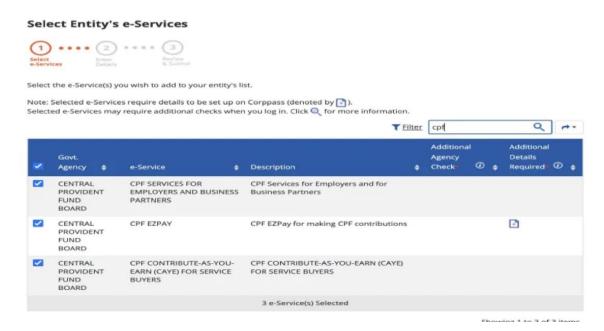
Who needs Singpass as Business to access CORENET X?

- Developer (organisation)
- Licensed Builder

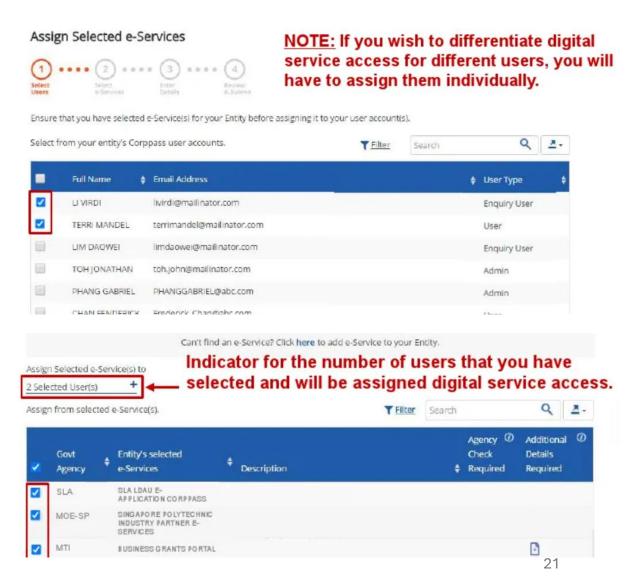
 If a corppass registered user has more than 1 entities, he/she will be prompted to select the relevant company

Logging in - Setting up Singpass for Business

Similar to all other government systems, CORENET X login mechanism is Singpass. As CORENET X is primarily a Government-to-Business system, users are strongly encouraged to use Singpass Business

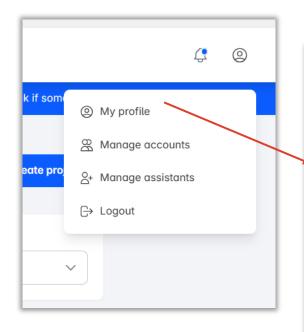


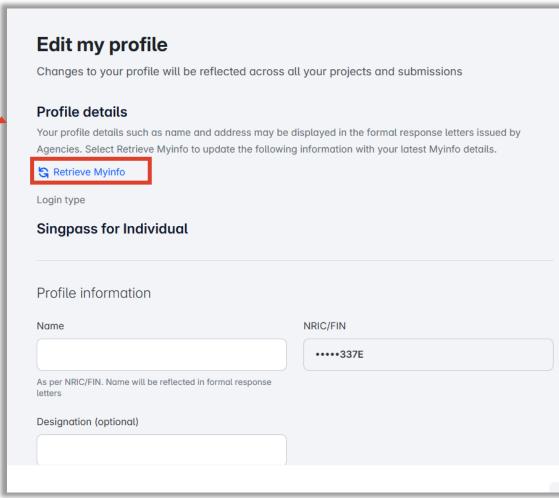
- Ensure all project members who are using Singpass Business have Singpass set up.
- For Singpass Business, the corporate admin of each company will need to first authorize the member to be given access for the intended system (i.e. CORENET X "CORENET X Industry Portal").
- This onboarding step is required for all, including existing CORENET 2 users.



Setting up profile page

Auto-populating user information through MyInfo



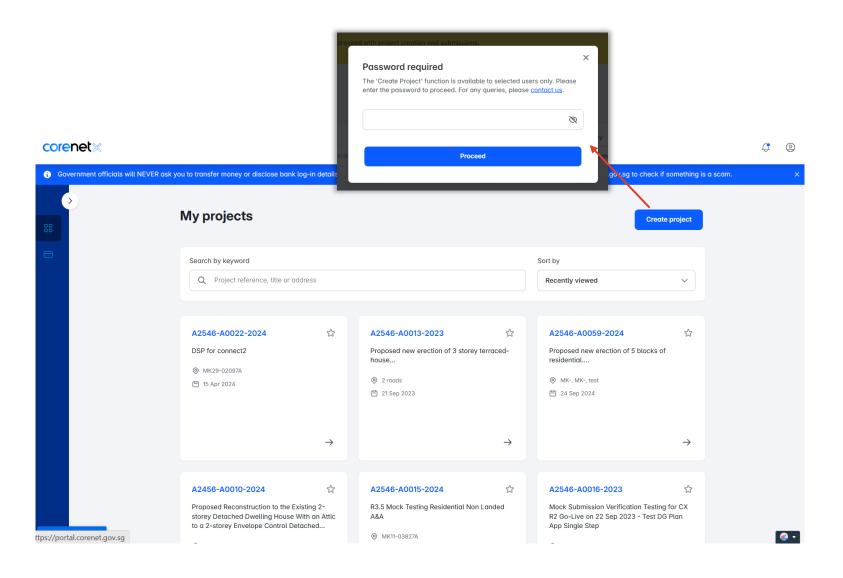


Profile page

- The profile page is a one-time set up for new users to create a profile
- Select "Retrieve my info" to ensure the most accurate details are extracted in your preparation for submission
- The name in your profile will be used to reflect your name on agencies' letterheads in the official responses
- Your particulars will be autopopulated

Creating a project during voluntary phase submission

Register with CORENET X if you have a live submission project



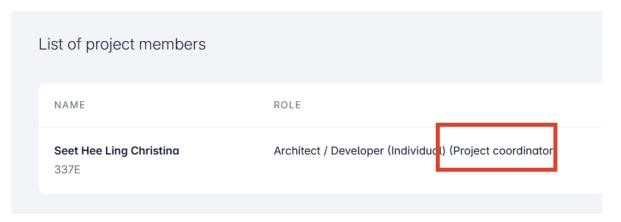
To register your live submission project for actual CORENET X submission, please register your interest at

https://go.gov.sg/corenetxbeta

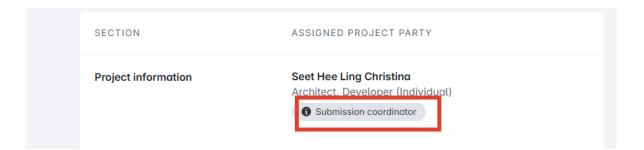


System roles - Project Coordinator & Submission Coordinator

Project-level coordinator



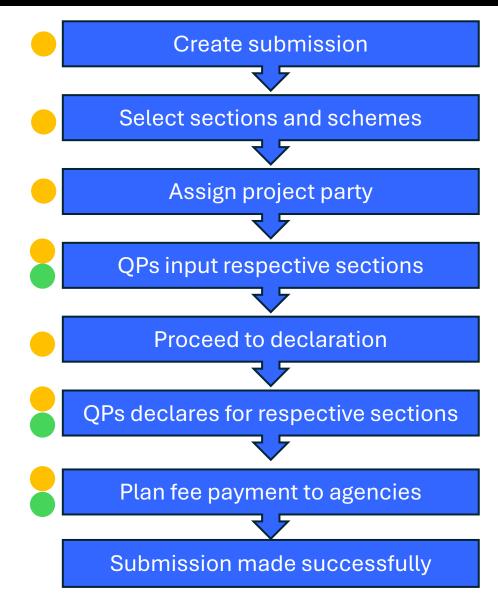
Submission-level coordinator



Things to note:

- The role of a Project Coordinator is similar to that of CORENET 2, where the lead QP is overall responsible to set up the Project Account and addition of project members.
- The role of a Submission
 Coordinator occurs in a joint-submission (submissions involving more than 1 project member)
- The Submission Coordinator is responsible in making inputs to key project information. After all sections in a form has been completed by all QPs, the Submission Coordinator is to initiate the next step to trigger declaration for all QPs

Submission workflow – joint submission



Things to note:

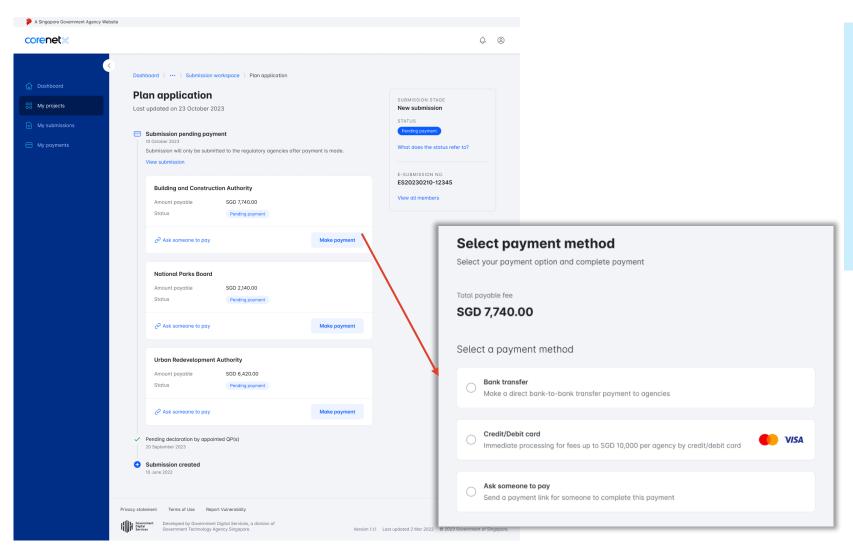
- While assigned project parties can prepare their respective sections concurrently, the intended workflow does not allow them to declare for their respective sections until all inputs are completed, locked as "Ready for Review" and Submission coordinator initiates declaration
- This is to ensure that all assigned project parties involved in the joint submission are declaring on the same set of completed inputs

Action allowed by

- Submission coordinator
- Assigned project party

Plan fee payment

Plan fee payment must be made before submission can transit to agencies for processing



What are the available payment modes?

- Bank transfer (takes at least 2-3 working days to be processed)
- Credit card (for each transaction up to \$10,000)

- Payment to agencies are to be transacted separately
- This is to avoid payment errors e.g. credit limits to affect multiple transactions at a time
- Users who receive a request to make payment via "Ask someone to pay" must login to transact

CORENET X Training Environment

Training Environment for Simulated Hands-on



Training environment replicates the CORENET X Submission Portal



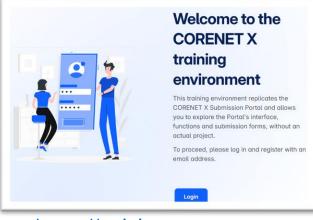
Allow industry users to explore the Submission Portal's interface, functions and submission forms without an actual project.



Training guide provided to help industry navigate the simulation environment

(https://info.corenet.gov.sg/overview/corenet-x-submission-portal)





https://training.corenet.gov.sg



Training Courses for Industry Practitioners

		Mode of Lessons	<u>Trainers</u>
		Physical	The Architect's Academy by Singapore Institute of Architects (SIA)
	CORENET X Regulatory Approval for Building Works (RABW) Course		BIMAGE
			BCA Academy
	Understanding the new RABW Processes		SP Pace Academy
			AcePLP(AIA)
		Self-paced Online Learning	Bluskai
		Software	<u>Trainers</u>
	IFC-SG Training	Revit	AcePLP Pte Ltd, BIMAGE consulting, SP Pace Academy, Innocom
	Preparing OpenBIM submissions using IFC-SG	Tekla	AcePLP Pte Ltd
	Preparing Openbiw submissions using IFC-36	Archicad	Graphisoft
		Bentley	Bentley, AcePLP(AIA)

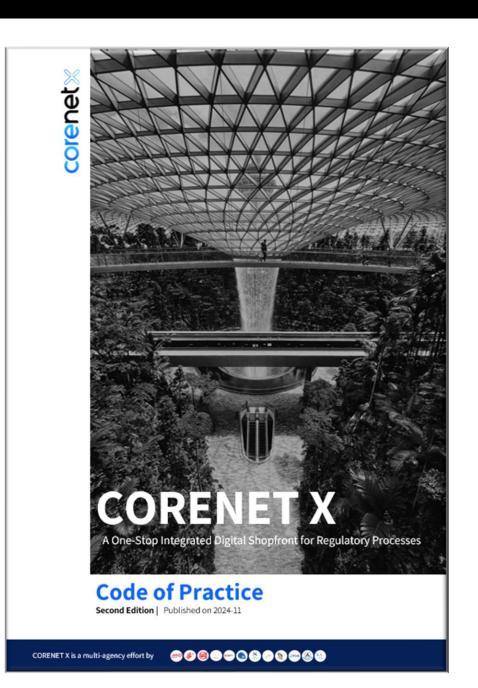


CORENET X Code of Practice

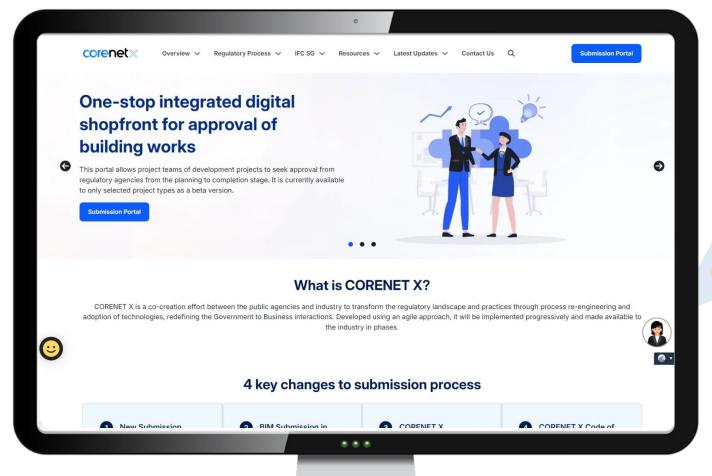
- > First edition was released on September 2023
- ➤ Intended to help industry practitioners in understanding how to prepare multi-agency regulatory submissions across the key submission gateways in CORENET X
- ➤ Includes **recommended procedures** and **good practices** to address common BIM issues
- This Code of Practice <u>does not</u> substitute Handbooks, Circulars or other regulatory publications of our regulatory agencies.
- ➤ Complements other resources on the CORENET X website, including the IFC+SG Resource Toolkit

[Latest Version Here]
The 2nd edition is
now available!





CORENET X Website & Self-Help Resources



- Interactive COP
- Submission Portal Guides
- IFC+SG
- Training & Funding
- Past Events & Material
- Circulars



List of firms that have onboarded to CORENET X

More details on CORENET X can be found at:

https://go.gov.sg/cx



Thank You

















