



# CORENET X Industry Seminar

2 May 2024

BCA Braddell Campus



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The CORENET X Industry Seminar gathered industry stakeholders together to **deepen their understanding on CORENET X**, its impact, and the potential it offers for the industry.

It is an **invaluable opportunity** for the industry to come together, learn from each other, and **collectively contribute** to the advancement of Singapore Built Environment sector.



## Attendees' Profile

More than  
**600** industry professionals

across the Built Environment value chain  
attended the CORENET X Industry Seminar

**74** developers

**151** architects

**209** engineers

**30** builders

**89** digital delivery leads

**57** others



# Opening Address by BCA/Deputy CEO (Building Control)



**Mr. Chin Chi Leong**  
Deputy CEO (Building Control)  
BCA

“ The spirit of CORENET X is about collaboration and coordination within industry, as well as amongst agencies... CORENET X was co-created for both industry’s and regulatory agencies’ needs.

We should be at the stage of looking at **what do we need to do to get ready** and **what are the issues we are facing** when we are getting ready.

”



# Seminar Speakers



**Mr. G Ganesh Ruban**  
Senior Engineer,  
CORENET X Project  
Office, BCA



**Ar. Tay Seok Cheng**  
Deputy Head of Property  
Development Division,  
City Developments Limited



**Ar. Tang Kok Thye**  
Associate Partner,  
ADDP Architects LLP



**Mr. Kenneth Loo**  
Chief Operating Officer  
and Executive Director,  
Straits Construction Group

## Getting Ready for CORENET X

- Recap on **key changes** under CORENET X
- Efforts to **address industry concerns**
  - *Revised payment milestones for consultancy services*
  - *Approval process for projects involving external works*
  - *Part ST submissions for huge projects*
- **Resources available** ranging from online resources, training courses and funding
- **New and enhanced user experience** in CORENET X Submission Portal



**Mr. G Ganesha Ruban**  
Senior Engineer, CORENET X Project Office,  
Building and Construction Authority

# Industry Speaker

## CORENET X Pilot Project

### FROM A DEVELOPER'S PERSPECTIVE

- Be **well-versed** with CORENET X new submission process to smoothen the learning curve
- **Early collaboration and forward planning** are crucial to reduce abortive work downstream
- **Upfront decisions and design freeze** are important

“

*You can look at this whole process, it is not as bad as what everyone is talking, (not) very long... I am very pleased to report to my management that we are on track, even if we are using CORENET X.*

*We work very hard in the upfront... but we clear it earlier... everyone will have a peaceful mind for the next 3 years after the plans are approved, provided there are no amendments.*

”



**Ar. Tay Seok Cheng**

Deputy Head of Property Development Division,  
City Developments Limited

## CORENET X Pilot Project

### FROM A CONSULTANT'S PERSPECTIVE

- **Mindset change** and transforming the business model are essential to maximise the benefits
- A **competent team** will significantly help to ease upfront design decision process
- Consolidated authorities' response provides **clear timeline and certainty** in construction process

“

*The benefit of this is that agencies will come back with a collective review and coordinated response... it will reduce abortive work in future... it will save time.*

*The faster you establish your staff to be familiar with IFC and the parameters, once you set up the systems, it is easier to do the next jobs...*

”

## Industry Speaker



**Ar. Tang Kok Thye**

Associate Partner, ADDP Architects LLP



# Industry Speaker



**Mr. Kenneth Loo**

Chief Operating Officer and Executive Director,  
Straits Construction Group

## CORENET X Pilot Project FROM A BUILDER'S PERSPECTIVE

- **Upfront collaboration** among project team is essential for CORENET X projects
- The addition of Piling Gateway benefits contractors greatly as **works can commence on site promptly**
- **Embrace technology** to maximise its benefits

“

*When we first embarked on the journey, I was asking ourselves, “Contractors are always at the receiving end, (CORENET X has) nothing to do with me...” After going through the journey, we found that there is value in it.*

*From a contractor's perspective... we are hopeful that when we get to Construction Gateway... all the details are cleared... so that we can move seamlessly forward.*

”

# Panel Discussion with Industry Speakers

## Panel Moderators:

**Er. Clement Tseng**  
Group Director of Building Plan  
and Management, BCA



**Ms. Goh Chin Chin**  
Group Director of Development  
Control, URA



## Panelists:



**Ar. Tay Seok Cheng**  
Deputy Head of Property  
Development Division,  
City Developments Limited



**Ar. Tang Kok Thye**  
Associate Partner,  
ADDP Architects LLP



**Mr. Kenneth Loo**  
Chief Operating Officer and  
Executive Director,  
Straits Construction Group



**Ms. Mavis Ng**  
Director of CORENET X  
Project Office,  
BCA



**Mr. Timothy Lee**  
Director of Development  
Control Ops Tech Department,  
URA

# Panel Discussion with Industry Speakers



The CORENET X Industry Seminar concluded with an **engaging and informative** panel discussion.

The **key topics** covered in the panel discussion include:

- Clarity on CORENET X process
- Transformation of business model
- Good collaboration practices

# Booths by Training and Software Providers



**Autodesk**



**Bentley**



**Graphisoft**



**Trimble**



**ACEPLP**



**BIMAGE**



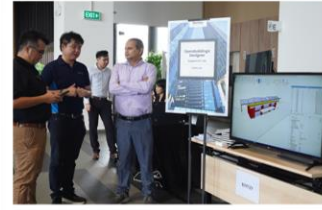
**Innocom**



**SP PACE Academy**



# Networking and Sharing





# Continual Refinements

Observations from pilot projects &  
Mitigating impacts to industry

# Addressing Industry's Concerns on Timeline & Payment Milestones

## 1. Addressing concern that projects may be delayed as the industry is unfamiliar with the new requirements



- ✓ A **temporary 6-month extension** will be granted to qualifying projects submitted fully on CORENET X during the transition phase **between 18 Dec 2023 - 31 Dec 2025** to:
  - **Additional Buyer's Stamp Duty (ABSD)** remission timeline
  - **Project Completion Period (PCP)** timeline

## 2. Addressing impact of CORENET X on payment milestones for consultancy services



- ✓ **Payment milestones** under Annex C of the Standard Consultancy Agreement for **public sector consultancy services** have been reviewed to **align with the new submission gateways** under CORENET X
- ✓ The TACs agreed to **take reference from public sector and make the necessary adjustment for private projects**

# Review of RABW and COP to Address Industry's Feedback

Impractical to complete the full structural details of the entire development in one go

**BCA will allow Part ST Submissions for qualifying large projects:**

- Full coordinated structural BIM carcass model at 1<sup>st</sup> CG submission
- Detailed structural submissions (incl detailed calculations, AC/ACO report, etc) can be submitted in parts – e.g. 1<sup>st</sup> part in CG and remaining parts after CG as independent submission

External work clearance may delay the main development

**LTA, NParks and PUB have reviewed and aligned the process:**

- **Only interfacing details** between the external works and the main development need **to be cleared at CG**
- Remaining details can be submitted separately after CG

Difficult to provide operational details at DG/CG without builders onboard

**Agencies will continue to refine the submission requirements in the COP based on observations from pilot projects and feedback**

- **Calibrate level of details required at DG and CG** to an appropriate level, in alignment of the intent of the gateways and taking into consideration general industry practices



# Common Misconceptions

Facts

Myths

#1

## Question

## Answer

Is it true that there is no way to do a Design Gateway submission unless there is a builder onboard?

Design Gateway (DG) submission aims to resolve high-level planning parameters that may appear as a show-stopper if not resolved upfront. *Examples include land use, building massing, building orientation.*

In most cases, **it is unlikely that you need the builder onboard to make a DG submission**, unless your project faces unique site constraints which require builder's inputs.

#2

Is it true that structural submission must be done within a single submission, even if the project is large?

Structural submission is generally required at Piling Gateway (PG) and Construction Gateway (CG). Structural submissions for temporary works and ancillary works can be done as independent submissions.

**For large development that fulfils the criteria, part ST submissions can be allowed.**

However, **each ST submission needs to be of a sizeable scope and a set of coordinated models (comprising of the structural model) needs to be submitted** as part of the joint submission in CG.

#3

Is it true that CORENET X requires all M&E details to be furnished upfront?

While CORENET X requires coordination among disciplines, it is not true that all the M&E details must be provided upfront. CORENET X is meant for regulatory submission and not up to construction details. **Only relevant aspects requiring multiple-disciplinary coordination need to be included in CG submission.** One example of independent submissions is SCDF's fire protection/mechanical ventilation plan.

To balance between the modelling efforts and information required, **not every details must be provided in BIM.** Please refer to CORENET X Code of Practice for more details.




## Hear from our Pilot Projects

We made first submission on 31st October 2023. Written direction come back on 27th November 2023 (which was really fast). Resubmission are made on 17th January 2023. Approval come back on 1st Feb. All processes are really fast.

...the overall submission process was otherwise smooth and there was no lagging or delays in uploading files.

The response time is not long like what people is saying. Submission is also not as complicated as speculated.

... fire safety engineer (can) do SCDF waiver submission (directly) is good news to us.  thank you

Just learnt that BCA is prepared to allow split ST, it's great, BCA takes the industry feedback seriously. Appreciate it, thanks

The project dashboard and submission timeline are useful features so that everyone can see the project status and not wait for the QP to update.

Useful that all the payments to agencies are consolidated under 1 portal

Today, often by the time we (M&E engineer) finished a resubmission according to the Architect's design change, they will make further design change and resubmission – we can't catch up. In the future, it is good that the 3 disciplines will make resubmissions at the same time (in the Construction Gateway) so that we don't waste time on unnecessary resubmissions.

YOU NEVER KNOW UNTIL YOU TRY





# THANK YOU

Don't miss out on the excitement – Stay informed by visiting our website at [go.gov.sg/cx](https://go.gov.sg/cx). There, you'll find the latest updates, events, and all things CORENET X.

You can also subscribe to CORENET X mailing list at [go.gov.sg/cx-mailing-list](https://go.gov.sg/cx-mailing-list)

We look forward to seeing you at future CORENET X events.