

Questions and Answers for CORENET X Industry Seminar on 2 May 2024

Question 1: New Regulatory Approval Process

- ***If I achieve a WD in a gateway, and the client changes the design or layout, will the subsequent WD be counted as the second one or still considered the first?***

Answer:

At each gateway, agencies will issue consolidated WDs to project teams, and target to clear the submission within 2 iterations. This is on the basis that the project team addresses the comments provided and the resubmission does not introduce new design changes. In the event there are any major changes in the submission, it will entail a re-evaluation by the agencies and hence for such cases, the number of iterations could exceed 2.

Question 2: New Regulatory Approval Process

- ***What is the workflow for amendment submissions?***

Answer:

There is no control over the number of amendments a project could made. While amendment is generally discouraged, we understand its necessity.

When making amendment plan, especially for joint submission e.g. during Construction Gateway, the amendments to the earlier approved plans must be provided in a holistic and coordinated manner, ensuring the amended submission meets the regulatory requirements in all relevant aspects and where other disciplines are involved, the respective QPs are aware.

Fees are imposed by regulatory agencies as stipulated under their respective Act and Regulations. Therefore, it will follow the prevailing rate imposed by the respective agency.

In terms of BIM requirements for amendment plans, the QPs will only need to provide the updated models. CORENET X's backend system will carry out a model compare of the amendment model with the earlier approved model. Please refer to the CORENET X Code of Practice for preparation and submission requirement for amendments.

Question 3: Agency-Specific Queries and Others

- ***What is the submission workflow for structural plan applications to BCA? Do all ST plans need to be submitted at the construction gateway before works can commence on-site?***

Answer:

Under the CORENET X process, the project team is required to coordinate their designs and submit a set of coordinated models at the Gateway. Structural submissions of ancillary works (such as barrier, cladding) or temporary works (such as ERSS) can be submitted separately and independent of the gateway submission.

For qualifying large projects, it will be possible for project team to submit part ST submissions. When doing so, the structural BIM model submitted still needs to be coordinated with the architectural and M&E model) at the Construction Gateway (CG). The QP(ST) will also be required to include the first part ST detailed calculation report and documents of a sizeable scope at the CG. The subsequent part STs (of similar sizeable scope) can then be submitted independently.

Question 4: Agency-Specific Queries and Others

- **What is the submission workflow for external works?**

Answer:

Under CORENET X, the QP will need to submit the proposed external works to the LTA, NParks and PUB for a coordinated regulatory review.

At the Construction Gateway (CG) submission, only the interfacing details between the external works and the development site will need to be submitted. Remaining details for the external works can be cleared separately after CG. Please refer to the CORENET X Code of Practice (pages 158-176) for more details on the required interfacing aspects.

Question 4a: How will the project team make submission for projects that are very small or involve only a single disciplinary?

Answer:

For projects with a small scope of works and likely to require only the approval(s) from 1 or few agencies, the QP can indicate during submissions the agencies whose approvals are not required and provide the necessary declarations.

Once done, the submission will only be routed to the relevant agencies indicated. The rest of the agencies will still be notified of the submissions and may choose to audit them.

Question 5: Potential Impact on Project

- **Will agencies be able to meet the agreed response time?**

Answer:

Under CORENET X, the regulatory agencies have committed to the following service levels for submission made under CORENET X:

- 1. Agencies will provide a consolidated response to the project team within 20 working days.*
- 2. Submissions generally will not be issued with more than 2 Written Directions at each gateway, unless the resubmission introduces new changes or contains non-compliance despite the earlier Written Directions issued.*

Question 6: User Experience and Interface

- **Will the Code of Practice (COP) be digitalised?**

Answer:

The first edition of the CORENET X Code of Practice (COP) was released in Sep 2023. We are currently incorporating feedback from industry and refining the contents of the COP. We will also be looking into possible improvements to the COP to enhance the user experience.

Question 7: Potential Impact on Project

- **The new regulatory process requires upstream design coordination and planning. How much time is needed before a project will be ready to submit for the respective gateways?**

Answer:

While the industry estimates that about 3 to 6 months may be required for upfront planning and coordination, this will depend on a number of factors. These factors include the project's typology, complexity and size, etc. and whether there are other project specific requirements that will need to be complied with.

CORENET X will incentivise project teams that are able to plan and collaborate well, in order to resolve planning parameters early at the Design Gateway and proceed with the detailed design for subsequent gateway or independent submissions.

Question 8: Automated Model Checker

- **Can QPs use the Automated Model Checker to check their model before submitting it via CORENET X?**

Answer:

Automated Model Checker is currently available in a Beta format and is offered to project teams who express interest to trial it. In its eventual state, QPs will be able to use the Automated Model Checker to carry out pre-submission checks and address any non-compliances identified by the AMC before submitting the model via CORENET X.

Question 9: Automated Model Checker

- **How can consultants effectively check the IFC models and ensure compliance? Do Owners/Developers need to be well versed in BIM as well?**

Answer:

Consultants should refer to the IFC-SG Resource Toolkit via <https://go.gov.sg/ifcsg> for a step-by-step guide on the recommended steps to take to prepare an IFC-SG model for submission. As explained in Step 5, the IFC-SG Validator can be used to check that the IFC models are adequately prepared for submission.

There are many openBIM viewers available in the market and some are free-of-charge. Developers could make use these viewers to review the model.

Question 10: New Regulatory Approval Process

- **With CORENET X, do we need to appoint the Builder/Main Contractor earlier, without which we cannot make any submission for Design Gateway?**

Answer:

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 early inputs to guide the design of the development.

Question 11: Agency-Specific Queries and Others

- **What about projects subjected to performance-based design requirements or waiver applications to SCDF?**

Answer:

Project teams could pre-consult SCDF on the performance-based design requirements early and seek direction before any relevant submission.

Generally SCDF requires the Fire Engineering Design Brief for performance-based proposal to be cleared before Construction Gateway. We have received industry feedback on the potential delay and impact to timeline. SCDF and BCA are currently reviewing this aspect to mitigate the potential issues.

For waivers, similar to today, the industry may apply for waiver (if the project requires) under the respective Act and Regulations and the respective agency will assess the applications accordingly.

Question 12: Approved Plans

- **Will the approved plans be IFC models or 2D drawings in CORENET X?**

Answer:

For projects that are mandated for BIM submissions, the approved plans will be the approved models.

For projects prepared in 2D plans, the approved plans will continue to be 2D drawings.

Question 14: Agency-Specific Queries and Others

- **Does PG need to be cleared before the project team can apply for CG clearance?**

Answer:

This is not necessary. While the main gateways are generally sequential (i.e. Design gateway before Construction gateway), Piling gateway is an optional gateway for project teams which wish to commence piling early.

Submission for PG and CG could be made concurrently. However, project team should ensure the PG submission is consistent with the CG submission.

Question 15: Agency-Specific Queries and Others

- **Must the permit to commence building works be applied only after Construction Gateway?**

Answer:

The requirements for permit application remains unchanged. Similar to today, the permit to commence building works can be applied for upon receiving approval of structural plan application, either under PG, CG or independent submission.

For non-structural works, similar to today's practice, works should generally commence only after obtaining the necessary agencies' approval at the respective gateway or milestone.

For other FAQ collated, you can refer to our website FAQ at

<https://www1.bca.gov.sg/regulatory-info/building-control/corenet-x/corenet-x-faq>