

MEDIA FACTSHEET

CORENET X

Harnessing the power of digitalisation and technology, CORENET X will allow Qualified Persons (QPs, i.e., professional engineers and registered architects) to submit a three-dimensional model of a development or building – created and developed digitally through Building Information Modelling (BIM) – to the regulatory agencies. It allows the project team which includes the QPs to collaborate and review their designs in the model together, detect possible major conflicts before construction, and produce a coordinated BIM model for submission and regulatory approval. It changes the current practice of QPs dealing separately with multiple regulatory agencies, and producing different versions of building plans thereafter.

Led by BCA and URA, CORENET X was developed in close collaboration with the other regulatory agencies and leading built environment professionals, firms and TACs. It is slated for implementation by the end of 2023.

Concept of CORENET X

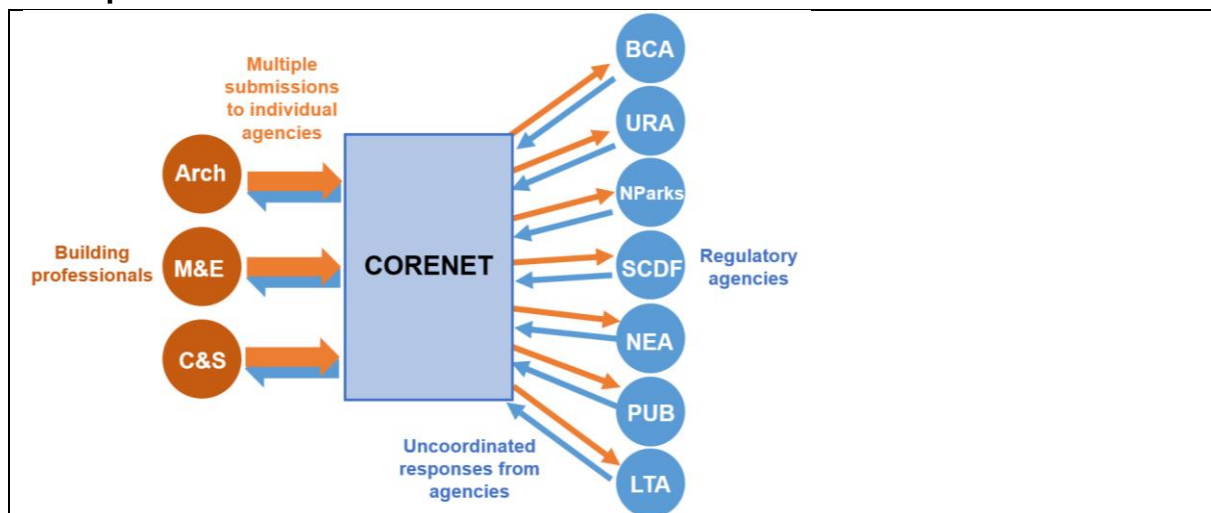


Figure 1 – Current regulatory approval process

The current regulatory process allows concurrent submissions, where industry consultants submit plans to various agencies separately. This approach does not incentivise consultants to conduct proper design coordination, which is important for productive construction practices. The plans approval process and response time of the regulatory agencies are also largely dependent on the project teams’ own coordination as each individual agency assesses the submissions independently.

**Note: The diagram does not show all public agencies involved in regulatory approval process.*

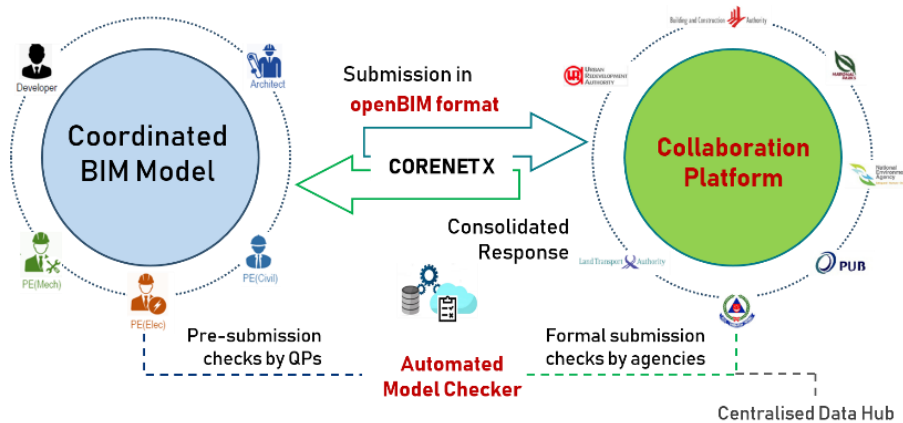


Figure 2 – Concept of CORENET X

CORENET X requires the consultants to collaborate upfront to de-conflict their designs, and submit a coordinated BIM model to the authorities. Agencies will collectively review the submission and provide a consolidated response to the consultants. This integrated submission process provides a one shopfront experience and improves regulatory governance and synergy among agencies.

What are the key aspects of CORENET X?

1. Re-designing the current approval process - Public agencies* and the industry – including developers, architects, civil and structural engineers, mechanical and electrical engineers, builders, land surveyors, and the Trade Associations and Chambers' (TAC) representatives – have come together to map out the current regulatory approval process and identify challenges/ pain points before going on to redesign the new approval process.
2. Leveraging technologies to redefine the way agencies and industry interact - One of the key technological enablers is the Collaboration Platform that will support concurrent review and collaboration among the different agencies, before issuing a coordinated response to the project team.
3. Create a model checking tool - A second key technological enabler is the Automated Model Checker that will allow QPs to run checks of their BIM model against regulatory requirements from seven main regulatory agencies before submission. This will ensure that QPs can address any major non-compliances before they submit them.

Benefits

CORENET X will shift from project parties submitting in silos, to upfront design coordination by project parties that is enabled by auto-checking. The modus operandi in

project delivery will refocus on integrative design and resolution, instead of divergence and expediency.

CORENET X enables

(a) Developers to enjoy overall improved cost, time, and quality project goals

(b) Qualified Persons (QPs) to have a true one-stop shopfront experience. They will no longer deal with individual agencies separately. With upfront coordination prior to submission, this will reduce the number of iterations between industry and agencies.

(c) Contractors and builders to receive coordinated models, minimise design discrepancy and abortive reworks, reduce safety hazards and risk, enjoy higher certainty of project delivery.

** Public agencies include BCA, the Urban Redevelopment Authority, Land Transport Authority, PUB, National Parks Board, National Environment Agency, SCDF, SLA, HDB, JTC and GovTech.*