

اۆتوريتي كاؤلن باغونن دان ايندوستري قمينان

AUTORITI KAWALAN BANGUNAN DAN INDUSTRI PEMBINAAN (ABCi)



# BRIEFING ON ACCREDITED CHECKER

ABCi, Ministry of Development

14<sup>th</sup> March 2019

# اۆتوريتي كاؤلن باغونن دان ايندوستري قمينان

AUTORITI KAWALAN BANGUNAN DAN INDUSTRI PEMBINAAN (ABCi)



## AGENDA

- Opening Remarks by HABCi
- Introduction to Accredited Checkers
- Accredited Checkers Guidelines
- Technical Requirements
- Important Dates
- Question and Answer

## Introduction to Accredited Checkers

- As a requirement under Building Control Order, 2014
- Objective
  - Check detailed **structural plans and design calculations** of the building works according to building regulations and guidelines.

## AC Guidelines

- Appointed AC shall only accept and perform work for project that they have necessary experience and competency related to the nature and scope of project.
- The checking process shall solely be done by the checker themselves and not be assigned to any other engineers.
- Should some or parts of the design require technical specialist for assistance, the AC must first seek prior approval from the Authority. This must be justified and the details of the specialist must be stated in the proposal. The Authority have the rights to approve or reject the request.
- No projects shall be taken if there is financial or professional interest on the project.
- Project owner or consultant shall bear the cost of the checking of the project.

## Registration Guideline

- Registration is on annual basis.
- Minimum of 10 years of practicing with chartered status, subject to the approval of the review panel.
- Registration may be revoke if there are sufficient proof of technical incompetency, negligence, or failure to comply to all or any of the regulations and guidelines
- Fees payable

Registration and renewal	\$300
Interview and Assessment	\$400

## Responsibilities of AC

- Evaluate, analyse, review the structural design in the plans of any building works and perform such original calculations with the view to determining the adequacy of the key structural elements of the building works to be erected or affected by building works carried out in accordance with those plans;
- Verify that the key structural elements are consistent with the layouts shown in the architectural plans and any amendments made;
- Without delay, after performing the checking process, submit to the Authority, the Certificate of Adequacy in such form as the Authority may require and an evaluation report including the analysis and calculations performed by the Accredited Checker.

## Duties of AC

- Determine and use the Code of Practice adopted in the preparation of the structural design in the plans of building works;
- Check the design loadings and where applicable, wind loading;
- Ascertain design assumptions and limitations of the computer program used in the analysis of the structural design;
- Use the appropriate engineering information and model in the analysis for the structural design;
- Check the standard and specifications of materials to be used in the building works;
- Ascertain the structural design concept and identify the key structural elements;
- Determine the stability and robustness of the structural system of the structural system, including considerations for lateral loads, lateral ties, bracings and lateral transfer of loads;
- Analyse all key structural elements and foundation systems of the buildings to be erected or affected by building works carried out in accordance with the plans of the building works;
- Analyse all piles used in the foundations, including considerations for structural capacity, geotechnical capacity, lateral load effects, uplift effects, pile group effects, differential settlements of supporting structures, negative skin friction effects and pile joint capacities;

## Duties of AC

- Analyse all earth retaining structures, including considerations for surcharge loads, overburden pressure and water pressures;
- Analyse all columns and vertical key structural elements, including considerations for axial loads, lateral loads and bending moments;
- Analyse all long span steel trusses and long span beams, including considerations for lateral and torsional stability;
- Analyse all transfer beams, including considerations for torsional capacity, lateral stability and the effects of the structural frames to which they are connected;
- Analyse all joint connections, including connections between structural elements and between structural elements and its supports;
- Check the structural detailing in drawings and ensure that these are consistent with the design calculations;
- Determine the adequacy of other aspects of the design which are peculiar to the building to be erected or affected by the building works and which are essential to the structural integrity of the building.

اؤتوريتي كاوون باغونن دان ايندوستري قمينان

AUTORITI KAWALAN BANGUNAN DAN INDUSTRI PEMBINAAN (ABCi)



# Technical Requirements

Becoming an Accredited Checker

By YAM Pengiran Indera Wijaya Pengiran Dr. Haji Ismail  
bin Pengiran Haji Damit

## Accredited Checker Technical Requirements

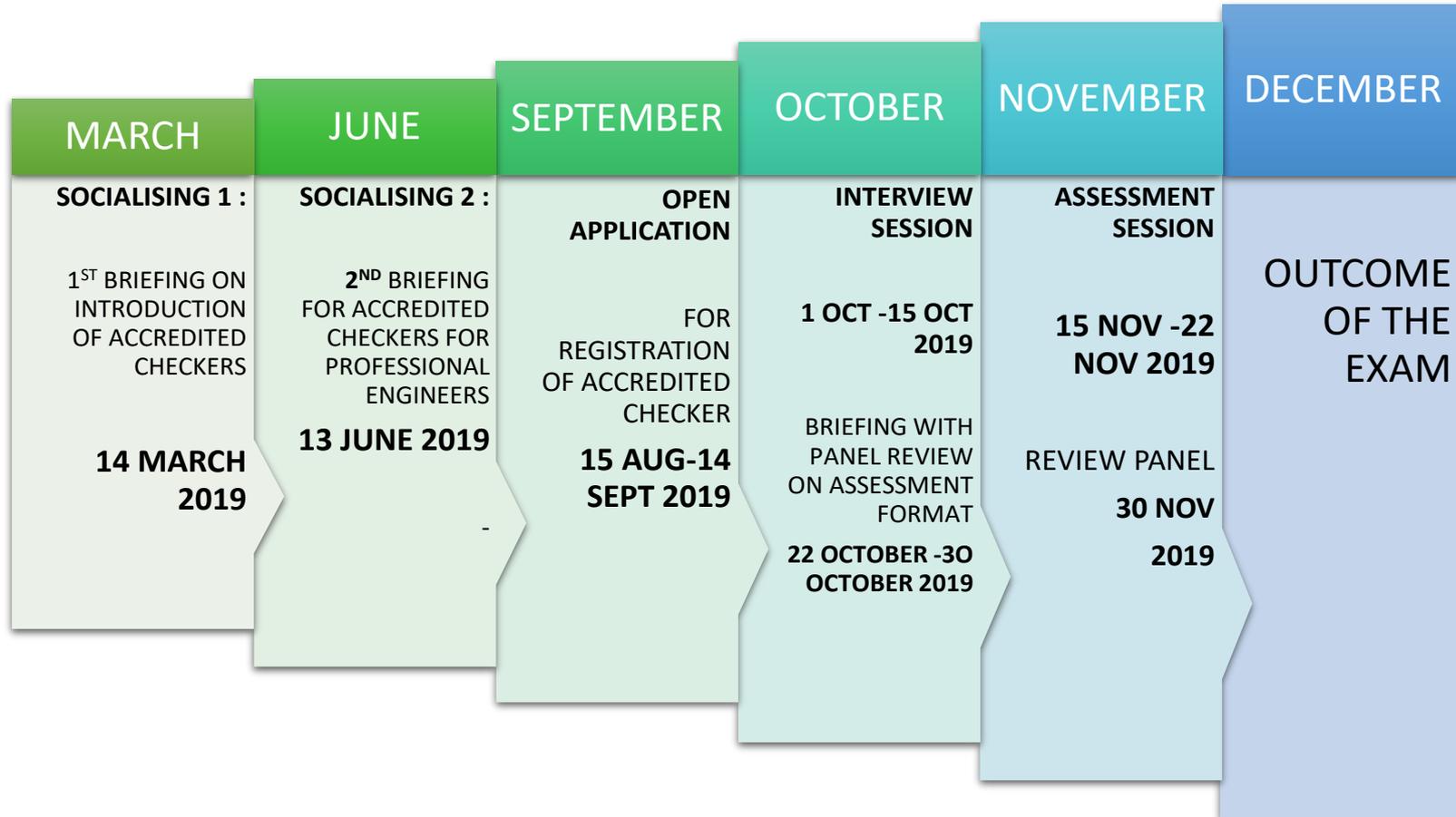
- Duties of AC
- Checking of plans and calculations to ensure safety while being economical about the usage of material and design
- Designs have to be constructable i.e. not to endanger any parties involve in the construction phase
- Use of code of practice
- What are our constraints vs capabilities
- Detecting problems in designs that is overlooked by the designer
- Technologies and design progression to be taken into account

# اوتوريتي كاوون بائون دان ايندوستري قمينان

AUTORITI KAWALAN BANGUNAN DAN INDUSTRI PEMBINAAN (ABCi)



## Important Dates



اؤتوريتي كاوون باغونن دان ايندوستري قمينان

AUTORITI KAWALAN BANGUNAN DAN INDUSTRI PEMBINAAN (ABCi)



Q & A