



2011
BEM Roadshow
Paper 2: CCC

**Certificate
of
Completion & Compliance**

Ir. CHEN Thiam Leong

Background

- 26th June 2004 - Prime Minister calls for the replacement of the issuance of the Certificate of Fitness for Occupation (CFO) by the local authorities with self-certification by the professionals
- The intention is to improve the efficiency of the building delivery system further and to enhance the competitiveness of Malaysia globally
- The Ministry of Works (MOW) and Ministry of Housing and Local Government (MOHLG) initiated meetings with the industry players to seek their respective feedback and to prepare proposals for this to be implemented
- MOHLG organised a working visit to Australia covering three main cities (Sydney, Canberra and Brisbane) to study the Australian system and their experience of self-certification

The various models of certification considered were :-

Model 1 - Certification of CFO by Independent Certifier
(Non Architects and Non Engineers)

Model 2 - Certification of CFO by Independent Certifier
(Architects and Engineers Who Are Not the
Submitting Persons)

Model 3 - Certification of CFO by Independent Certifier
(Architects and Engineers Who Are the
Submitting Persons)

Model Selected

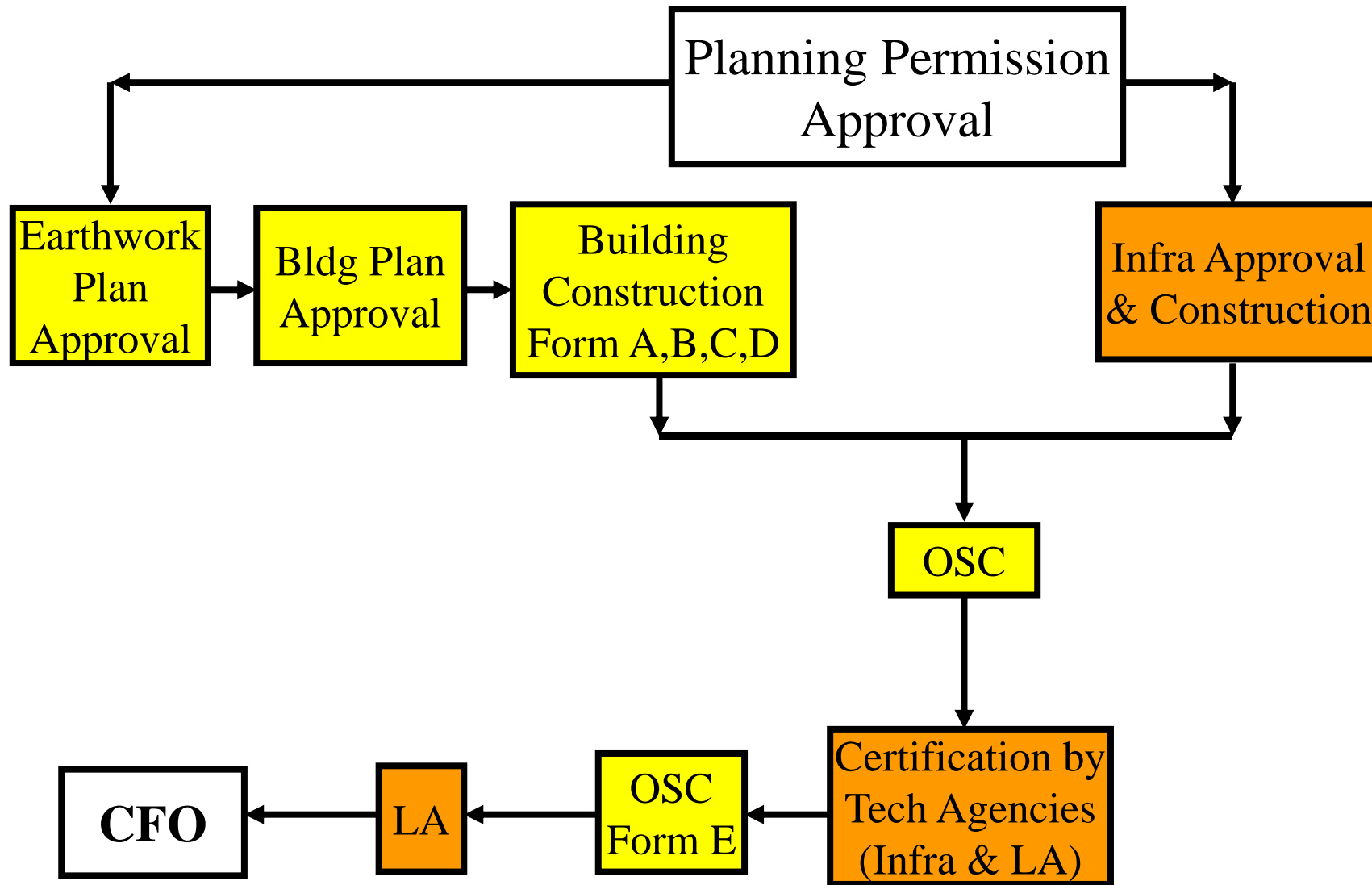
The Working committee supported Model 3 to be adopted based on the following:-

- ✓ The Professionals (Architects and Engineers) are competent and able to do so
- ✓ Self-certification has already been implemented for individual detached bungalows
- ✓ Committee under MOHLG was already working to extend the self certification to industrial buildings
- ✓ Self certification is an extension of the current role of submitting person with the OSC
- ✓ Minimum changes required in Acts and regulations

Decision by the Government

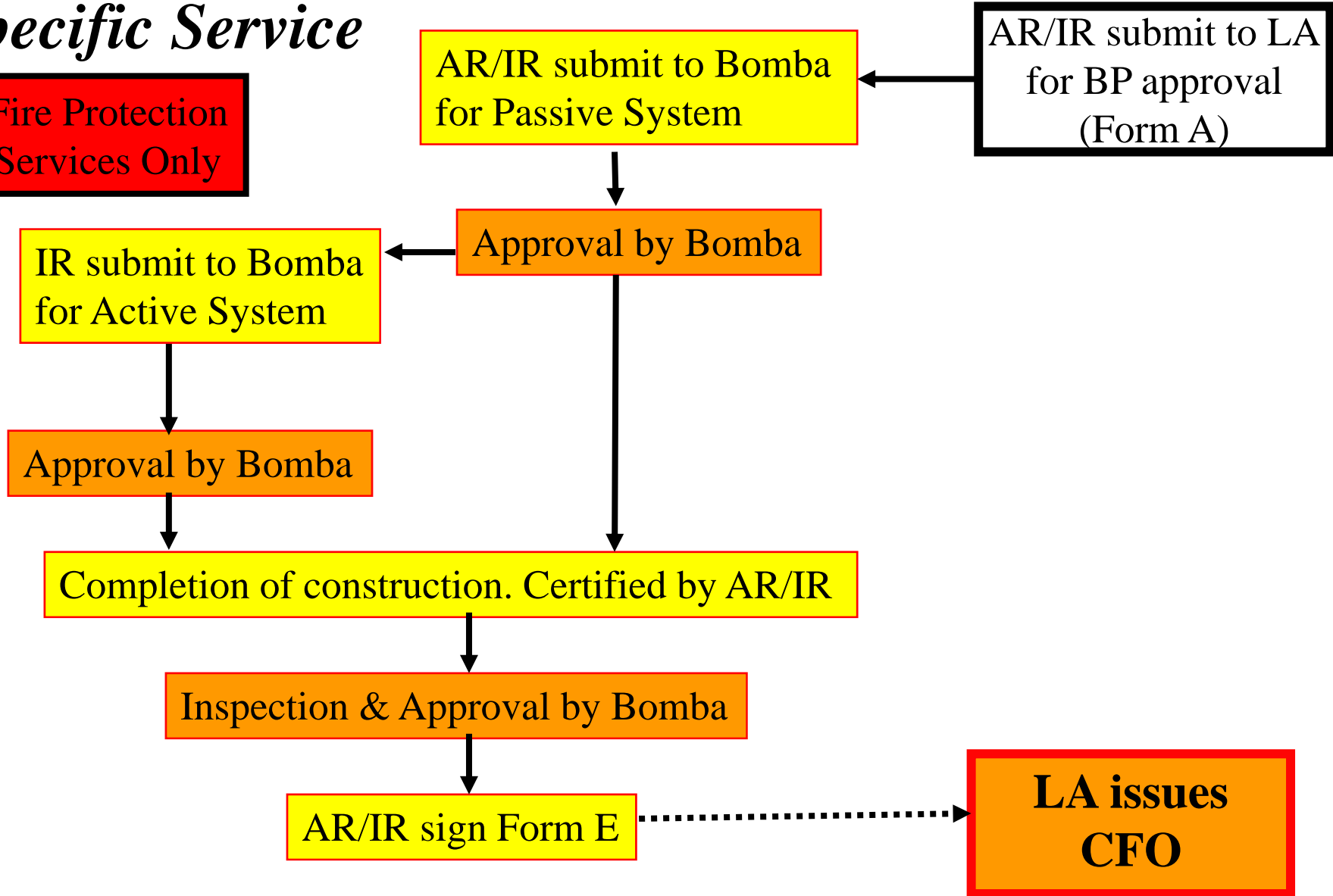
- ✓ MOHLG decided to adopt self-certification of CFO by the original submitting professionals
- ✓ Working papers were prepared and presented to the Cabinet by MOHLG and adopted at the end of 2004
- ✓ PM on 13th April 2007 announced officially that CCC, OSC, COB and Built and Sell (10:90) will take effect on **12th April 2007** and all Acts and regulations have been put in place for the implementation
- ✓ Government committed to give intensive training to all the local authorities and related agencies for 2 months for effective implementation

Old (concurrent) Building Delivery System



Specific Service

Fire Protection Services Only



CFO Procedure

- CFO application by ‘qualified person*’ using Form E
- UBBL 25 empowers the ‘qualified persons’ to certify in Form E that they have supervised the erection of the building which has been constructed in accordance with the UBBL and they accept full responsibility for those portions which they are respectively concerned with and all essential services have been provided.
- The LA may, pursuant to UBBL 27 and subject to certain provisions, grant a partial CFO of any part of the building partially completed and impose any conditions that it deems necessary in the interest of the public.

Salient Features of CCC Framework

- Building plans are still to be approved by the local authorities through improved OSC.
- CFO by local authorities will be replaced by CCC to be issued by the Principal Submitting Person (PSP)
- This is meant to be merely an administrative change since the Local Authorities carry no liabilities and the liabilities still go back to the qualified person/s.

Salient Features of CCC Framework cont'd

- CCC can only be issued by PSP after:-
 - ✓ all the certifications by the respective parties (professionals, contractors, licensed tradesmen) based on prescribed forms (Form Gs) under the Matrix of Responsibility are secured.
 - ✓ Clearances for the essential services [TNB, Water Authorities, JPP, Bomba (for buildings involving active fire system), JKKP and Roads & Drains] are still required to be secured before CCC can be issued by the PSP.

Salient Features of CCC Framework cont'd

- The matrix of responsibility was introduced to make everyone accountable for their respective scope of work
- The local authorities will still maintain their right and power to enter the site during construction prior to issuance of CCC by the PSP
- The Local Authorities can issue an order to stop the issuance of CCC by the PSP if the building on site is found to have breached the approved building plans relating to health and safety aspects

Salient Features of CCC Framework cont'd

- The issuance of CCC is restricted to only technical issues concerning health, safety and essential services
- Non-technical issues will have to be resolved between the Owner and the Local Authorities at the planning and building plans approval stage or via other mechanism
- The issuance of CCC will only apply to projects in which building plans are submitted after the amendment of the various relevant Acts and Regulations are in place and effected

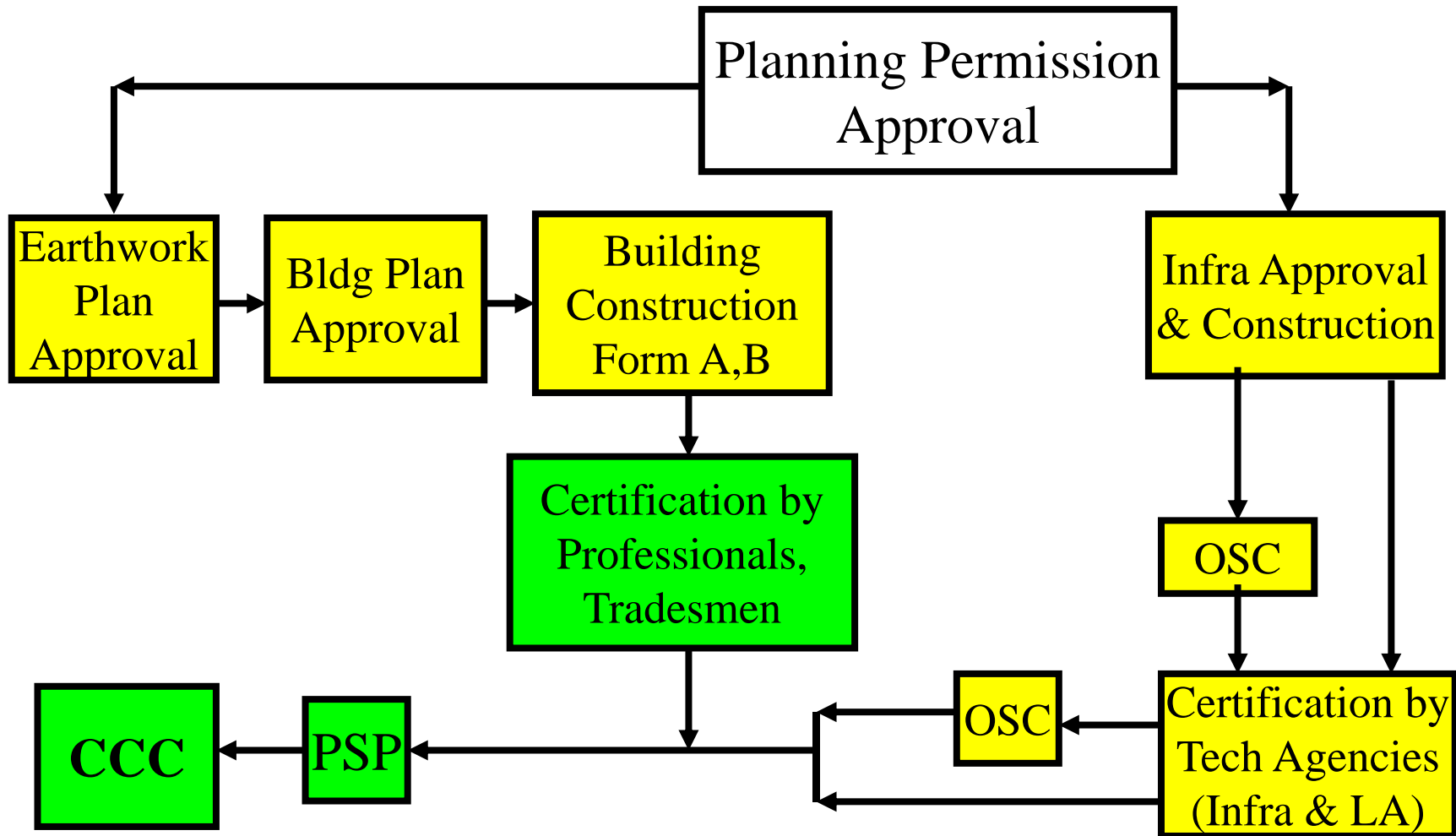
Salient Features of CCC Framework cont'd

- The respective agencies including CIDB shall take necessary actions against their errant members for non compliance or fraudulent certification
- The respective Boards to improve their efficiency and explore more effective measures against errant members

Salient Features of CCC Framework cont'd

- The matrix of responsibility was introduced to make everyone accountable for their respective scope of work
- The AG chamber took out certification by the consultants' supervisors from Form Gs
- Memorandums were submitted and presented to the Minister of Works to lobby for the inclusion of consultants' supervisors in the matrix of responsibility
- The Minister of Works has in principle agreed for consultants' supervisors to be regulated under CIDB. Effort will be made to include them under the matrix of responsibility

CCC Building Delivery System



CCC
Specific Service

Fire Protection
Services Only

AR/IR submit to Bomba
for Passive System

AR/IR submit to LA
for BP approval
(Form A)

Approval by Bomba

IR submit to Bomba
for Active System

Approval by Bomba

Completion of construction

Completion of construction

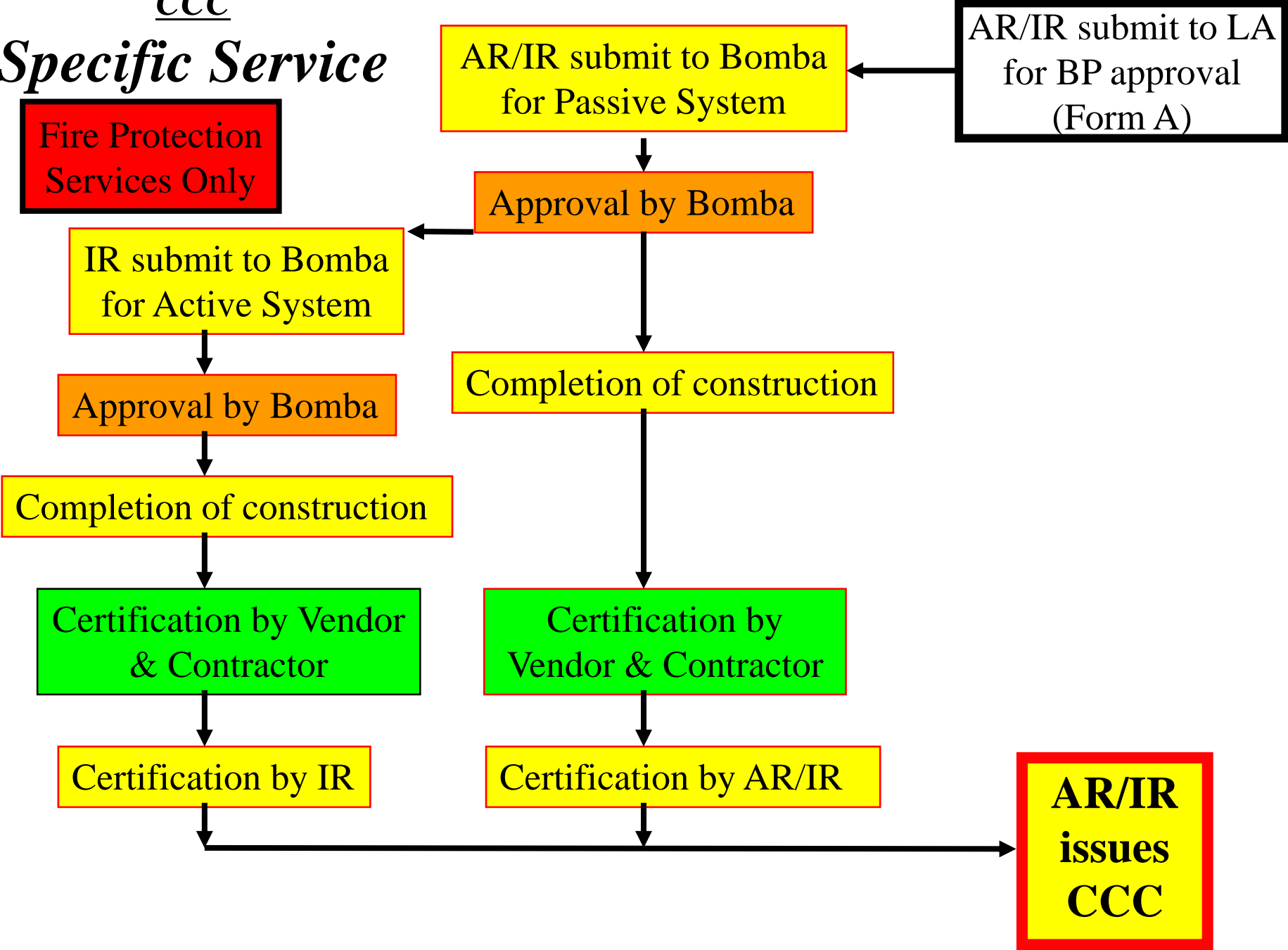
Certification by Vendor
& Contractor

Certification by
Vendor & Contractor

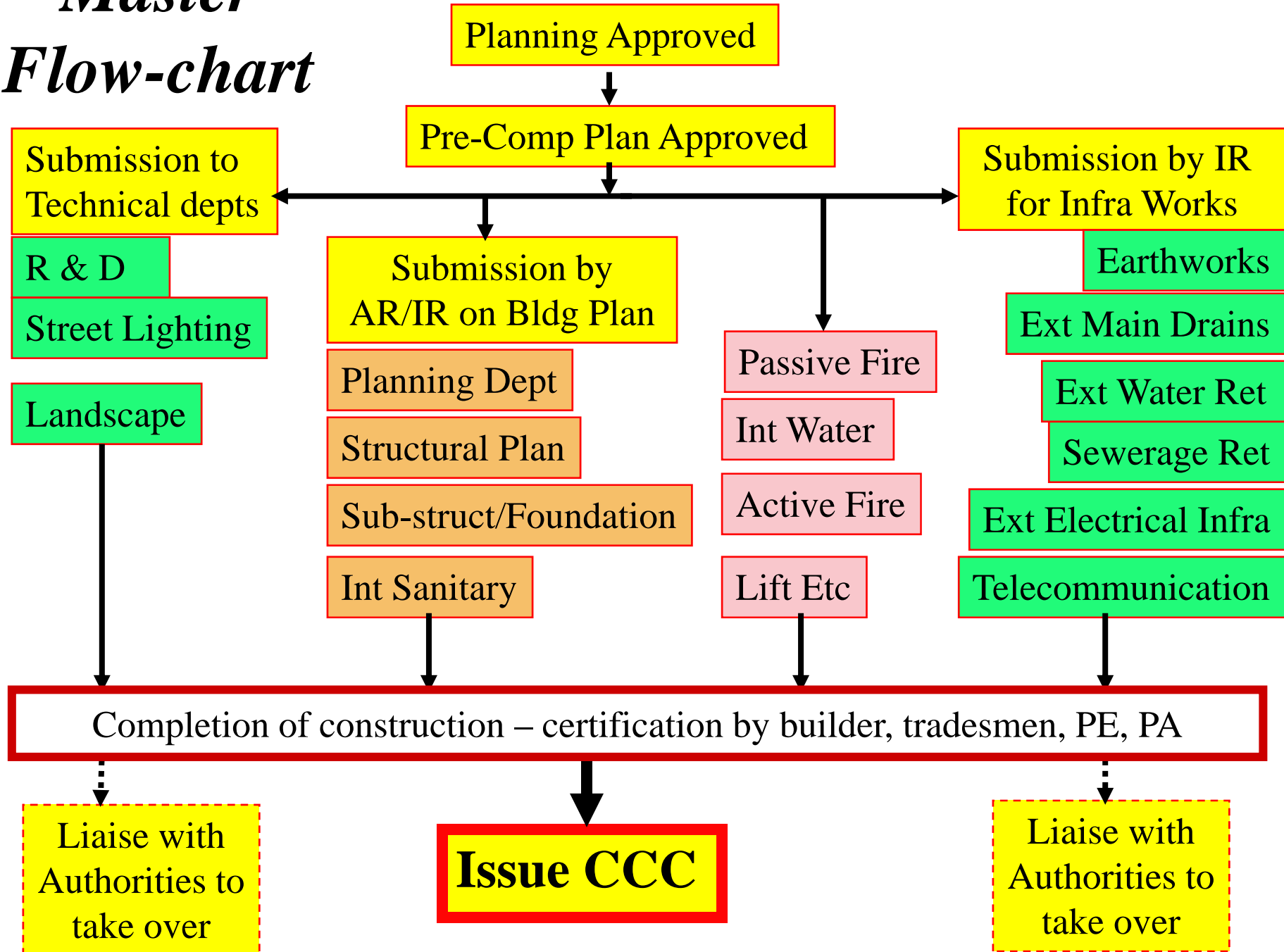
Certification by IR

Certification by AR/IR

**AR/IR
issues
CCC**



Master Flow-chart



Critical Issues

- Licensing of Builder (Main Contractor) on an individual basis
- Licensing of specialist tradesman (eg fire fighting installer)
- *Registration of architect's and engineer's site supervisors / COW*
- Submission of plans by the professionals – for Approval or for Record only ?

Types of Forms under CCC

- Form A : Certification of Buildings/Structural Plans
(for endorsement on plans to be submitted for approval)
- Form B : Notice of Commencement/Resumption of Building Operations
- Form Gs: Stage Certification for various components of works
- Form F : Certificate of Completion and Compliance
- Form F1: Partial Certificate of Completion and Compliance

FORM F
CERTIFICATE OF COMPLETION AND COMPLIANCE
(By -Law 25)

Date:.....

To:

*

.....

I hereby issue the certificate of completion and compliance for the building/s on

.....
upon being satisfied that the said building/s has/have been satisfactorily completed and is/are Fit for Occupation.

I certify that I have supervised the erection and completion of the building/s and it is to the best of my knowledge and belief that such work/s is/are in accordance with the Act, Uniform Building By-laws 1984 and Approved Plan No.

Dated

.....
Signature of Principal Submitting Person

1. Particulars of Principal Submitting Person

Name :

.....

Address:

#Board of Architects Malaysia/Board of Engineers Malaysia

Registration No.

2. Copy to:

Local Authority :

#Board of Architects Malaysia/Board of Engineers Malaysia

* The developer, if it is for development other than individually built building or the owner, if it is for individually built building.

Delete accordingly

UNIFORM BUILDING BY-LAWS 1984
 FORM G 1
STAGE CERTIFICATION : EARTHWORKS
 (By-law 25 or 27)

Project Title:

*1. We certify that we have supervised and/or carried out the construction and completion of the earthworks and that to the best of our knowledge and belief such works are in accordance with the **Approved** Earthwork Plans Ref. No. : and that we accept full responsibility for the same.

	<u>Name (Individual)</u>	<u>#Registration No.</u>	<u>Signature</u>
(a) Contractor (CIDB) (Date:)
(b) Submitting person (BEM) (Date:)

OR

*2. I certify that this form is not applicable.

.....
(Principal Submitting Person)

I.C. No., if there is no relevant body in respect of registration

* Delete whichever is not applicable

UNIFORM BUILDING BY-LAWS 1984
 FORM G 4
STAGE CERTIFICATION : STRUCTURAL
 (By-law 25 or 27)

Project Title:

* We certify that we have supervised and/or carried out the erection and completion of the structural works and that to the best of our knowledge and belief such works are in accordance with the **Deposited** Structural Plans Ref. No. : and that we accept full responsibility for the same.

	<u>Name (Individual)</u>	<u>#Registration No.</u>	<u>Signature</u>
(a) Contractor
		(CIDB)	(Date:)
(b) Submitting person
		(BEM)	(Date:)

UNIFORM BUILDING BY-LAWS 1984
 FORM G 5
STAGE CERTIFICATION : INTERNAL WATER PLUMBING
 (By-law 25 or 27)

Project Title:

*1. We certify that we have supervised and/or carried out the erection and completion of the internal water plumbing works and that to the best of our knowledge and belief such works are in accordance with the ***approved plans/Deposited** Plans Ref. No. : and that we accept full responsibility for the same.

	<u>Name (Individual)</u>	<u>#Registration No.</u>	<u>Signature</u>
(a) Trade contractor
<i>(Licensed plumber)</i>		+()	<i>(Date:)</i>
(b) Submitting Person
		(* <i>BAM/BEM</i>)	<i>(Date:)</i>

FORM G 8

STAGE CERTIFICATION : FIRE FIGHTING (PASSIVE)

[by-law 25 or 27]

Project Title:

*1. We certify that we have supervised and/or carried out the erection and completion of the fire-fighting (passive) works and that to the best of our knowledge and belief such works are in accordance with the **approved plans/Deposited Plans** Ref. No. : and that we accept full responsibility for the same.

	<u>Name (Individual)</u>	<u>#Registration No.</u>	<u>Signature</u>
a) Contractor	_____	_____ (Construction Industry Development Board)	_____ (Date: _____)
b) Submitting person	_____	_____ (Board of Architects Malaysia/ Board of Engineers Malaysia)	_____ (Date _____)

OR

*2. I certify that this form is not applicable

(Principal Submitting Person)

I.C. No., if there is no relevant body in respect of registration

** **Letter of Clearance from the Fire Department Malaysia (except for residential buildings not exceeding 18 metres height) shall be attached**

* Delete whichever is not applicable

FORM G 9

STAGE CERTIFICATION : FIRE FIGHTING (ACTIVE)

[by-law 25 or 27]

Project Title:

*1. We certify that we have supervised and/or carried out the erection and completion of the fire-fighting (active)) works and that to the best of our knowledge and belief such works are in accordance with the **approved plans/Deposited Plans** Ref. No. : and that we accept full responsibility for the same.

	<u>Name (Individual)</u>	<u>#Registration No.</u>	<u>Signature</u>
a) Contractor	_____	_____ +()	_____ (Date:)
b) **Submitting person	_____	_____ (Board of Engineers Malaysia)	_____ (Date)

OR

*2. I certify that this form is not applicable

(Principal Submitting Person)

+ Relevant regulatory body

I.C. No., if there is no relevant body in respect of registration

**** Letter of Clearance from the Fire Department Malaysia (except for residential buildings not exceeding 18 metres height) shall be attached**

* Delete whichever is not applicable

UNIFORM BUILDING BY-LAWS 1984
 FORM G 21
STAGE CERTIFICATION : LANDSCAPE
 (By-law 25 or 27)

Project Title:

*1. We certify that we have supervised and/or carried out the construction and completion of the landscape works and that to the best of our knowledge and belief such works are in accordance with the **approved plans** Ref. No. : and that we accept full responsibility for the same.

	<u>Name (<i>Individual</i>)</u>	<u>#Registration No.</u>	<u>Signature</u>
(a) Trade Contractor
		+()	(<i>Date:</i>)
(b) *Architect/ Landscape Architect
		+()	(<i>Date:</i>)

+ Relevant Regulatory Body

I.C. No., if there is no relevant body in respect of registration

OR

I certify that this form is not applicable

.....
(Principal Submitting Person)

- ✓ FORM F
CERTIFICATE OF COMPLETION AND COMPLIANCE
- ✓ FORM F1
PARTIAL CERTIFICATE OF COMPLETION AND COMPLIANCE

- FORM G 1 (Approved Plans)
STAGE CERTIFICATION : EARTHWORKS
- FORM G 2 (Approved Plans)
STAGE CERTIFICATION : SETTING OUT
- FORM G 3 (Deposited Plans)
STAGE CERTIFICATION : FOUNDATIONS
- FORM G 4 (Deposited Plans)
STAGE CERTIFICATION : STRUCTURAL

- FORM G 5 (Approved/Deposited Plans)
STAGE CERTIFICATION : INTERNAL WATER PLUMBING
- FORM G 6 (Approved/Deposited Plans)
STAGE CERTIFICATION : INTERNAL SANITARY PLUMBING
- FORM G 7 (Submitting Engr's Endorsed Plans)
STAGE CERTIFICATION : INTERNAL ELECTRICAL
- FORM G 8 (Approved/Deposited Plans)
STAGE CERTIFICATION : FIRE-FIGHTING (PASSIVE)
- FORM G 9 (Approved/Deposited Plans)
STAGE CERTIFICATION : FIRE-FIGHTING (ACTIVE)
- FORM G 10 (Submitting Engr's Endorsed Plans)
STAGE CERTIFICATION : MECHANICAL VENTILATION

- FORM G 11 (Submitting Engr's Endorsed Plans)
STAGE CERTIFICATION : LIFT/ESCALATOR
INSTALLATION
- FORM G 12 (Approved Plans)
STAGE CERTIFICATION : BUILDING
- FORM G 13 (Approved Plans)
STAGE CERTIFICATION : EXTERNAL WATER SUPPLY
SYSTEM
- FORM G 14 (Approved Plans)
STAGE CERTIFICATION : SEWERAGE RETICULATION
- FORM G 15 (Approved Plans)
STAGE CERTIFICATION : SEWERAGE TREATMENT
PLANT
- FORM G 16 (Approved Plans)
STAGE CERTIFICATION : EXTERNAL ELECTRICAL
SUPPLY SYSTEM

- FORM G 17 (Approved/Deposited Plans)
STAGE CERTIFICATION : ROAD AND DRAIN
- FORM G 18 (Approved/Deposited Plans)
STAGE CERTIFICATION : STREET LIGHTING
- FORM G 19 (Approved)
STAGE CERTIFICATION : EXTERNAL MAIN DRAIN
- FORM G 20 (Approved/Deposited Plans)
STAGE CERTIFICATION : TELECOMMUNICATION
- FORM G 21 (Approved)
STAGE CERTIFICATION : LANDSCAPE

Changes in Acts

- The following Acts were approved by Parliament for the purpose of CCC :-
 - ✓ Street, Drainage and Building (Amendment) Act
 - ✓ Architects (Amendment) Act
 - ✓ Registration of Engineers (Amendment) Act
 - ✓ Housing Development (Control and Licensing) (Amendment) Act
 - ✓ Strata Titles (Amendment) Act

Key Amendments to the Respective Acts and Regulations for the Implementation of CCC

- **Architect's Act 1967**
 - Increased penalty to deter wrongful certification
 - Expressed provision on fraudulent certification.
- **Registration of Engineer's Act 1967**
 - Increased penalty to deter wrongful certification
 - Expressed provision on fraudulent certification
- **Street, Drainage and Building Act 133**
 - To make provision for implementation of CCC
 - To define Principal Submitting Person
 - Increased penalty to deter wrongful certification

Key Amendments to the Respective Acts and Regulations for the Implementation of CCC cont'd

- **Uniform Building By-Law 1984**
 - To make provision for the implementation of CCC
 - Introduction of additional G Forms (Matrix of Responsibility)
- **Housing Development Act and Regulations**
 - Consequential amendment in view of CCC (ie definition of CF etc)
 - VP will now be given together with CCC
- **Strata Title Act**
 - Consequential amendment in view of CCC

Key Amendments to The Registration of Engineers Act 1967

- Section 7A(5)(d) Increase of fine from not exceeding **RM 10,000** to not exceeding **RM 50,000** and to increase the suspension of registration for a period not exceeding **1 year** to **2 years** on Engineering consultancy practice for disciplinary offence
- Section 14A Establishment of a 3-person Disciplinary Committee to provide more effective disciplinary actions for dealing with CCC issues
- Section 15(1) and (1A) Insertion of false or negligent certification as grounds for disciplinary action

- Increase of fine from not exceeding **RM 5,000** to not exceeding **RM 50,000** and to increase the suspension of registration for a period not exceeding **1 year** to **2 years** on a registered Engineer for disciplinary offence
- Section 24 Increase the fine from **RM 10,000** to **RM 50,000** or to **imprisonment** for a term not exceeding **3 years**, or to both, on any person, sole proprietorship, partnership or body corporate who contravenes the provision of the Act and its regulations as stipulated

- Section 25 Increase the fine from ***RM 2,000*** to ***RM 10,000*** or to ***imprisonment*** for a term not exceeding ***1 year***, or to both, on any person, sole proprietorship, partnership or body corporate who contravenes the provision of the Act and its regulations where there is no penalty expressly provided

Status of CCC - May 2008 (1 year on)

- By May 2008 Professional Engineers had issued 16 CCCs and Professional Architects had also issued about the same number. The majority of the completed projects were for factories, warehouses, bungalows and petrol stations.
- Both BEM and BAM set up their respective CCC Sub-Committees to deal with all issues pertaining to CCC.
- Review of the CCC documents (Form F and Gs) received by both Boards (circa May 2008) revealed that many PSPs (Principal Submitting Persons) were still not fully conversant with filling up the various forms properly and some defaulting on enclosures.

Examples of errors detected were;

- Inserting PSP's design drawing nos. instead of Local Authority's Approval Reference no.
- Inserting Contractor with Company Name instead of the required Individual Name with NRIC no.
- Name of Local Authority not inserted
- Wrong discipline of Professional Engineer signing as SP (Submitting Person) in Form Gs
- Non submission of Form Gs
- Non enclosure of Clearance Letters from Utilities

GUIDE TO FILLING UP FORMS F & F1

(Version 1 - May 2008)

Form	Date	Address To *	Details of Building	1. PSP	2. Local Authority	Forms G-1 to G-21
F	Insert date of CCC	1) Insert name of Developer if it is for development other than individually built building 2) Insert name of owner for an individually built building	1) Insert Address of Building - Lot No/Nos, Section, and Road 2) Insert description of project as per Building Plan Approval adjacent or below or in place of item 1) 3) Insert BP Approval Ref and Date 4) PSP to sign off	1) Insert full name of PSP 2) Insert Name of ACP/ECP and address 3) Insert BAM/BEM Registration no. of PSP	Insert Name of Local Authority	Attach Forms G-1 to G-21 together with other required enclosures before forwarding to Local Authority and BAM/BEM
F1	Insert date of CCC	1) Insert name of Developer if it is for development other than individually built building 2) Insert name of owner for an individually built building	1) Insert Address of Building - Lot No/Nos, Section, and Road 2) Insert description of project as per Building Plan Approval adjacent or below or in place of item 1) 3) Insert BP Approval Ref and Date 4) PSP to sign off	1) Insert full name of PSP 2) Insert Name of ACP/ECP and address 3) Insert BAM/BEM Registration no. of PSP	Insert Name of Local Authority	Attach Forms G-1 to G-21 together with other required enclosures before forwarding to Local Authority and BAM/BEM

Notes:

1) PSP shall notify the local authority through OSC (in writing or using prescribed form) after Forms G1-G3 are certified (i.e. after completion of Earthwork, Setting Out and Foundations)

2) Form F/F1 and Form G-1 to G-21 shall be forwarded to the Local Authority and BAM/BEM within 14 days of the issuance of Form F/F1

GUIDE TO FILLING UP FORMS G-1 TO G-21

(Version 1 - May 2008)

FORM	Project Title	Item *1	Item *1 (a)	Item *1 (b)	Item *1(c)	Item *2
G-1 Earthwork	Insert description of project as per BP approval	If this item is applicable, insert LA's Approval Ref No. If not applicable, strike out Item*1	1) Insert name (individual) of proprietor / partner / director of Contractor's Company & attach certified copy of Company's Form 49 to authenticate this individual (Contractor) 2) Insert Contractor's NRIC 3) Contractor to sign and date 4) Attach copy of CIDB registration of Company	1) Fill in SP's name 2) Fill in BEM registration no. 3) Sign and date 4) SP must be a Civil Engineer		If Item *1 is applicable, strike out Item *2. If item *1 is not applicable, PSP to sign declaration
G-2 Setting Out	Insert description of project as per BP approval	If this item is applicable, insert LA's Approval Ref No. If not applicable, strike out Item*1	1) Insert name (individual) of proprietor / partner / director of Contractor's Company & attach certified copy of Company's Form 49 to authenticate this individual (Contractor) 2) Insert Contractor's NRIC 3) Contractor to sign and date 4) Attach copy of CIDB registration of Company	1) Fill in Licensed Land Surveyor's name 2) Fill in Surveyor Board's registration no. 3) Sign and date	1) Fill in PSP's name 2) Fill in BAM/BEM registration no. 3) Sign and date	If Item *1 is applicable, strike out Item *2. If item *1 is not applicable, PSP to sign declaration
G-3 Foundation	Insert description of project as per BP approval	If this item is applicable, insert SP's Deposited Plans Ref No. to LA. If not applicable, strike out Item*1	1) Insert name (individual) of proprietor / partner / director of Contractor's Company & attach certified copy of Company's Form 49 to authenticate this individual (Contractor) 2) Insert Contractor's NRIC 3) Contractor to sign and date 4) Attach copy of CIDB registration of Company	1) Fill in SP's name 2) Fill in BEM registration no. 3) Sign and date 4) SP must be a Civil Engineer		If Item *1 is applicable, strike out Item *2. If item *1 is not applicable, PSP to sign declaration

FORM	Project Title	Item *1	Item *1 (a)	Item *1 (b)	Item *1(c)	Item *2
G-8 Passive Fire	Insert description of project as per BP approval	If this item is applicable, insert Bomba's Approval Ref No. or PSP's Deposited Plans Ref No. If not applicable, strike out Item*1	1) Insert name (individual) of proprietor / partner / director of Contractor's Company & attach certified copy of Company's Form 49 to authenticate this individual (Contractor) 2) Insert Contractor's NRIC 3) Contractor to sign and date 4) Attach copy of CIDB registration of Company	1) Fill in PSP's name 2) Fill in BAM/BEM registration no. 3) Sign and date 4) If an engineer, PSP must be a Civil Engineer 5) Attach Letter of Clearance from Bomba (except for residential buildings not exceeding 18 meters height)		If Item *1 is applicable, strike out Item *2. If item *1 is not applicable, PSP to sign declaration
G-9 Active Fire	Insert description of project as per BP approval	If this item is applicable, insert Bomba's Approval Ref No. or PSP's Deposited Plans Ref No. If not applicable, strike out Item*1	1) Insert name (individual) of proprietor / partner / director of Trade Contractor's company & attach certified copy of Company's Form 49 to authenticate this individual (Contractor) 2) Insert Contractor's NRIC 3) Contractor to sign and date 4) Attach copy of CIDB registration of Company	1) Fill in SP's name 2) Fill in BEM registration no. 3) Sign and date 4) SP must be a Mechanical Engineer 5) Attach Letter of Clearance from Bomba (except for residential buildings not exceeding 18 meters height)		If Item *1 is applicable, strike out Item *2. If item *1 is not applicable, PSP to sign declaration

Status of CCC - Sept 2008

- By September 2008, 23 Professional Engineers had issued a total of 42 CCCs (41 Form Fs and 1 Form F1)
- 15 CCCs were issued without any error
- 16 CCCs were copied to BEM after >14 days
- 1 CCC was issued unnecessarily
- 9 CCCs were issued without Form Gs or using wrong Forms
- 1 Complaint was received

Status of CCC - Nov 2008

By 7 November 2008, a grand total of 151 CCCs have been issued, comprising

- 81 issued by professional architects
- 70 issued by professional engineers

Status of CCC – Feb 2009

By 25th February 2009, professional engineers have issued;

- CCC using Form F = 132
- CCC using Form F1 = 4
- Complaints received = 1
- Incorrect/Incomplete Submissions = 35 (after May 2008)
- Warning Letters issued = 29

Feb 2009

- ❑ 'Form F & F1' reprinted in 4 different headings to conform with differing gazettes by various states;
Form F (By Law 25), F1 (By Law 27) for Kedah, Penang, Perak, Selangor, Melaka, Johor, Kelantan
Form F (By Law 23), F1 (By Law 25) for Wilayah
Form F (By Law 25), F1 (By Law 27) for Pahang, Terengganu
Form C (By Law 25), C1 (By Law 27) for Negri Sembilan

Status of CCC – Latest

Feb 2010:

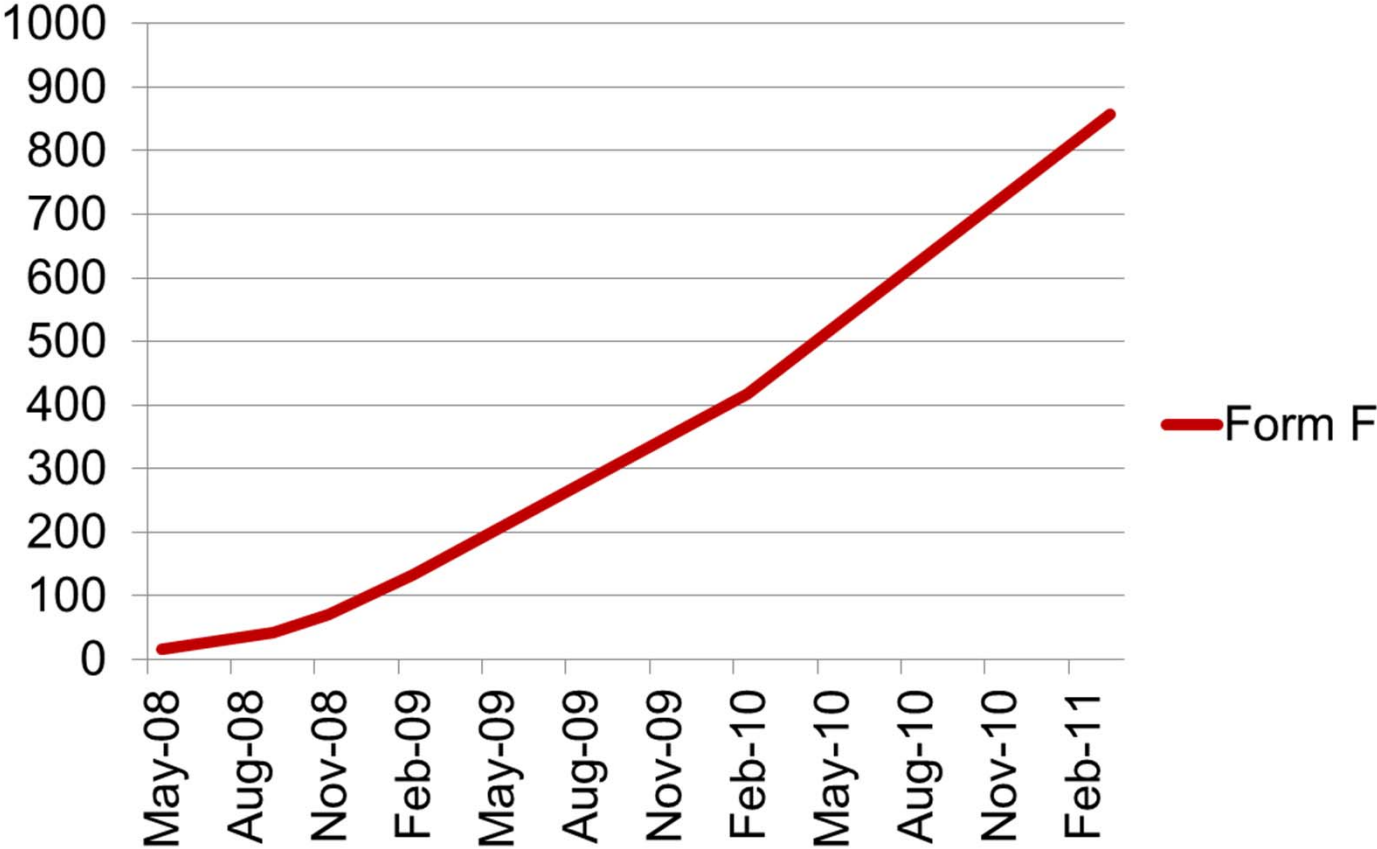
- CCC using Form F = 418
- CCC using Form F1 = 33

Mar 2011

- CCC using Form F = 858
- CCC using Form F1 = 35

CCC issuance

Form F



Complaints & Disciplinary Action

- Complaints received from LA >10
- PSP submitting under non-registered ECP = 6
- **PSP issuing CCC wrongfully >5**
- IC resulting from CCC issue = 1

BEM Circular No.1

(www.bem.org.my under “SERVICES” tab)

Submission of Plans classified under
APPENDICES A, B & C

Appendix A:

No person shall submit any Building Plans, reports and specifications for the underlisted works and or services, unless he is an Architect, except for any engineering works required (excluding any standard engineering works), such engineering plans and specifications shall be submitted by a Professional Engineer.

APPENDIX A

Apartments, Art Galleries, Airport Terminal Buildings,

Domestic Houses, Golf Clubs, Hotels, Hospitals, Kindergartens,

Neighbourhood housings (housing schemes),
Office buildings,

Restaurants, Shophouses, Supermarkets, Shopping Centres, Showrooms,

University Complexes, Vocational Training Centres,

Appendix B:

No person shall submit any engineering plans, reports and specifications for the underlisted works and or services, unless he is a Professional Engineer, except for any architectural works required, such architectural plans shall be submitted by an Architect.

APPENDIX B

Airport Runways & Aprons, Airconditioning & Mechanical Ventilation Systems,

Bridges, Carparking Areas, Incinerators, Jetties, Mechanical Services & Installations, Mass Rapid Transit Systems, Major Retaining Walls

Electrical Services Installations, Fire Protection Services, Plumbing Services,

Pumping Stations, Ports, Waterworks,

Appendix C:

No person shall submit any plans, reports and specifications for the underlisted works and or services, unless he is either an Architect or a Professional Engineer.

APPENDIX C

Aircraft Manufacturing Plant, Bus Depot & Workshops, Breweries, Carparking Layouts, Carparks (Multi-storey), Engineering Laboratories, Electrical Substations (single storey),

Flatted Factories, Fencing & Gates, Footings, ...

Glue Factories, Ice Factories, ...

Manufacturing, Assembling, Processing, Repair Plants & Associated Buildings & Facilities, Motor Vehicle Service Stations,

Utilities Buildings, Warehouses & Godowns, Workshops,

CONCLUSION

- With self-certification, the delivery process will be more efficient and transparent
- The success of CCC will depend largely on the professionalism and integrity of the professionals
- Architects and Engineers

AND

- The responsibility and accountability of the contractors and tradesmen

FAQs

- www.acem.com.my
- www.pam.org.my
- www.lam.gov.my
- www.bem.org.my
- www.iem.org.my



END

THANK YOU