

**MINIT MESYUARAT BIL. 3**  
**CITP IWG on National Construction Cost Centre**  
**CITP-IWG12/P5a-N3C**

Date : 29 December 2017 (Friday)  
Time : 10.30 am – 12.00 pm  
Venue : Bilik Resak, Tingkat 32,  
CIDB Malaysia, PWTC  
Chairman : Dato' Sr Sri Kandan Kanagainthiram  
Immediate Past President  
Royal Institution of Surveyors Malaysia

**ATTENDANCE**

- |   |   |
|---|---|
| 1. Dato' Sr Sri Kandan Kanagainthiram<br>(Chairman) | Royal Institution of Surveyors Malaysia               |
| 2. Datuk Ir. Abdul Kadir Mohd Din                   | Ranhill Holdings Berhad                               |
| 3. Sr Eddie Wong Weng Hong                          | Royal Institution of Surveyors Malaysia               |
| 4. Sr Ruzimah Othman                                | Jabatan Pengairan dan Saliran                         |
| 5. Pn. Siti Aminah A. Manaf                         | Programme Management Office,<br>CIDB Malaysia         |
| 6. En. Muhamad Fariq Abd. Hamid                     | Programme Management Office,<br>CIDB Malaysia         |
| 7. En. Roswadi Muhammed                             | Personnel & Contractor Devt. Sector,<br>CIDB Malaysia |
| 8. Sr Mohd Zaid Zakaria                             | Initiative Owner (IO), CIDB Malaysia                  |
| 9. Sr Nazir Muhamad Nor                             | Officer In Charge (OIC), CIDB Malaysia                |
| 10. Pn. Afifah Rahim                                | Business Division, CIDB Malaysia                      |
| 11. En. Muhammad Lutfi Khalil                       | Business Division, CIDB Malaysia                      |
| 12. Sr Amnah Mohammed Salleh (Secretary)            | CIC-QS Services Sdn. Bhd.                             |

## ABSENT WITH APOLOGIES

- |     |  |  |
|-----|--|--|
| 1.  | Sr Rozita binti Yahaya (Deputy Chairman) | CKUB, Jabatan Kerja Raya                   |
| 2.  | Sr Husnan Hussin                         | CKUB, Jabatan Kerja Raya                   |
| 3.  | Sr Sariah Abd Karib                      | Corporate & Business Sector, CIDB Malaysia |
| 4.  | Sr Noridah Shafii                        | Programme Management Office, CIDB Malaysia |
| 5.  | Sr Wan Ainon Zuraiha Wan Abdul Khalid    | Royal Institution of Surveyors Malaysia    |
| 6.  | Sr Umi Kalsum Zolkafli@Zulkifli          | Royal Institution of Surveyors Malaysia    |
| 7.  | Dr. Suraya Ismail                        | Khazanah Research Institute                |
| 8.  | Datuk Kwan Foh Kwai                      | Sunway Construction Group Berhad           |
| 9.  | Dato' Sr Aziz Abdullah                   | Lembaga Lebuhraya Malaysia                 |
| 10. | Ir. Mohd Zuki Muda                       | Indah Water Konsortium Sdn.Bhd.            |
| 11. | Sr Gar Ti Wei                            | KPK Quantity Surveyors (Sem.) Sdn Bhd      |

## 1. WELCOMING ADDRESS BY CHAIRMAN

- 1.1. Chairman welcomed and thanked all committee members, initiative sponsor, initiative owner and secretariat for attending the third meeting for CITP IWG on National Construction Cost Centre (CITP-IWG12/P5a).
- 1.2. The minutes for meeting no. 2 was confirmed without any amendment; proposed and seconded by Datuk Ir. Abdul Kadir Mohd Din and Sr Eddie Wong respectively.

## 2. TECHNICAL COMMITTEE

- 2.1 Initiative Owner (IO) updated on the Technical Committee members' list and the number of meetings held to date.

Technical Committee		Members	No. of meetings
1	Construction Cost Model (TC-CCM)	1. Sr Wan Ainon Zuraiha Wan Abdul Khalid (Pengerusi) 2. Sr Eddie Wong Weng Hong (Timb. Pengerusi) 3. Sr Ruzimah Othman 4. Sr Azmi Mohamed 5. Mr. Tong Yew Meng 6. Sr Muhammad Zuhry Mohd. Mazlan	1
2	Tender Price Index (TC-TPI)	1. Sr Husnan Hussin (Pengerusi) 2. Sr Gar Ti Wei (Timb. Pengerusi) 3. Pn. Raja Normawati Raja Ayob 4. Pn Nor Azlinda Mohamed Sabli 5. Sr Umi Kalsum Zolkafli @ Zulkifly 6. En. Firdaus Ab. Rahman 7. Sr Jamisah Ibrahim	3



Technical Committee	Members	No. of meetings
3 Lifecycle Costing (TC-LCC)	1. Dr. Suraya Ismail (Pengerusi) 2. Sr Umi Kalsum Zolkafli @ Zulkifli (Timb. Pengerusi) 3. En. Wan Ahmad Shukiman Wan Jaafar 4. Ir. Mohd Sabri Mat Deris 5. En. Hasnan Ab. Hamid 6. Datuk Kwan Foh Kwai 7. Datuk Abdul Kadir Mohd Din	5
4 Labour & Plant Constant (TC-LPC)	1. Sr Hjh. Rozita Yahya (Pengerusi) 2. Mr. Ong Ka Thiam (Timb. Pengerusi) 3. Sr Mohd Zaid Zakaria 4. Sr Husnan Hussin 5. En. Suhaimi Mohd Aini 6. Pn Rauzah Zainal AbidinRau 7. Pn Siti Mazzuana Shamsuddin 8. Sr Dr. Sarajul Fikri Mohamed 9. Dr. Chia Fah Choy 10. Syed Abdul Haris Syed Mustapa 11. Mr Verdon Tan 12. En. Nur Aziz Abu Bakar	2

#### Action: Information

- 2.2 IO reported that the meeting with the chairmans from the Technical Committee under initiative P5a (except Dr Suraya) was held on 15th December 2017 to report and monitor the progress of the actual work done.

#### Action: Information

- 2.3 The members of the technical committee agreed that RISM particularly should consider establishing a subsidiary company for the collection of data. Examples on companies who have established subsidiaries are RICS – BICS, RIBA – NBS, PAM – Green Building, Archidex etc. In order to establish a company, there are terms of agreement that need to be reviewed internally by RISM

#### Action: RISM

### 3. PROGRESS REPORT OF IWG12/P5a

#### 3.1 KPI achievement of Initiative P5a

Officer in Charge (OIC) presented in detail the KPI achievement of Initiative P5a up till Dec 2017.

#### 3.2 All targets for KPI Initiatives have been achieved:

KPI Initiative	Initiative KPIs	Progress until December 2017
78	N3C portal in operation	myN3C portal was launched on 14 November 2016 and currently, there are 10,000 unique users registered. Most popular users are from (i) Contractors (4,700 , 47%) (ii) Consultants (2,200, 22%) (iii) Developers (1,200, 12%)
79	Construction Cost Information published by Q3 2020	RISM had developed 60 prototype models of construction cost information that had been completed on 6th December 2017.
80	Tender Price Indices introduced by Q3 2020	The TOR for Tender Price Index had been finalized with the technical committees TC-TPI on 21st November 2017.  RISM had been appointed on 12th December 2017 as the consultant to develop Ready Reckoner (standard base rate) and to prepare Tender Price Index.
81	Lifecycle Costing published by Q3 2020	MCM Value Sdn Bhd had completed the Life Cycle Costing Study by 15 September 2017 (6 months period). The draft of LCC study consist of 3 scopes: (i) Literature Review (ii) Data Collection (iii) Framework for LCC System Application

KPI Initiative	Initiative KPIs	Progress until December 2017
82	Labour and Plant Constant published by Q3 2020	<p>KH Alliance had been appointed on 6th December 2017 as the consultant to conduct the study on labour and plant constant.</p> <p>CIDB will set up a technical committee meeting in early January.</p>

DSK congratulated the team for achieving all the targets for KPI initiatives.

**Action: Information**

### 3.3 KPI 78 - N3C portal

3.3.1 OIC also reported that on average, there is an average of 4,000 times download from the portal per month. DSK congratulated the team for the good job.

**Action: Information**

3.3.2 For cost data automation, IO mentioned that while CIDB is now considering PCEPREMO, discussions are still ongoing with Exactal. DSK requested CIDB to “push” Exactal to give their proposal.

**Action: IO and OIC**



3.4 KPI 79 - Construction Cost Information

- 3.4.1 OIC reported there are now 1,500 BQs available and for the next batch, RISM is required to analyse 200 BQs. DSK requested RISM to select the BQs based on different types of construction projects.

**Action: RISM**

3.5 KPI 80 - Tender Price Indices

- 3.5.1 DSK requested RISM to expedite in producing TPI.

**Action: RISM**

3.6 KPI 81 - Life Cycle Costing

- 3.6.1 MCM Value Sdn Bhd presented their findings for the “Study on the Proposal for Management of Life Cycle Costing (LCC) Data for Construction Projects in Malaysia”. They were represented by Sr Dr Mazlan Che Mat and Sr Muhammad Zuhry Mohd. Mazlan.

**Action: Information**

- 3.6.2 Based on the Terms of Reference by CIDB in August 2016, the objectives of the study is to “identify elements contributing to LCC, obstacles in LCC and critical success factors in LCC data collection, methodology involved and proposed web based LCC system (framework) for the selected construction projects”. MCM presented the following:

- Collection & Findings
- Obstacles
- LCC Analysis & Model
- Framework for LCC System App
- Recommendations

**Action: Information**

### 3.6.3 Data were collected from 3 types of projects:-

Type	Project	Respondent (Data Custodian)	
		Initial Cost	O&M Costs
Highway	North Klang Valley Expressway (NKVE)	Lembaga Lebuhraya Malaysia (LLM) & PLUS Malaysia Berhad	PLUS Malaysia Berhad
	ELITE Expressway (ELITE)		
	GUTHRIE Expressway	Lembaga Lebuhraya Malaysia & PROLINTAS	PROLINTAS
Social Housing	PPRT Kepong Utara	Kementerian Perumahan & Kerajaan Tempatan	Dewan Bandaraya Kuala Lumpur (DBKL)
	PPRT Salak Selatan		
	PPRT Pekan Kepong		
Office	Kompleks Parcel E Putrajaya	Putrajaya Holdings Sdn Bhd (PjH)	Jabatan Kerja Raya (Putrajaya)
	Kompleks Parcel D Putrajaya		
	The Pinnacle Sunway	Sunway Berhad	

### Action: Information

### 3.6.4 Findings:

Project	Cost	Accessible	Available	Current	Reliable
Highway					
NKVE	Initial	Form	Project	Actual	Yes
	O&M	Form	Project	Annual	Yes
ELITE	Initial	Form	Project	Actual	Yes
	O&M	Form	Project	Annual	Yes
GUTHRIE	Initial	Email	Project	Actual	Yes
	O&M	Email	Project	4 years	Yes
Social Housing					
PPRT Kepong Utara	Initial	Yes	Component	Actual	Yes
	O&M	Interview	Project	Estimate	OK
PPRT Salak Selatan	Initial	Yes	Component	Actual	Yes
	O&M	Interview	Project	Estimate	OK
PPRT Pekan Kepong	Initial	Yes	Component	Actual	Yes
	O&M	Interview	Project	Estimate	OK
Office					
Parcel E	Initial	No (Web)	Project	Actual	Yes
	O&M	Form	Project	Annual	Yes
Parcel D	Initial	No (Web)	Project	Actual	Yes
	O&M	Form	Project	Annual	Yes
The Pinnacle	Initial	Form	Element	Actual	Yes
	O&M	Form	Project	Annual	Yes

DSK commented that the data collection to be based on “component” rather than on overall project cost.

### Action: Information



3.6.5 LCC Analysis (for full details including specifications and expected life span of each project, please refer to Appendix 1)

(i) LCC components for highway

Item	Description	Initial cost	Operation cost	Maintenance cost
a.	For rigid pavement with ground improvement	40%	36%	24%
b.	Flexible pavement with major ground improvement	37%	38%	25%
c.	Flexible pavement with minor ground improvement	40%	36%	24%

(ii) LCC component for social housing

Item	Description	Initial cost	Operation cost	Maintenance cost
a.	PPRT (Conventional RC)	57%	43%	

(iii) LCC component for office building

Item	Description	Initial cost	Operation cost	Maintenance cost	Refurbish-ment cost
a.	GBI-rated office	52%	45%	2%	1%
b.	Normal RC Office	29%	56%	14%	1%
c.	RC Office with Facing Brick	33%	55%	11%	1%

**Action: Information**

3.6.6 MCM highlighted the obstacles they had faced in gathering the data:

- a) Lack of understanding and awareness on the significant importance of LCC in managing assets among the senior management of organisations.
- b) No clear policy in the implementation of LCC at the strategic level. Hence, no dedicated personnel or officer to perform the tasks.
- c) No proper database to store and upkeep the cost data specifically operation and maintenance costs.
- d) Bureaucracy especially in government departments which eventually prolong the data collection process. Furthermore, officers keep on changing.
- e) Confidentiality issue that is considered as a major hindrance for any research or study to move forward thus dampen the expansion of knowledge.

**Action: Information**

3.6.7 Proposed framework for LCC system application

MCM proposed the LCC system application to be:

- a) Open source platform
- b) Desktop version and mobile app (optional)
- c) Server within existing infrastructure (CIDB)

**Action: IO and OIC**

3.6.8 Recommendations

- a) The LCC data collection is very much possible with a greater awareness and commitment from various higher authorities.
- b) CIDB shall embark and champion on the preparation of National LCC Guide.
- c) CIDB to pursue the more advance LCC studies at elemental and component levels.
- d) CIDB shall regulate the LCC requirements to be submitted by the FM and maintenance contractors as part of their license renewal as this will further enrich the LCC data for the construction industry in Malaysia.
- e) CIDB to spearhead the possibility of enacting an Act of Parliament that requires the assets of certain value to have

LCC database. This augurs well with the sustainability aim of the construction industry in Malaysia.

**Action: IO and OIC**

3.6.9 Comments and feedback from committee members on the LCC presentation and way forward:

- a) The data collected can be used to help in decision making. CIDB plans to publish these findings, however data from more projects are required.
- b) To look at what government is doing with regards to gathering data for maintenance work (central database system) and how we at private sector can improve it.
- c) For office buildings:
  - to partner with private developers for data gathering
  - to establish general category for office buildings
- d) To create awareness by giving broadbase information on LCC data gathering and how it needs to be done so that companies would be willing to share their data
- e) With regards to data publication, to start with LCC of components first (instead of project) as it is more realistic and the committee feel that companies would be more willing to disclose/share components cost than the project costs

**Action: IO and OIC**

3.6.10 OIC informed that the study had been presented to TC-LCC and had been endorsed. DSK thanked MCM for completing the study. DSK suggested CIDB to establish a roadmap on what need to be done.

**Action: IO and OIC**

3.6.11 With regards to the recommendations put forward by MCM (refer item 3.6.8), this committee (IWG12) accepts recommendations (a), (b), (c) but to keep-in-view recommendations (d) regulate LCC requirements and (e) to have an Act of Parliament.

**Action: IO and OIC**



3.7 KPI 81 - Labour and Plant Constant

- 3.7.1 IO suggested to invite KH Alliance to present their interim findings at the next IWG12 meeting.

**Action: IO and OIC**

**4. PUBLICATION – COST BOOK**

- 4.1 CIDB has already liaised with Rawlinson Australia and is currently waiting for their technical and financial proposal. OIC was requested to give a dateline to Rawlinson to submit these by 31 Jan 2018.
- 4.2 CIDB will provide all the data and information to be included in the cost book while Rawlinson will be responsible in providing their template, editing, desktop publishing, printing and binding works.

**Action: IO and OIC**

## 5. ADJOURNMENT OF MEETING

The next meeting will be held on 25 April 2018. Dato' Sri Kandan once again thanked all committee members and requested that the minutes to be circulated to IWG members prior to the next meeting.

Prepared by;

A handwritten signature in black ink, appearing to read "Nazir", written over a dotted line.

Sr Nazir Muhamad Nor  
Officer In Charge (OIC)  
CITP IWG12

Date : 5/1/2018

Reviewed by;

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Dato' Sr Srikandan Kanagainthiram  
Chairman  
CITP IWG12

Date :

