# JKR REGISTERED PROJECT MANAGER PROFFESSIONAL STATUS CERTIFICATION

Written Summary of the level of application of project management through the project life cycle for Master Project Director.

Session Six: 10-03-2014

Azman bin Abdul Manaf Ketua Penolong Pengarah Kanan Bahagian Pengurusan Projek 5 Cawangan Kerja Kesihatan





UNIT 1: DIRECT SCOPE MANAGEMENT OF MULTIPLE PROJECTS/PROGRAM

**UNIT 2: DIRECT TIME MANAGEMENT ACTIVITIES** 

UNIT 3: DIRECT COST MANAGEMENT OF MULTIPLE PROJECTS/PROGRAMS





UNIT 4: DIRECT QUALITY MANAGEMENT OF MULTIPLE PROJECTS/PROGRAM
UNIT 5: DIRECT HUMAN RESOURCE MANAGEMENT OF MULTIPLE
PROJECTS/PROGRAM
UNIT 6: DIRECT COMMUNICATIONS MANAGEMENT OF MULTIPLE
PROJECTS/PROGRAMS





UNIT 7: DIRECT RISK MANAGEMENT MANAGEMENT OF MULTIPLE PROJECTS/PROGRAM
UNIT 5: DIRECT PROCUREMENT MANAGEMENT OF MULTIPLE PROJECTS/PROGRAM
UNIT 6: DIRECT INTEGRATION OF MULTIPLE PROJECTS/PROGRAMS



	oject Manager Certification Programme: ment Session Five: 10-03-2014
UNIT	1: DIRECT SCOPE MANAGEMENT OF MULTIPLE PROJECTS/PROGRAMS
1.1.	Evaluate Multiple Projects/program Proposals
(KKM	receipt of the Borang Permulaan Perlaksanaan Projek (BPPP) by the Ministry), the office of the Portfolio Management Office (PMO) would issue an Appointreletter and distribute the BPPP to the specific HOPT for further action and feed
propo Projec submi Requi Only u	receiving the letter of appointment, I will direct my officers to evaluate the project package by going through a checklist in compliance to the JKR Client Chartest Implementation Norm. The three required criteria of a successful project that itted together with the BPPP are, a Site and Location plan; a Medical Brief of trement document detailing the scope; and finally a statement of Project Cost Cupon satisfying these three criteria would the project be registered in SKALA, Je project monitoring. <sup>2</sup>
criteria HODT (Archi Geote	upon confirmation that a project proposal is classified as Category Three (All that are confirmed), would I proceed to the next phase. Letters of appointment for (head of Design Team) would be distributed to the various Specialist branche tects, Mechanical Engineering, Electrical engineering, Civil, Structural and Bridechnical and Roads; Environmental; Contractual and Quantity survey; etc) <sup>3</sup> . A king would be convened to determine and decide on certain key issues: <sup>4</sup>
<ul><li>Mo</li><li>Mo</li><li>Da</li></ul>	onfirmation of the brief, site location and ceiling allocated; ode of implementation (conventional, design and build or appointing consultant ode of procurement (Open/ restricted tender, direct negotiations); ate of site visit;
• Pi	reliminary implementation (Planning/design Phase) schedule. <sup>5</sup>
<u>Hc</u>	perlantikan sebagai HOPT, bersama dengan BPPP, Medical Brief of Requirement ( <u>Projek CDR</u> ospital Sibu, Sarawak)
Im	A Print out of registered projects complying to Category 3 & JKR Clients Charter and Project plementation Norm Perlantikan HODT, termasuk arahan pematuhan SPK 9001. (Projek CDR/TPN Hosp Sibu dan P
	osp Tawau)

1.2.	Define and Manage Program Scope
Berse medi would would funds regal	rding to the JKR ISO 9001:2008 Integrated Management Systems (Sistem Pengepadu JKR SPB), upon receiving the project proposal from the client, the project call Brief would have to be verified before being confirmed. As the program owned call the first project implementation meeting. One of the agenda for this first mediabe brief verification to verify the accuracy and efficacy of the brief; the adequace budgeted for it; any special request or consideration from the client/end users words to constraints of the site, implementation issues, the necessity of decanting; in the project produced in the project produced in the project proj
(Mess coord give the p client progr	mechanism for this process is the Project Implementation Coordination Meeting syuarat Penyelarasan Perlaksanaan Projek). During the first 'kick-off' implementation meeting, members of the project team would be introduced. The HOPT a briefing to introduce the project to the team members. Key information like nat roject, project cost ceiling, location of the project site, projected start of operation that are presented. This meeting would be chaired by me, in the capacity of HOPT ram manager, and attended by representatives of the specialist branches, KKM ausers.6
The	objective of this meeting would be to decide on these key issues:
fo	Confirmation of project scope. Once the project scope has been defined and conforms the basis upon which the cost estimate can be established. The scope also ecomes the technical and design objectives;
e a	Pate for a site visit: During the subsequent site visit, additional information would stablished, such as any existing structures on site that requires demolition or reloccessibility for construction activities; location of existing services; any other item nat might affect the scope of the project.;
• (	Confirmation of project cost ceiling;
	Preliminary estimates of key milestone (design completion, tender date, approximor letter of Award); <sup>7</sup>
	Key dates for deliverables by the various specialist branches and KKM/End Users nable the successful implementation of the project). The deliverables to be manable project director at this stage would be the written confirmation of the project so

L

Azman Abdul Manaf, Cawangan Kerja Kesihatan, JKR

]	JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014
J	A case study for program scope definition and management is the Upgrading of the Pharmacy in Hospital Tawau. This project was to be implemented as a Design and Build Contract, procured through a Restricted Tender, where the contractors would be identified beforehand and invitations for bid sent out as soon as the Tender Need Statement is completed.
	The original project brief submitted by KKM called for an upgrade of the existing Pharmacy Department into a Non-CDR clean room. The proposed site was an adjacent store room. However, during the site visit on 16 <sup>th</sup> of May, attended by the HOPT and representatives from the HODTs and KKM, it became clear that the store room was an unauthorized extension done by the hospital themselves. The HODTs present voiced their reservation due to the lack of any as-built drawings especially of its structural components and services routing.
	During the site visit and the subsequent discussion, it was agreed to utilize a nearby open area. The scope for the project thus changed from being an upgrading exercise to being designing and constructing a new building to cater to the operational requirements as set out in the brief. The justification for this change in scope was that it would be easier and cheaper, not to mention technically safer, to construct a new block rather than renovating an existing building whose structural and services integrity are unknown. These decisions were duly
	recorded and acted upon. The subsequent need statements reflected this change.
]	
]	
7	

1.3.	Conduct Program Scope Authorisation
Appoi Appoi brand specia work	receipt of the scope confirmation letters, the actual planning and design phase of the ct would commence. The various HODTs, by the issuance of the HODT letter of intments, would be authorized to conduct specific design activities. Letter of intments for HODTs are usually issued to the respective directors of the Specialist ches. Operationally, it would be delegated down to specific sub-groups within the alist branches who have the necessary competencies and capacity to handle the type of required. For health related projects, this would be the Unit Rekabentuk Fasiliti latan of the various specialist branches.9
releva Syste	mpliance to JKR SPB, as the programme manager, I would issue instructions to the ant appointed HODT to comply with JKR's MS ISO 9001:2008 Quality Management im in the implementation of their scope of work. In addition to complying to the specific n and documentation procedure, they would also be required to submit a design plan (D-
Plan) carry referre plan) Meeti	listing down, among others, their capacity in terms of human resource, estimated time to out their respective design, and also the by-laws, standards and guidelines to be ed to. This D-plan would in turn be incorporated into the overall Project Quality Plan (Q-In turn; the office of the HOPT would convene monthly Implementation Coordination ngs to monitor the progress of the design process, keeping in mind, the overall objective project implementation.
devia taken	ress of the design process would be tracked against the Implementation Schedule. Any tion would be highlighted to the HODTs involved and remedial steps recommended and . These steps could be in the form of adjusting the preliminary schedule, setting new lines, intervening in the design process in order to expedite the activities. <sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Surat perlantikan HODT (projek Naik taraf CDR/TPN Hospital Sibu Sarawak)

 $<sup>^{10}</sup>$  Minit mesyuarat penyelarasan perlaksanaan projek. (<u>Hospital Sri Aman Fasa 2</u>). See also 6, 7 and 8

	Manage scope Change Activities
Integr	ng in mind that change can be inevitable, BPP 5, in keeping to the processes of Jated Management System (SPB) has in place various tools and mechanisms in c ge Change Activities.
1.4.1.	Planning/Design Stage
project it wou stage	ge of scope at the planning/design scope although happening at the early part of at lifecycle can still have cost and time implication. Unless this change is manage ld affect the smooth implementation of the program. For the record, changes at the can be because of change in operational/technical policy, incomplete MBoR assion, or specific requirement by the Local Authority or other third party.
meeting ascent tabled Record most change reque	nechanism to manage such changes is the monthly implementation coordination ng. Firstly, the nature of the change of scope would be raised and discussed, inclaining the source of the change. Next, the implication of this scope change would and discussed among the HODTs, client representative and end-users' representation for solution would be tabled at such meetings. The implication would cases, affect cost and time. If there is agreement among the project team that this is necessary, then I would send an official letter informing the client of the change sting confirmation of the change would be forwarded for further instruction. The calso be advised of any cost and time implication where applicable. <sup>11</sup>
scope the all accord to con	kample, the Petrajaya Hospital, which had an allocation of RM500 million, change in the design and planning stage. During numerous discussions, it was determined location would not be enough if KKM insisted on implementation of the full scope ding to their submitted Medical brief. To resolve this issue, I instructed my planning up with different scoping options together their respective estimates to be present. After several PDA proposals, KKM finally agreed to a proposal where they specific their respective estimates.

Changes to the scope at the construction stage would be the result of necessary design amendments, technical and site conditions, local authority and service providers issue among others. Management of Changes to the scope during the Construction phase would follow processes as per JKR SPB. Changes in scope affecting design, quantity and quality would have to go through a Request for Change procedure. The initiator of the request would have to give due justification and also include, where possible, cost and time implication. The affected stakeholder(s), the client, contractors or designers would be apprised of the implication of the changes and advised to take remedial steps.

<sup>&</sup>lt;sup>11</sup> See 6, 7, 8 and 10

<sup>&</sup>lt;sup>12</sup> Surat Kelulusan Peruntukan PDA dari KKM -Opsyen 1. (<u>Projek Hospital Petrajaya</u>)

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014
As a rule, the instruction and procedure to follow for this scope change would be incorporated into the Conditions of Contract in Volume 1 of the JKR standard contract, which spells out in detail the process and procedures that have to be followed when a change in scope happens. To supplement the CoC, I would sometimes have to remind the SO representative to submit the necessary justifications in order for the HOPT to process their application for a variation order. <sup>13</sup>
Case Study: Tuaran Hospital Project
This project calls for the designing, construction, testing and commissioning of a 76-bedded hospital. It is implemented as a design and build contract and at the time of this report, it is still under construction.
Hospital Tuaran's scope had undergone several changes of scope prior to issuance of the letter of appointment to the contractor. Specifically, the contractor was instructed by JKR to increase the scope from being a 50-bedded hospital to a 76-bedded hospital. The amended scope was sent to JKR for evaluation and was finally approved.
However, during construction, it was discovered that an important component of the hospital kitchen, the central plating system was not included in the contract. It was subsequently decided by the client that the central plating system was required. After submitting the justification, it was agreed that this would be considered as a variation Order by the government based on the argument that the government had failed to comment on this exclusion during the evaluation.

Surat kepada JKR Sandakan untuk beri justifikasi permohonan Kelulusan peruntukan ATDA Pindaan dan Petikan Dokumen Kontrak, Jilid 1: Kehendak-kehendak Am Kontrak, JKR Contract Document (JKR 203A) and JKR Standard Contract Document for Design and Build Projects (JKR DB 2010)

JKR Project Manager Certification Programme
Assessment Session Five: 10-03-2014

## **UNIT 2: DIRECT TIME MANAGEMENT ACTIVITIES**

# 2.1. Direct Project Schedule Development

Development of the project schedule is done at two main stages. Firstly, during the planning/designing stage, where activities relating to budget and scope finalizations, design, procurement are discussed and agreed upon by all the related stakeholders. JKR Integrated Management System requires that every project must have its own Project Quality Plan (Q-Plan) which sets out the quality objectives of the project with regards to time, cost and quality. Specifically, its deliverables are a Design Quality Plan (D-Plan) by each HODT which list out the design objectives to be met, the resources allocated to the activity, the references used and the time allocated to this specific activity. The Preliminary implementation schedule which was discussed and accepted during the previous implementation meetings would be confirmed by all HODTs and KKM and would next be formally integrated into the Q-Plan.<sup>14</sup>

Secondly, during the construction phase, where, upon the issuance of the letter of Award to the successful contractor, I will ensure that the SO/PD representative instruct the contractor to establish a Construction Plan (C-Plan) which includes among others a work program and a financial s-curve, which tracks the proposed progress of construction and financial expenditure respectively. The proposed C-plan are usually submitted during the first pre-construction meeting with the contractors, during which they are discussed and subsequently approved. And during the construction phase, the performance of the contractors would be tracked against this C-Plan.<sup>15</sup>

# 2.2. Manage Program Schedule

The project Schedule thus established would have to be managed by the HOPT as the program owner. Again, these are done at two stages. During the planning/design stage, the schedule is monitored by the Planning Unit within BPP 5. Tools used to manage the program Schedule during the planning/design stage includes:

- The SKALA monitoring system that tracks the schedule from Planning/Design stage, through procurement and even Construction;
- Monthly or regular project Implementation meetings during the Planning/Design stage;

At the construction stage, the SO Representative manages the projects on behalf of the HOPT using these tools, among others:

- Monthly technical Coordination meeting chaired by the construction managers/ Supervising Officer's representative (SO Rep)
- Monthly Site Coordination Meeting during the construction stage, chaired by the SO Rep (Project Director's representative for design and Built projects).
- SKALA report for day to day monitoring.

<sup>&</sup>lt;sup>14</sup> See 7 and 10

<sup>&</sup>lt;sup>15</sup> Pelan Kualiti Pembinaan (C-Plan)untuk Projek-projek Hospital Tuaran dan KK3 Sibu Jaya

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014

Deviation from the approved schedule will be highlighted and remedial actions recommended to the responsible parties. Delay at the planning/designing stage will be discussed during the regular project implementation meetings and possible solutions are suggested and ultimately prescribed. As is usually the case, causes for delay at this particular stage include delay in getting the necessary information for planning and design; delays in getting brief confirmation; delay in getting information about the site (site plan, topographical survey); delay in appointment of consultants; conflicting workloads due other urgent matters.<sup>16</sup>

Delay at the construction stage is usually attributed to contractor's performance (including associated nominated and domestic sub contractors); local authority issues (stop work order due to non compliance of local by-laws); lack of coordination with local service providers; delay by the government side in approving materials samples, M&E and Medical equipment. The office of the HOPT would monitor contractor's performance via regular SKALA reporting, monthly technical and site meeting and also via project progress report submitted by the contractors. If a project is not performing, then the office of the HOPT would usually issue a reminder letter to the SOR or PD Rep to take necessary action as outlined in the *Surat Penurunan Kuasa* issued to the SOR/PD Rep outlining his authority. Subsequently the available management tools given to project managers to deal with such eventualities include issuing warning letters; granting extension of time (EOT) to the contract, the duration of the EOT to be properly justified. <sup>18</sup>

# 2.3. Analyze Time Management Outcome

In order to measure and evaluate the schedule management activities, a set of criteria must be established and agreed upon by the related stake holders. Input from the stakeholders are utilized to come up with a realistic and logical duration, projected start and projected finish time, to establish a reasonable float time and also to identify the sequence of the activities. During the planning/design stage, the main reference for determining the sequence is via JKR Integrated management System (SPB). In determining the more specific information like duration, dependencies and float times, there is no better alternative in convening a coordination meeting with all of the affected stakeholders (Client, HODTs and consultants). These feedbacks are usually discussed during specific project's coordination meeting. In addition, End Users representatives also contribute input to this analysis. Together, these feedbacks are compiled and discussed and analysed in our regular BPP 5 Management Meetings.<sup>19</sup>

<sup>&</sup>lt;sup>16</sup> See 10

<sup>&</sup>lt;sup>17</sup> See 7

<sup>&</sup>lt;sup>18</sup> Reminder letters to SOR/PD Rep to take action on projects performing below par (<u>Projek KK4 Telupid dan KK3</u> Sibu Java).

<sup>&</sup>lt;sup>19</sup> Minit Mesyuarat Pengurusan BPP 5, 8-11-13, perkara 2.5. and Minit mesyurat pra pembinaan KK4S Nabawan, 12-11-2013.

Assessment Session Five: 10-03-2014
At the construction stage, work program proposals submitted by the contractor are a Evaluation can either be done in several ways: During the monthly technical coordin meetings; the SO Rep/PD Rep would evaluate and grant approval based on his perexperience; or the convening of a special workshop to systematically evaluate the warrogram together with the SO representatives and his team; the HODTs and/or Con and also representatives from the client. At the end of this workshop, the resulting warrogram is formally approved by the SO representative. This approved WP will form to monitor the contractor's performance. <sup>20</sup>
On another level, factors contributing to deviation to program schedules are also dis our weekly meeting chaired by the Director of Cawangan Kerja Kesihatan. Analysis gleaned from other program managers in order to detect common denominators to t problem of delay and deviation to schedule. The inputs thus contributed are compile office of the PMO, CKK where they are raised at higher level coordination meeting by CKK and KKM at our biannual CKK-KKM Coordination Meeting. <sup>21</sup>

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014

# UNIT 3: DIRECT COST MANAGEMENT OF MULTIPLE PROJECTS/PROGRAMMES

# 3.1. Direct Program Budget Development

At the beginning of the year, the client department, Kementerian Kesihatan Malaysia would submit a proposed development budget for the implementation of projects by Cawangan Kerja Kesihatan for that particular year. The development of this budget would usually commence even before the previous year's end when KKM would request for CKK to submit a projected budget based on existing projects and projects under planning stage. Add to this the expenditure projection for newly issued projects and what is establish is a projected development budget categorized according to project types and zone. As head of BPP 5 serving Sabah, Sarawak and Labuan, I would direct my subordinate officers to work out:

- a) Projected expenditure for projects under construction. This also include projects under defects Liability period;
- b) Projected expenditure for new projects or projects under design/planning stage. Expenditure at point includes tender advert, fees for surveyor etc.<sup>22</sup>

Within the context of BPP 5, the projected expenditure derived from estimates from each individual projects would be totalled up according to category (Rural health, Urban health, upgrading/renovation and hospital). The grand total from all these categories would be BPP projected allocation, i.e. the Program Budget. This so-called program Budget would be BPP 5 development budget for that particular year.<sup>23</sup>

For projects with an estimated cost exceeding RM50 million, the client department is required to conduct a Value Management Workshop chaired by the Economic Planning Unit of the Prime Minister's Department. At this stage, CKK would play an important role in the development of the programme budget by providing technical input that will have financial implication. Examples of these include implementation of government policies that the client might not be aware of, like Industrial Building Components; sub contracting certain works to class-F contractors under the umbrella system; allocating cost for consultancy fees, where necessary; contribution to local utilities; requirement of submitting specific reports by local authorities (EIA report). The contribution of the HOPT at this stage is to ensure subordinate managers prepare necessary information to be raised in such VM workshops. <sup>24</sup>

<sup>&</sup>lt;sup>22</sup> Memo dalaman meminta semua ketua unit BPP 5 untuk membincangkan unjuran perbelanjaan pembangunan.

<sup>&</sup>lt;sup>23</sup> Jadual Unjuran Perbelanjaan Pembangunan di bawah HOPT 5 (Sabah dan Sarawak)

<sup>&</sup>lt;sup>24</sup> Keputusan makmal Pengurusan Nilai, 12/09/2013. (Projek KK4s dgn X-Ray dan Kuarters Nabawan)

3.2.	Direct Management of Program Cost	
Mar	nagement of program cost or budget is done via several methods:	
th es pr up es ex ar	ost estimate and Preliminary Detail Abstract (PDA) at the planning/design stage management of project cost means ensuring that the cost of the project stimated does not exceed the cost ceiling. After going through the evaluation and roceeding with the design, I would, at the appropriate time instruct the HODTs to cow with a cost estimate specific to their scope of responsibility. CKM and CKE wou stablish their respective estimate; KKM would do likewise based on their past experiences; CKUB will establish the estimated cost for the building and civil works incillary cost estimate for consultancy fees, contributions to local providers, occumentations, among others would also be included. The deliverable in this case at the Preliminary Detail Abstract (PDA). <sup>25</sup>	ome ld . Othe
fo ar	the PDA is less than the allocation, it is possible to go into procurement stage by a retender. Upon confirmation by KKM, I would then instruct either CKUB or the Elected mechanical Engineering Branches to proceed with the tender process depended a particular mode of procurement of the specific project. <sup>26</sup>	ctrical
		the
re co Se	egular monitoring of SKALA report. Within the SKALA report, each project's S p is required to key in monthly expenditure projection which is estimated from the entractor's financial s-curve. As each Interim payment certification is received fro OR/PD Rep, it is compared against the monthly projection and if the variance gets ide, then appropriate action must be taken. <sup>28</sup>	m the
th re	quarterly meeting with KKM to monitor and review development expenditures ese meetings, I would instruct my unit heads or their representative to submit their spective projects' projected expenditure based on current situation. The current rojection might differ from the financial s-curve submitted by the contractors. <sup>29</sup>	
	onthly technical; and/or site coordination meetings where current expenditure ompared against Financial s-curve;	e is
•	pplication for Variation Orders (VO). This usually arises to a variety of reasons chnical (Eg. unforeseen bed rock requiring change in piling methodology); Local	,
<sup>26</sup> Sura <sup>27</sup> Sura se	nininary Detailed Abstract (PDA) for ( <u>Projek Hosp Sri Aman and Projek KK3 Sibu Jaya)</u> It makluman panggilan tender untuk kerja-kerja Elektrikal dan Mekanikal – ( <u>KK3 Sibu Jaya)</u> It makluman bahawa PDA adalah melebihi siling kos dan mohon pihak KKM untuk mengambil tind wajarnya (Hosp Sri Aman fasa 2); Ikan SKALA showing financial S-curve: ( <u>Hospital Petrajaya dan Projek KK2 Petrajaya</u> ):	akan
		Page 1

JKR Project Manager Certification Programme:

en	thorities requirement which was not picked up during the design stage (Eg. Specific vironmental requirement necessitating increased project expenditure); Last minute quest by end users due to change of medical practices and technologies. <sup>30</sup>
jus the de be the	equest or application for VO must be accompanied by supporting documentations to stify the change which necessitates the increase in project cost. These requests are en submitted to either a VO Committee at the Branch Level or at the Departmental Level pending on the amount of variation requested for. The cost of the V.O. meanwhile would incorporated into a new As tendered Detail Abstract and if the new ATDA is still within a cost ceiling set by the client, than the works involved in the V.O. can be plemented. <sup>31</sup>
3.3.	Direct Financial Completion
is dir com	ughout the construction and also the Defects Liability phase, the SO/PD representative rected to submit their projected expenditure on a quarterly basis. These projections are piled and submitted for evaluation and review and subsequently forwarded to KKM to are the availability of project funding. <sup>32</sup>
unde othe	ards the end of the construction phase of the project, there are several activities ertaken by the SO/PD Rep in preparation to the Statement of Final Account. Among rs, all outstanding amendments to the ATDA or Adjustment of Contract Sum eyelarasan Harga Kontrak – PHK) is resolved. 33
and prog	ools such as SKALA,, monthly meetings and quarterly projection estimate and reports, Financial S-curve, the contractor's progressed is tracked to evaluate whether work ress is synced with projected expenditure. Deviation is highlighted to the various SO/PD esentatives and instruction given to take appropriate action in the form of either:34 encouraging the contractor to increase productivity;

<sup>&</sup>lt;sup>33</sup> Surat peringatan kepda SOR untuk menyediakan SOFA (<u>Projek KK3 Batu Kawa dan Projek KK6 Sukau</u>)
<sup>34</sup> See 18

<sup>&</sup>lt;sup>35</sup> See 28

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014

### UNIT 4: DIRECT QUALITY MANAGEMENT OF MULTIPLE PROJECTS/PROGRAMS

#### 4.1. **Direct Quality Requirement Development**

In the implementation of projects under the portfolio of BPP 5, compliance to established quality management system is mandatory. Specifically, BPP 5 adheres to current edition of JKR's in house Quality Management System (Sistem Pengurusan Kualiti - SPK) or recently the MS ISO 9001:2008, JKR's Integrated Management System (Sistem Pengurusan Bersepadu - SPB).

During the planning/designing stage, I communicate the requirement to comply with these quality management systems via regular project implementation coordination meetings. Project Team members, comprising personnel from the offices of the HOPT, HODTs and the Ministry of Health are regularly reminded of their respective obligations to submit their respective deliverables. According to the JKR SPB, all HODTs are required to submit their Dplans which the HOPT will incorporate into the Project Q-plan (PQP). The Q-plan, which is imposed on all projects under BPP 5 will be the programme quality objective.<sup>36</sup>

Upon commencement of the construction phase, the Supervising Officer Representative (SOR) or the Project Director Representative (PD Rep) is required to establish the Construction Quality Plan (C-plan), in cooperation with the contractors appointed. Inherent in this C-plan, which again will be incorporated into the overall Project Quality Plan, are site personnel organization chart (covering both the contractor and JKR), project work programmes, construction drawings, specifications method statements, Inspection and Testing Plan (ITP), mock-ups, procurement plan etc.37

#### 4.2. Manage Program Quality Assurance

Once the Quality requirement has already been established and becomes part of the standard operating procedure, the implementation of these requirements or standards must be regularly monitored by the HOPT via a quality assurance management plan. The primary objective of the quality assurance plan is to ensure that the quality requirements (as embodied in the JKR SPK and JKR SPB) are followed to the letter and spirit. The mechanism for monitoring this or the Quality Assurance Management is implemented via:

- a) Internal construction audits. This is usually conducted by the construction project team to ensure that the construction is done according to the construction drawings and specification as incorporated within the contract documents;
- b) Design compliance audits by the HODTs. The purpose of this type of audits, usually done by the HODTs from the Specialist Branches, is to ensure compliance to the design objectives of the project. Discrepancies between the design drawings and the construction drawings are also detected during this audit. The benefit of this process is to ensure continuity from the design stage right up to handing over;38
- c) External audits, which are held periodically and organized by the Quality Division of the Corporate Management Branch of JKR. While this audit ultimately benefit the department

<sup>36</sup> Cetakan Q-plan yg telah disahkan (Projek Hosp Lawas)

<sup>&</sup>lt;sup>37</sup> See 15

<sup>38</sup> Surat panggilan Audit rekabentuk kejuruteraan awam. (Projek KK2 Petrajaya)

	KR Project Manager Certification Programme: Assessment Session Five: 10-03-2014
_	(ie. In maintaining KKR's certification as an ISO compliant organization), the programme likewise benefits from this audit, in that it acts as an extra check and balance in its implementation;
d	d) <b>Project Implementation Coordination meetings</b> which monitors compliance to the PQP during the planning/design stage;
e	Technical and/or Site Coordination Meetings. Last but not least, compliance with quality requirement is also monitored via regular coordination meetings (design/planning stage and construction stage). The SOR and PD Rep must ensure that the reporting and monitoring of Quality Assurance and Quality Control are made a permanent agenda in the meetings
f	Whatever findings or non-compliance discovered via the above activities is duly recorded for further action. These can take the form of actual corrective physical action or rectification of drawings and/or documentation. 39 40
4	4.3. Improve Program and Project Quality
n e	There is already a built-in mechanism for improvements within the existing JKR integrated management system. Under the JKR SPB, projects will from time to time undergo an audit to ensure compliance of the HOPT to the management system. Within the project team itself, the HODTs and the SOR/PD representatives would also undertake regular design and
c	construction audit in order to ensure compliance by the contractors to the design or construction drawings.
а	mprovement to program and project quality is already built into the management of quality assurance as previously described. Continuing improvement is covered within the JKR's ntegrated Management System.
f (	Alternatively, further improvement to the quality of the projects can also be taken based on the feedbacks received from the clients and users. BPP 5 distributed Customer Feedback Forms (Borang maklumbalas pelanggan) at different stages of a project to gain feedback on customer's perception of JKR's competencies, conduct, professionalism and overall services.
4	<sup>39</sup> Laporan Audit Rekabentuk Skop C&S ( <u>Projek Hosp Likas)</u> <sup>30</sup> Surat kepada SOR meminta tindakan ke atas laporan NCR ( <u>Projek KK2 Petrajaya dan KK6 Sukau)</u> <sup>31</sup> Borang soal selidik Kepuasan Pelanggan( <u>Projek Hosp Likas</u> )
=	A ALLIAN CO IZ ' IZ ') . IZD

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014
 4.4 JKR Specific - Direct Environmental Quality Plan
Since adherence to the JKR SPB was made compulsory for all projects implemented by JKR, all projects under BPP 5's portfolio has, likewise, adopted, as a standard quality plan, adherence to the <b>MS ISO 14001:2004 (Environmental Management System).</b> The coverage of the EMS relevant to JKR covers most stages of the lifecycle of the project, from design, procurement, construction, and right up to handing over and defects liability period. All recent projects have incorporated the EMS into its project requirement to be implemented throughout the lifecycle of the projects. This can be shown in the inclusion of these requirements as part of the JKR needs statement for design and built project and as part of the Contract Documents. <sup>42</sup>
Deliverables under this EMS includes:
a) EIA Report; This is usually done during the project planning stage either by the relevant HODTs Cawangan Alam Sekitar dan Tenaga, or by an appointed consultants. This report is usually mandatory for project site of more than 50 hectares under the Jabatan Alam Sekitar (Department of Environment) and additionally the various state ordinance of Sabah and Sarawak;
<ul> <li>b) Aspect/Impact Report, that details out what may happen due to the various construction activities (aspect);</li> </ul>
c) Environmental Management Plan (EMP): As per the JKR EMS, the contractor upon appointment will have to submit an EMP detailing all proposed actions regarding environmental control during the construction stage. It includes, among others, methods for run-off control, erosion control, disposal of site waste;
<ul> <li>d) Environmental Management Report(EMR); a regular monitoring report that is submitted to the SOR/PD Rep in order to monitor compliance to the EMP;<sup>43</sup></li> </ul>
<ul> <li>Petikan daripada Dokumen Prebid Clause 43 Jilid 1 &amp; Dokumen Kontrak, Clause 43 Jilid 1: Kehendak-kehendak</li> <li>Am Kontrak (<u>Projek Hosp Petrajaya</u>)</li> <li>Surat peringatan kepada kontraktor untuk kemukakan EIA/EMP (<u>Projek Hosp Petrajaya</u>)</li> </ul>
Azman Abdul Manaf, Cawangan Kerja Kesihatan, JKR Page 15

ز ا

	R Project Manager Certification Programme: sessment Session Five: 10-03-2014
4.	5. JKR Specific – Improve Program and Project Environmental Quality Plan
	s in other quality management systems, the EMS is also subject to periodic audits in order to sure continuous improvement. The purpose of these periodic audits would be:
a) b) c)	To detect any non-compliance due to systems or policy mismatch;
im m	BPP 5, improvement on the Environmental Quality Plan (EQP) is more along the lines of a proving compliance to existing EMS or statutes. Using the medium of the pre-construction eeting at the beginning of each project plus the subsequent regular technical and site cordination meetings, in which a standard agenda for these meetings would be issues
er	lated to the environment, I would utilize this meeting, referring to the agenda specifically, to issure that compliance to the EQP (either by the HODT, consultant or the contractor) is aintained.44
va	extension to the above, plans for the improvement in the compliance of EQPs by the trious stakeholders would be transmitted to via medium such as the pre-construction eetings held at the beginning of each project <sup>45</sup>

Minit mesyuarat penyelarasan teknikal (<u>Projek Hosp Petrajaya dan Hosp Sri Aman</u>).
 Laporan NCR audit dalaman CAST dan Laporan Pemerhatian audit QAS SIRIM (Projek Hosp Petrajaya). See also

<b></b>	JKR Project Manager Certification Programme:
	Assessment Session Five: 10-03-2014
	UNIT 5: DIRECT HUMAN RESOURCES MANAGEMENT OF MULTIPLE PROJECTS/PROGRAMS
	5.1. Manage Program Organisation and Staffing
	Bahagian Pengurusan Projek 5 (BPP 5) is one among five project management divisions within the Health Facility Branch ( <i>Cawangan Kerja Kesihatan - CKK</i> ) of Jabatan Kerja Raya Malaysia. CKK's role and responsibility is to implement health care facility projects for the Ministry of Health ( <i>Kementerian Kesihatan Malaysia – KKM</i> ). In addition to that primary role, CKK also provide technical advice and assistance to other government agencies in connection to implementation of projects related to healthcare facilities. <sup>46</sup>
	The function of BPP 5 is as a project management group tasked with the implementation of multiple health care facility projects, from planning, design, procurement, construction, testing
	& commissioning to closing of account, within Zone 5 which is Sabah, Sarawak and the Federal Territory of Labuan. BPP 5 does this in cooperation with other stakeholders such as the Specialist branches of JKR, Development and Planning Division ( <i>Bahagian Perancangan dan Pembangunan</i> ) of the KKM; the offices of JKP Sabab, JKP Sarawak, Passukan Projek
	dan Pembangunan)of the KKM; the offices of JKR Sabah, JKR Sarawak, Pasukan Projek Sabah, and also support units within CKK itself.
	Within BPP 5, the organization is further divided into three sub units according to their respective functions. This programme organization is managed primarily via two main mechanism, firstly, an officer-level management meeting, where management issues like higher management instructions, project progress, human resource, problem-solving, etc are raised and discussed. The second mechanism is a staff meeting which is attended by all level of staff. In this meeting, the agenda includes staff welfare and social activities, problem sharing and solving, planning for social/sport activities etc. The roles and responsibility of each units are as follows:
	• Planning Unit, whose role is to manage activities at the planning, design and procurement stage. This unit conducts the regular implementation coordination meetings for each project, organizes site visits at project commencements, appoints the HODTS, manages the appointment of consultants, liaise with the client department and end-users with regards to project reporting. The Planning Unit also perform a secondary role representing the director in monitoring the implementation of Health Clinic projects, which are implemented by the State JKRs. Finally, this unit also acts as the secretariat for the HOPT. It is headed by a J52 officer who manages the running and organization of the unit;
	<ul> <li>Specialist Unit, whose primary role is to provide consultancy services to the SOR/PD Rep during the construction phase. Specifically, the Specialist Unit performs site evaluation for claim processing, construction audits, materials/mock-up approvals, and testing &amp; commissioning. All the disciplines within JKR is represented within this unit. It is further subdivided according to disciplines. A J52 officer is nominally appointed to look into the</li> </ul>
I	

that its component sub units carry out their task autonomously;  Construction Unit, which manages activities at the construction, defects liability an closing of accounts phase. This unit is further divided into three sub units with each headed by a construction manager. Each of this sub unit is given specific projects of which they are responsible. In executing their task, the construction managers are assisted by Specialist SOR, whose members are drawn from the Specialist Unit. To they form a construction project team who would be conducting the regular project technical and site coordination meetings, organizes construction audits, grant approfor material submission, TSA approvals, conducts testing and Commissioning prior handing-over of the project and finally closing of account. These construction manager officially and contractually appointed as the SOR or PD Rep, depending on the of project implementation. Thus, they are given specific contractual authority to perfitheir task.   Manage Individual and Team Performance  An organization or team is only as good as its component parts. This refers specifically officers and staff. Therefore it follows that for the organization and team to function effit the performance of its individual personnel would need to be managed well. Only from twould the team perform efficiently so that the objectives of the team and also the organize ment. Some of the key aspects that need to be managed include:  Training;  Clarity of roles and responsibilities;  Competency matching to specific task;  Continuing observation and monitoring.  To manage these aspects, which represents the key variables of a well managed organization, BPP 5 relies on these management tools:  Annual assessment, to assess the overall annual performance of a particular staff Annual Assessment Report, while being a major indicator of staff performance due to limited coverage;  Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meetings of the		Project Manager Certification Programme: essment Session Five: 10-03-2014
closing of accounts phase. This unit is further divided into three sub units with each headed by a construction manager. Each of this sub unit is given specific projects which they are responsible. In executing their task, the construction managers are assisted by Specialist SOR, whose members are drawn from the Specialist Unit. To they form a construction project team who would be conducting the regular project technical and site coordination meetings, organizes construction audits, grant appro for material submission, TSA approvals, conducts testing and Commissioning prior handing-over of the project and finally closing of account. These construction manager officially and contractually appointed as the SOR or PD Rep, depending on the of project implementation. Thus, they are given specific contractual authority to perfitheir task. **  5.2. Manage Individual and Team Performance  An organization or team is only as good as its component parts. This refers specifically officers and staff. Therefore it follows that for the organization and team to function effit the performance of its individual personnel would need to be managed well. Only from twould the team perform efficiently so that the objectives of the team and also the organizar met. Some of the key aspects that need to be managed include:  Training:  Clarity of roles and responsibilities;  Campetency matching to specific task;  Continuing observation and monitoring.  To manage these aspects, which represents the key variables of a well managed organization, BPP 5 relies on these management tools:  Annual assessment, to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;  Feedbacks from management meetings: Because of the wide range of areas coverage;  Feedbacks from management meetings, the management meeting is a useful tool to manage incomended to the managemen		smooth running of this unit, this particular unit is organized along a matrix organization that its component sub units carry out their task autonomously;
An organization or team is only as good as its component parts. This refers specifically officers and staff. Therefore it follows that for the organization and team to function efficithe performance of its individual personnel would need to be managed well. Only from the would the team perform efficiently so that the objectives of the team and also the organizate met. Some of the key aspects that need to be managed include:  Training;  Clarity of roles and responsibilities;  Competency matching to specific task;  Continuing observation and monitoring.  To manage these aspects, which represents the key variables of a well managed organization, BPP 5 relies on these management tools:  Annual assessment, to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;  Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage included to human resource. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, proble		assisted by Specialist SOR, whose members are drawn from the Specialist Unit. Togethey form a construction project team who would be conducting the regular project technical and site coordination meetings, organizes construction audits, grant approvals for material submission, TSA approvals, conducts testing and Commissioning prior to handing-over of the project and finally closing of account. These construction manages are officially and contractually appointed as the SOR or PD Rep, depending on the most project implementation. Thus, they are given specific contractual authority to perform
officers and staff. Therefore it follows that for the organization and team to function efficithe performance of its individual personnel would need to be managed well. Only from the would the team perform efficiently so that the objectives of the team and also the organizare met. Some of the key aspects that need to be managed include:  Training;  Clarity of roles and responsibilities;  Competency matching to specific task;  Continuing observation and monitoring.  To manage these aspects, which represents the key variables of a well managed organization, BPP 5 relies on these management tools:  Annual assessment, to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;  Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage included and team performance. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, proble	5.2	Manage Individual and Team Performance
<ul> <li>Clarity of roles and responsibilities;</li> <li>Competency matching to specific task;</li> <li>Continuing observation and monitoring.</li> <li>To manage these aspects, which represents the key variables of a well managed organization, BPP 5 relies on these management tools:</li> <li>Annual assessment, to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;</li> <li>Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage included to human resource. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, problems.</li> </ul>	offic the wou are	pers and staff. Therefore it follows that for the organization and team to function effic performance of its individual personnel would need to be managed well. Only from the ald the team perform efficiently so that the objectives of the team and also the organization. Some of the key aspects that need to be managed include:
<ul> <li>Competency matching to specific task;</li> <li>Continuing observation and monitoring.</li> <li>To manage these aspects, which represents the key variables of a well managed organization, BPP 5 relies on these management tools:</li> <li>Annual assessment, to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;</li> <li>Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage included and team performance. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, problems.</li> </ul>		•
To manage these aspects, which represents the key variables of a well managed organization, BPP 5 relies on these management tools:  • Annual assessment, to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;  • Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage income and team performance. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, problems.		·
<ul> <li>Annual assessment, to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;</li> <li>Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage included to human resource. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, problems.</li> </ul>		
<ul> <li>Annual Assessment Report, while being a major indicator of staff performance is no necessary reliable tool to measure or manage individual or team performance due to limited coverage;</li> <li>Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage included the management meetings would be to human resource. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, problems.</li> </ul>		· · · · · · · · · · · · · · · · · · ·
the management meetings, the management meeting is a useful tool to manage income and team performance. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, proble		<b>Annual assessment</b> , to assess the overall annual performance of a particular staff. Annual Assessment Report, while being a major indicator of staff performance is not necessary reliable tool to measure or manage individual or team performance due to limited coverage;
		Feedbacks from management meetings: Because of the wide range of areas cover the management meetings, the management meeting is a useful tool to manage indicated and team performance. One of the agenda for the management meetings would be to human resource. This would cover staff performance, training needs, disciplinary problems, competency mismatch. During discussions on individual projects, problem competency mismatch, staffing needs and requirements for each team or sub unit are

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014 raised and discussed. Generally, the management meeting is also ideal as a platform to generally monitor team and individual performance;48 Monitoring of staff training: A Training and Competency Coordinating Officer (Pegawai penyelaras Kompetensi dan latihan – PPKL) would be appointed. The role of this officer would be to maintain the record of staff training and also to report a training and competency record to CKK's Corporate Unit.. Bearing in mind that it is an organization objective to make mandatory for all staff to complete a minimum of 7 days equivalent of training, it is also the task of the PPKL to remind those officer to make up for any shortage of training days.49 Mentoring and Coaching Programme is also initiated and practiced to ensure the continuity of competency developed within the organization. New staffs are attached to senior staff within the team in order to learn by observing, coaching or even formal teaching. A secondary, but no less important, benefit of this program is the propagation of the organization's mission and objectives.<sup>50</sup> Social and Welfare Activities, in the form of management-staff dialogues, birthday celebrations, religious activities, sports activities, among others, are conducted regularly as a means to boost morale and also indirectly to motivate the staff by creating an espirit de corps. These informal activities serve to bring down formal office barriers between management and staff and crucially establish a medium to get to know the staff.<sup>51</sup> 5.3. Lead the Project Team The strategies of good leadership include clarity of vision, mission and objectives; effective communication; effective management; and empathy. In carrying out these strategies I would make it clear BPP 5's role in CKK by prominently displaying our vision and mission statement on the bulletin board. 52 In addition, BPP 5's organization chart is regularly updated and posted. Clear and unambiguous communication for me means being in constant contact via numerous discussion, meetings and email transmission; this is also become a function of good and effective management.<sup>53</sup> Empathy is displayed via managing staff competency and morale. Staff morale is promoted via celebration and appreciation of the staff. Activities to celebrate and appreciate the staff are usually carried out once every three to four months and they are usually held right after the staff meeting. These activities celebrate achievements by the staff, in addition to birthdays, births and weddings. Once a year at least, during Hari raya Aidilfitri, BPP 5 would

organize a hari raya gathering in conjunction with that of CKK. On a contrary note, tragedies

<sup>&</sup>lt;sup>48</sup> Petikan minit mesyuarat pengurusan BPP 5, 4-10-2013

<sup>&</sup>lt;sup>49</sup> Carta Kursus yg Dihadiri Pegawai HOPT 5. See also 48 (Perkara 4.5)

<sup>&</sup>lt;sup>50</sup> Surat penempatan staf baru dengan makluman mentor/mentee.

<sup>&</sup>lt;sup>51</sup> Memo/email mesyuarat kakitangan, majlis keraian dan majlis membaca yassin.

<sup>52</sup> Gambar papan bulletin Bahagian Pengurusan Projek 5

<sup>53</sup> Contoh komunikasi melalui email

	deaths of family members are also acknowledged. These activities are final voluntary collection and distribution. <sup>54</sup>
5.4.	JKR Specific – Direct Program Health and Safety Plan
Occupa	d of BPP 5, I require that all of our projects costing above RM20 million comp tion, health, safety management system 18000 (OHSAS 18000). The OHSAS aponent of the JKR SPB and therefore is mandatory for all programme manage
include stage,	rogramme level, the instruction to the contractors for complying with OHSAS in the Standard Conditions of Contract, clause 43, Appendix 2. At the plant make it the responsibility of the Planning Unit to ensure that this clause is income necessary tender or prebid document. 55
manage contract encomplements to the Scontract	the construction phase, the SOR/PD representative responsible for the construction and contract administration must ensure that the provisions are followed to respecifically, they have to provide or submit a <b>Health and Safety Plan</b> , passing an S-plan (Safety and Health Plan), a safe and proper working environeasures for the protection and welfare of the workers. In order to ensure considerly and Health Plan, the SOR/PD Representative must also ensure that the tor submit a monthly <b>Safety and Health Report</b> , in addition to it being presented the technical and site coordination meeting. All projects within BPP 5, which constructed the same statement of the safety and the sa
_	d to establish a HSP as per OSHA. <sup>56</sup>

Feukan danpada Dokumen κοπτακ, voi 1, Clause 43, Appendix 2 (<u>Projek Hosp Petrajaya</u>)

56 Safety and Health Plan, Hospital Petrajaya and Monthly Safety and Health Report, Oct 2013 (<u>Projek Hospital Peterajaya</u>)

	T 6: DIRECT COMMUNICATIONS MANAGEMENT OF MULTIPLE DJECTS/PROGRAMS
6.1.	Direct Planning of Project Communication
congen- inforpart the (phychai from leve	bod and efficient communication plan is crucial in the running of an organization. In the text of a project management organization, the project communication plan involves eration, collection, storing, retrieving and finally taking appropriate action of project rmation, in a timely manner to the appropriate stakeholders. The stakeholders in this icular case would be anybody or any party that is affected, either directly or indirectly, programme or projects. These information includes examples like project briefs, programme or projects. These information includes examples like project briefs, programand financial) reports, audit reports, quality reports, invoices, claims, request for necessary accident reports, minutes of meetings/discussion, instructions/request for a stakeholders, special reports to higher management including at ministry and cabineted etc. The stakeholders are involved in many and multiple roles, either as the generate recipient, the instructor/instructee etc. The variables in a project communication plan are recipient, the instructor/instructee etc.
;	The type or category of information. Project information comprises of, but is not limito, project and operational brief, allocation, design and construction drawings, specifications, cost estimates, audit reports, quality reports, health and safety reports, environmental management report, risk management reports, claims, payment certification, request for change, project progress etc. I would categorize these informatically the project phase they fall under; i.e. planning, design, procurement, construction and finally defects liability phase. Categorizing the information in this manifically useful in automatically assigning the task to the responsible stakeholders;
	The appropriate method or medium of communication: There is a whole range of communication medium available to me and they include phone calls (including text messaging) regular letters, fax and electronic mail. Information can also be posted or updated online on SKALA, JKR's online project monitoring portal. The choice of which method of communication would usually depend on the appropriateness and also on turgency of the matter.
	When the information is needed: The next variable is to determine the appropriate to required for the information to be conveyed. Certain category of information might have high priority and action have to be taken immediately (E.g. Feedback to parliament an cabinet, request for information by top management or minister, response to public

complaints). Other information, especially of a routine matter, just needs to be conveyed according to pre-set schedule (e.g. Progress report to higher authorities, minutes of meeting, claims, etc.).

Simply put, a project communication plan serves to communicate and manage all project information in an efficient manner in order to meet the organization's overall objectives. In BPP 5, the communication plan is conveyed via a project master list. This project master list, which categorizes the projects according to implementation phases (design/planning, procurement and construction/defects), also contains other important and relevant information such as scope, cost (estimate or contract cost), method of implementation, method of

-	ect Manager Certification Programme: ent Session Five: 10-03-2014
•	ement, project team information (HOPT, HODT, consultants and contractors), pro- rent status. <sup>57</sup>
official contain format (notification)	ogram master list contains contact information of the various stakeholders such as address, contact numbers, emails etc This list is updated regularly and the informed therein can be transmitted or alternatively extracted and imported into various according to the stakeholders specific requirement, routine operational corresponation for meetings, reminder/warning letters), weekly SKALA updates, regular reproposation of Management, Ministry of Health, and even periodical reports to various ministry of other government agencies. 58
6.2.	Manage Project Information Processes
manage dispose if not m	oject communication plan provide the framework for the proper and efficient ement of project information, whether it be to generate, evaluate, disseminate, stop and archive. Notwithstanding the availability of the project communication plan, ost, of these information needs to be evaluated and managed in a proper manner tion process management tool that is employed by BPP 5 is via:
atta Wit	ute sheets attached to incoming mail/fax. The minute sheets are small notes ched to incoming letters/documents with the names of all officers and staff of BPI nin these minute sheets are appropriate action (action/monitor/information) to be twhom and whether the action is deemed urgent; <sup>59</sup>
with	o-unit/individual morning prayers session/discussion, where specific informate regards to individual project or project team requiring further deliberation is discudisposed of;60
disc	gular Planning/Design Coordination meetings where specific project's informations and processed with other project team members such as HODTs, client's resentative, contractors and consultants; <sup>61</sup>
	<b>t-level management meeting</b> , where information at the unit level (Planning, astruction and Specialist) are discussed and acted on;
mad Dire	nch-level monitoring/management meeting where discussions and decisions a decinion at programme level. These meetings are usually chaired by eith ector or the head of Programme Management Office (PMO). Information process level includes programme/project allocation, client issues, etc; <sup>62</sup>
<sup>58</sup> Extrac 'Wa <sup>59</sup> Conto <sup>60</sup> See 48 <sup>61</sup> See 6	unication Plan Chart for KK4 Nabawan Project. See also 46 t from MOM Mesy Jawatankuasa Tindakan Pembangunan KKM & Mesy Penyelarasan Projek kabout' n Memo Dalaman kuning (Item 3) 3 7: Minit mesyuarat penyelarasan perlaksanaan projek a mesyuarat Pemantauan Projek RMk10 CKK dan Mesyuarat Pengurusan CKK

Assessn	nent Session Five: 10-03-2014
_	partmental-level briefing, where information are presented to be deliberated for her action
whom o	the context of these discussions and meetings, the type of action to be taken and by can be determined. Deadlines are also set during these meetings. The choice of n of communicating depends on the urgency and suitability of the information.
6.3.	Analyse Communication Management Outcomes
dispens of an e prograr implem	communication plan is well managed and effective, then the right information would be se with at the right time, to the right party. The ultimate aim or the successful outcome ffective communication management plan is the successful implementation of the m via its subordinate projects. Conversely, if there is failure detected in the sentation of the program and the failure can be traced to a communication issue, then a analysis has to be done with the objective of improving on current practices.
Manag	e putting into place a Project Communication Plan and an Information Process ement, failures in communication do occur. An analysis of communication issues it several issues or problems:
of to acc inac	nultiplicity of information originating from different sources. The direct implication his is that the stakeholders (both internal and external) are not getting a true and curate information. At the least this issue creates confusion; at the most it perpetuates occurate information, creating confusion and adversely affecting the primary roles of the ject teams by necessitating corrective actions
tak cor inst tha take issu	rrespondence or information is not reaching the right stakeholders in time to e appropriate actions. It was frequently reported that correspondence by eventional mail are not fast enough in a world where decisions have to be taken almost tantaneously upon receiving instructions or reports. What is happening, in fact, is that to process of communications is slowed down due to various human factors like the time en to get signatures, the time taken to dispatch the letters, the time to deliberate before using a reply etc. Letters forwarded to unit leaders sometimes take a very long time to ch their desk officers;
diffe in to dela doc	permation is subjected to differing interpretation. Information required by the SO are erently interpreted by the contractor /consultant and vice versa. A lot of time is wasted rying to resolve this classic miscommunication. For instance, processing of claims is ayed due to different understanding as to what constitute proper supporting cumentation. Another example is during material approval procedure where time is ain wasted due to a lack of common understanding of what procedure and format to low.
	communication under this category also happens between and among other keholders like KKM, Local authorities, SO, HODT and other project team members;

Azman Abdul Manaf, Cawangan Kerja Kesihatan, JKR

Page 23

JKR Project Manager Certification Programme:

As	sessment Session Five: 10-03-2014
	order to improve this situation, so that information are managed and coordinated in an ficient manner, BPP 5 has put into place several tools:
1.	Regular coordination, technical, site and management meetings. These meeting become a medium where the right information is disseminated to the right stakeholde action or onward transmission. Appropriate actions to be taken are also discussed in these meetings. Subsequently, information generated during this meetings (which coall stages of the project implementation) are collated and form the primary source of project information;
2.	A centralized Master Program List which is updated regularly. Information which collected from the previously mentioned meetings are then compiled into a Master Program List. The information thus compiled are regularly updated and subsequently utilized to generate reports o be forwarded to various stakeholders like contractors, consultants, clients, central agency-level monitoring committees etc Having a central Master Program List would also be useful in acquiring information in a timely manner.
3.	Regular monitoring and updating of project information via SKALA. A conscious effort is also made to constantly update the information such as project progress, schedule, etc within the SKALA system. Being web-based, this information is access at all times by whoever is given access. SKALA is also useful in acquiring information instantaneously since it can be accessed wherever an internet connection is available.
4.	To solve the problem of correspondence and information not reaching the stakeholde hard copy correspondences are followed up with scanned copies sent via email an extra precaution, letters are also faxed or carbon copied to desk officers so that re of correspondence can be guaranteed; <sup>65</sup>
5.	In an order to solve miscommunication issues, especially between contractors and Japane-construction meetings are used as a medium to highlight JKR's quality, procurem and financial requirements. Even though JKR's contract documents are very comprehensive, experience have shown that we still need to remind and highlight procedural matters to the contractors. Additionally a checklist is also passed out to the contractors spelling out JKR's expectations with regards to supporting documentation format, and forms to fill in etc. <sup>66</sup>
ma dis Ma	ne above analysis and remedial actions are done in general and not just on communical anagement outcomes. These analyses, in the form of factors leading to program failur scussed at either the BPP Management Meeting or at the Branch level weekly project conitoring Meeting. As a result of this analysis, solutions can be recommended as part continuous improvement. <sup>67</sup>
64 65 66	See 46, Master program List BPP 5 Latest SKALA print out (Hosp Lawas F1 dan Hosp Petrajaya) Sample of letters in hard copy and email/scanned copy Sample of Pre construction checklist (KK4S Nabawan) Minit mesyuarat Pengurusan BPP 5, 4-02-2014 dan 10-01-2014.
	rman Abdul Manaf Cawangan Keria Kesihatan IKR P

IIVD Daa	
	oject Manager Certification Programme: ment Session Five: 10-03-2014
6.4.	JKR Specific – Issue Management
related becom adhere Integra manag instrud Prime referer manag	management within the JKR context refers to how a particular project/programme dissue is managed and acted upon. If not properly managed and resolved, issues can be problems and lead to disputes. In general, in addressing or managing issues, JKR is to processes and procedures already defined in the JKR's SPK or recently JKR's ated Management System (SPB). Other sources and reference utilized in the gement of issues include the contract documents themselves and also various ctions and circulars issued by the Ministry of Finance, the Economic Planning Unit of the Minister's Department and also the office of the KPKR. Using these sources as a nice, officers within my organization can take a systematic approach on issue gement, which generally follows Identifying/receiving, assessing/studying the issues, king appropriate action.
From p	past experience, issues can be divided into three broad categories:
lan	sues raised/caused by the clients: Examples of issues within this category include and issues, insufficient allocation, inadequate project brief (which are raised by JKR) and lay in starting a project, poor quality and shoddy workmanship.
pro cire	anagement of issues under this category entails studying and evaluating the issue or oblem against existing guidelines or practices, such as JKR's SPB, administrative culars issued by JKR, the Ministry of Finance, contract documents and local authority quirements, among others.
sec wa pla am teo	recent example of issue within this category is the delay in project taking-off for the cond phase of the Hospital Sri Aman project. This tender for this phase of the project is supposed to be called in the early part of the year according to targets set during the anning stage. However, in the course of designing, it was necessary to make nendments to the scope and floor area of the hospital due to clients, operational and chnical requirements. The resulting preliminary cost estimate was found to be over the proved ceiling. As a result, the EPU withheld approval for the project to go ahead.
ар	proved defining. As a result, the Li o withheld approval for the project to go ahead.

<sup>&</sup>lt;sup>68</sup> Correspondence/email on VE for HAS project, 2013/2014

# 2. Issues raised/caused by contractors/consultants:

Issue management with regards to contractors is bound by the contract documents, while for Consultants; reference is made to the letter of appointment and the memorandum of agreement (MOA). Logically it is referred to in order to resolve issues. The CoC provides a comprehensive contractual solution to any issues that might be raised including the examples shown above. Eg. Clauses concerning LADs are clearly spelled put in clause, of Volume 1 of the JKR 203A and clause, of volume 1 of the DBT 2011 contracts.

A recent example of contractor related issue is the complaint from KKM that the procedure for contract termination for problematic projects is taking too long. Example cited is the delay in the termination of the contractors for KK4 Telupid project in Telupid, Sabah. The termination procedure had in fact gone through three times due to repeated appeals by the contractors and even intervention by politicians. This state of affairs, naturally, had made our client unhappy, since, in their view, termination should have taken much earlier. There were even mild accusations that the contractor was 'protected'

In handling this issue, BPP 5, adopted a multi-pronged strategy. On one hand, using established channel of communications, we constantly fed information and updated KKM on the progress of the termination process to create an atmosphere of transparency.<sup>69</sup> Concurrently, we endeavoured to proceed with the termination processes, following established guidelines, working closely with JKR Sabah and the appointed consultants to come up with the lengthy reports and assessments needed for a termination. <sup>70</sup>

Issues raised by consultants are referred to clauses of the consultants' Memorandum of Agreement (MOA) between them and the Government. These MOA would spelled out in detail the scope of services required, quantum of remuneration etc.

As an example, in 2011, an architectural consultant had made a claim for unpaid arrears of consultation fee for what it claimed were service rendered under its appointment letter by JKR in 2005. Our first step upon receiving this claim was to have a discussion with the consultant to get a better picture of the situation. After initially assuring the consultant that JKR would look and study the matter, my team and I proceeded to looked at the chronology of events and also assessed the documents within our project files to ascertain the accuracy and truth of the claim.

A meeting was also called with Cawangan Architect, to seek expert advice, especially in regards to correct procedures on appointments and legal arguments for and against the consultant's claim. After all of the relevant facts were gathered to support the government's view, including getting views from the client and KKR's Legal Advisor, we convened a discussion with the consultant to present our reply. The LA, in turn, submitted their finding which we duly forwarded to the consultant.<sup>71</sup>

<sup>&</sup>lt;sup>69</sup> Laporan maklumbalas kepada mesyuarat JKTP KKM

<sup>&</sup>lt;sup>70</sup> Garispanduan untuk Urusan Penamatan Pengambilan Kerja Kontraktor, KPKR, Oktober, 2006.

<sup>71</sup> Urutan peristiwa tuntutan tunggakan yuran iktisas oleh Juruperunding ATCT (Fail Yuran Iktisas ATCT)

Assessment Sessio	
3. Issues raise	d/caused by the public:
management, slo others, are best a blown issue of pu	ints raised by the public, a Examples of these includes complaint of poor site w progress of works, damages to public and private properties among acknowledge and resolved as soon as possible before they become a full blic interest. If not properly handled, public issues and complaints can me major. Management of this category revolve around the strategy that apportance.
opposition MP, a ADUN did not he incorrect. This w of the issues rais	ole, a series of press reports supposedly reporting a press statement by an leged 'delay' of the Sri Aman Hospital. The subsequent rebuttal by the local p matters because the information given out to the press was factually hole affair was eventually picked up by the Minister of Public Works. Some ed in the press that affected JKR were that the project was ed; that JKR did not provide value by treating only a portion of the site.
minister's office,	ng highlighted on this reports, immediately sent short preliminary report to the norder for the minister would be appraised of the real situation. This is re detailed report that was also copied to state agencies. <sup>72</sup>
they become full- or sub unit level. and discussion re agreements, othe seek the advice of involves the contri the issue can be	t of BPP5, the strategy of issue management is to resolve the issues before blown disputes. Once issues are raised, they are initially discussed at project. The issue is passed down to the desk officer involved for further deliberation ferring to existing guidelines, contract documents, memorandum of ar documentation and other relevant references. Sometimes, we would also if other team members such as the HODTs and the Client department. If it ractor and consultants, then they too become a party to the deliberation. If resolved at this level (with the concurrence and agreement of the interested ringing this to higher authorities then appropriate action is taken. At this point dered closed.
crossed when the	not be resolved at this stage, then it becomes a bona fide dispute. This line is three main parties involved, JKR, the client and the contractor/consultants in agreement on how to resolve the issue and an impasse is reached. At this evant parties having mutually conflicting opinions, a third party arbitration ary.

<sup>72</sup> Surat maklumbalas kepada YB Dato Francis Hollis Harden / TKPKR

	Assessment Session Five: 10-03-2014		
6.5.	JKR Specific – Manage Dispute Resolution		
agreer within docum	an issue cannot be resolved according to existing mechanism and no mutual ment is reached, then this disagreement must be resolved to its conclusion. Disputes JKR can either be resolved by mutual consensus based on a commonly accepted tentation or principle, or it can be resolved by adjudication (either through arbitration nent of court).		
quantuprincip Sdn's had earesubr stage t action by the of the amical	ute between the government and the contractor on the matter of, say, deciding on the im of Liquidated Ascertained Damages (LAD) is usually resolved by via the first alle by referring to the relevant clause of the contract document. IN the example of Working claim for loss and expenses due to an extension of time given, the PD representative arlier rejected their claim based on the contract document. WCT Sdn Bhd appealed an itted their claim which was duly submitted to the PD himself. The PD decided at this that since the initial claim had already been rejected, then the next logical course of would be to refer it to the next level, the Jawatankuasa Projek Lewat dan Sakit cheir Deputy Diractor General (Pakar) for further deliberation. BPP 5 still retain ownership dispute, therefore it becomes our objective to manage the dispute right up to an only one and agreeable resolution. Guidelines and SOPs employed at this stage remain the sin managing issues previously.		
between of non-discus consul Cawar Govern objecting parties either Development at the issues to the store that to the store of the stor	ring disputes via the second principle (Adjudication) is illustrated by the disputes on ATCT architects and the Government. The dispute which originated from the issurpayment of alleged professional services as explained earlier. After lengthy sions and negotiations, a mutual agreement cpuld not be arrived at. Finally, the atant involved decided to take the issue to court. At this point, JKR, specifically negan kerja Kesihatan, embarked on compiling legal arguments to reinforced the nument's position, The issue giving rise to the dispute is presented as clearly and as vely as possible to higher authority and deliberated upon. Apart from the interested involved, higher management may practice their discretion in calling upon experts, a representative from the legal Office or a representative from the Construction Industry properties are likewise presented in order to give a whole-picture perspective or use. With the interested parties giving their respective versions of events, the decision be taken by higher management. If a resolution can be arrived at this stage, then the up action is taken.		
choice opinio	e rare occasion that the dispute cannot be resolved at this stage, then we would have but to refer this to the office of the Legal Advisor on the next course of action. If, in of the LA Office, the dispute has to go to court, then it becomes BPP 5's role to gat wer evidence is needed. <sup>73</sup>		

<sup>73</sup> See 71, Urutan peristiwa tuntutan tunggakan yuran iktisas oleh Juruperunding ATCT (Fail Yuran Iktisas ATCT)

UNIT :	7: DIRECT RISK MANAGEMENT OF MULTIPLE PROJECTS/PROGRAMS
7.1.	Direct Planning of Project Risk Management
<i>Impler</i> coordi probal To put	nanagement, as defined in ISO 31000, Risk Management – Principles and Guidelines mentation, is the identification, assessment and prioritisation of risk followed by a nated and economical application of resources to minimize, monitor and control the bility and/or impact of unfortunate events or to maximize the realization of opportunitie it simply, risk management can be summarized as identifying potential risk and finding managing it.
RM50 and su worksl these include initiate addition	P 5, a Risk Management Workshop is mandatory for Design and Built Projects above 000,000.00. The purpose of these workshops would be to establish a Risk Register absequently a Risk Management Plan. So far, since I took over BPP 5 in July 2011, to hops have been initiated for two projects, Hospital Tuaran and Hospital Petrajaya. For two projects, I had ensured that a provision for a risk management workshop be do in the contract document. Where conventional projects are concerned, I had recent a risk management brainstorming/workshop for the Hospital Sri Aman project. In an, I have also introduced a risk identification agenda within the implementation mation meeting for other projects for the purpose of identifying potential risk at the fing and design stage. <sup>74</sup>
certair	future, not only all design and build projects, but also conventional projects above a project cost will have to undergo a risk management workshop. This is done as a stemalize risk management practices in the implementation of healthcare projects.
7.1.1.	Design/Planning Stage
praction of the praction of the practical prac	planning and design stage, during the implementation kick-off meetings, I make it a see for the HOPT, the designers (HODTs/Consultants), the clients and the end users to storm and list down problems with the project brief, scope, cost, procurement and quather aspects of the project. In addition, the stakeholders are encouraged to do a site order to identify potential problems with the site that might affect the design or require presolve. The HODTs/consultants are also required to establish contact with the end and the local authorities, to identify potential issues that might influence the outcome object. <sup>75</sup>
7.1.2.	Procurement Stage

<sup>&</sup>lt;sup>74</sup> Risk Management Plan: Hospital Petrajaya & Risk register: Sri Aman Hospital

<sup>&</sup>lt;sup>75</sup> See 4.5.

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014 expertise to implement, then the solution is to pre qualify or to restrict the number of possible tenderers.76 For projects implemented as Design and Build, Project Risk Management is implemented by including a Risk Management Workshop in the Contract Document. This initiative will ensure that a structured risk management plan is implemented for projects where risk are identified and classified; and resolutions identified and carried out.77 7.1.3. **Construction Stage** During the construction stage, the project is handed over to the SO/PD representative to manage. As the HOPT, I must ensure that the PD/SO representative identify, categorize potential risks and subsequently resolve the risk. For design and build projects, as explained earlier, this is done by conducting a risk management workshop. This workshop, which is allowed for under the contract, is implemented for all current design and build projects. From these workshops, a risk management plan is established.<sup>78</sup> For conventional projects, there is currently no structured risk management plan. However, as the HOPT. I use the medium of the implementation coordination and pre-construction meeting to include an agenda in the meeting to identify potential issues that might affect the running of the project. These potential problems and issues would be listed down and monitored as part of the subsequent technical and site meeting.<sup>79</sup> 7.2. Manage Project Risk Once the project risk management plan is put in place, monitoring and controlling by the HOPT is done via several ways. As the HOPT or program owner, I make sure that our regular project meetings' agenda follow, as much as possible, the standard agenda as per JKR SPK, which include an agenda on risk management. Meetings such as pre-planning, implementation coordination, pre-construction, which are specifically chaired by the HOPT or my representative, utilize this agenda to identify, categorize and list suggested solutions to resolve potential risks. Another practice is to use the formal risk management plan (currently only for design and build projects), specifically by monitoring the risk register, to manage and coordinate the implementation of risk resolution. This can be shown by looking through each meeting's minutes.80

<sup>&</sup>lt;sup>76</sup> See 4, 5, 6 & 7

<sup>&</sup>lt;sup>77</sup> Extract from contract document (Hospital Petrajaya and Hospital Tuaran)

<sup>&</sup>lt;sup>78</sup> See 74, Risk Management Plan: Risk Register, Cadangan Hospital Petrajaya

<sup>&</sup>lt;sup>79</sup> See 19, Mesyuarat Pra-pembinaan Projek KK4 Nabawan, perkara 2.5.

<sup>80</sup> See 74, Risk Management Plan: Risk Register, Cadangan Hospital Petrajaya

7.3.	Assess Risk management Outcomes
the ov Monito the va	nalysis is done as part of the overall risk management plan. The risk register, a erall risk management plan, is monitored to track the progress of each risk's repring of each of these identified risk are tracked against its respective deadline rious project meetings at all stages of the project. The final result of the analyse compiled as a list of lessons learnt which can be put into practice for future progress.
mana( asses	ke analysis of scope, time, cost, quality, human resources, communication, progement provides a very useful tool in drawing up a list of lessons learnt, likewising Risk Management Outcomes can reveal common risk that cuts across the common risks can be identified and recommendations made for improvements
Paper Issues with B recom examp Cover	xamples of such an analysis has been done recently. The first one is an Executompiled specifically to be presented to the new Senior Director of Cawangan and lesson learnt had been identified by architects within Cawangan Kerja Kerper 5 submitting issues and risk specific to Sabah and Sarawak. The paper mended several solutions to improve architectural-related issues. The secont ole is a Lesson learnt Paper presented during the annual conference with state ing all issues (including risk management issues), the paper sought to present tence common issues affecting our implementation.
resolu	the context of conventional projects, the listing, categorization and subsequen tion of potential risk can also be taken as analysis. Likewise, the outcome of these can benefit future projects. <sup>83</sup>

<sup>81</sup> Architects paper to PKCA 5-02-14

Lesson Learnt Paper presented at mesy KPP Bangunan JKR Negeri 12-02-14
 Risk Management Plan: Risk Analysis. Also see 19

JKR Project Manager Certification Programme:
Assessment Session Five: 10-03-2014

# UNIT 8: DIRECT PROCUREMENT MANAGEMENT OF MULTIPLE PROJECTS/PROGRAMS

# 8.1. Direct Planning of Project Contracting and Procurement

The default instruction with regards to project procurement is via open tender. Nevertheless, upon receiving the project brief from the client, I would assess whether it would be feasible to implement an open tender for the main contract on the basis on availability of resources, urgency and complexity of the particular project. During the initial/kick-off project meeting, procurement method would be discussed and reviewed. Feedback would be gathered from the various stakeholders. If for instance the project is viewed as being complex in nature, then it would be better to call for a restricted tender or alternatively to prequalify the tenderers. This is so that only qualified tenderers are picked. Procurement plan for prime cost (PC) items and provisional sum items would also be decided at these meetings. Key decisions to be decided by the HOPT includes items to be called as PC Items or provisional items and to assign an estimated cost within the overall project cost estimate, referred to as the preliminary detailed abstract (PDA).<sup>84</sup>

Another major category of project procurement is via direct negotiation with the chosen contractor. In BPP 5, decision to implement according to this category of project procurement would be recommended if a particular project needs to be implemented quickly without going through the long conventional tender process. However, in compliance to Treasury Instruction, this avenue would only be taken if the justification is really airtight. Direct negotiation is also prevalent for special cases like a contractor directly appointed by other government agencies (usually the Ministry of Finance) or the Ministry of Works to take over a terminated contract.<sup>85</sup>

# 8.2. Set up Procurement Process

Setting up of the procurement process would usually be done during the subsequent project implementation coordination meeting attended by all HODTs, CKUB and also KKM. Procurement processes would usually comply with the relevant Treasury Instruction and procurement procedure according to SPK. Feedbacks from all stakeholders are gathered and taken into consideration. Subsequently, I would direct my subordinate managers to start listing down the processes, deliverables and also establish a planning schedule for tender/negotiation, evaluation and finally award. The procurement processes is listed down as specific activities like, for example, preparation of tender documents, preparation of bills of quantities, establishing cost estimates, calling for tender, evaluation, selection and award. This procurement process would usually be incorporated into the overall project implementation work program during the project implementation coordination meetings.<sup>86</sup>

For procurement process for PC Items and Provisional Sum items the contractual reference is clause 60 of the standard form of contract, JKR 203A. Upon handing over the project to the

<sup>84</sup> See 4, 5 & 25

<sup>&</sup>lt;sup>85</sup> Letter of Appointment for Jutaya Construction Sdn Bhd

<sup>86</sup> See 6 & 7

	oject Manager Certification Programme: ment Session Five: 10-03-2014	
provisi	D representative, I would also ensure that the procurement of items under PC or ional items is incorporated in the contractor's work program. Usually, this would be the pre-construction meeting <sup>87</sup>	e done
8.3.	Manage Procurement Process	
overall the pro of SKA	ext step would be to manage the procurement process so that it runs according to I objective of the program with regards to time and cost. As the HOPT, I would mocurement process via regular project implementation coordination meetings, mor ALA and also via my regular BPP 5 management Meetings. Non-compliance to the rement process would be identified and resolved quickly.88	anage nitoring
submit SKALA agains	ojects under construction, my primary management tools would be the monthly re tted by each SO/PD representative; technical and site meetings and monitoring vi A. Specifically procurement for PC items and Provisional Sum items would be tra at the approved work program. Any deviation from the schedule would be highlight pondence. <sup>89</sup>	a cked
8.4.	Manage Procurement Activities	
subord stage, quantit would procur progra schedu	anagement of specific and detailed procurement activities would be delegated to dinate managers or officers according to the stages of the project. At the planning procurement activities (preparation of tender documents, preparation of bills of ties, establishing cost estimates, calling for tender, evaluation, selection and award be delegated to the Contract and Quantity Surveyor Branch (CKUB). Since the rement process is incorporated into our overall project planning implementation am, progress of the procurement process and activities would be tracked against the tracked against the delegated.	rd) his
Provision representation the Prohamolic handing	ojects within construction phase, procurement activities such as Tender for PC Iterional Sum Items and Variation Orders are managed by the specific SO or PD sentative with the assistance of the HODT involved. Instruction or reminder to adhocurement Plan would be given during the Pre-Construction meeting before forming over of the project to the PD/SO. As the HOPT, I would monitor procurement lies and processes via SKALA, specifically the project's C-plan. <sup>90</sup>	ere to
<sup>88</sup> See 6 <sup>89</sup> See 1 Pra	ct from CoC, JKR 203A. See also 19, Item 2.2.5. 5, 7 and 44 18, Reminder letter to JKR Sarawak (KK3 Sibu Jaya) and JKR Sabah (KK4 Telupid) & See 66, Minit m a-pembinaan Projek KK4 nabawan	esyuarat
	10, 15 , 28 & 64 1 Abdul Manaf,  Cawangan Kerja Kesihatan, JKR	Page 33

	eject Manager Certification Programme
Assessi	ment Session Five: 10-03-2014
8.5.	Finalise Contracts
	nuitat name a montation (inclusive

As the project nears completion (inclusive of Extension of Time – EOT), I would issue instruction to the SO/PD Representative to commence with a pre CPC meeting or inspection in preparation to the issuance of the Certificate of Practical Completion to the contractor. Specifically these include, among others:

- Ensuring the completion of various procurement activities such as claims for VOs, outstanding claims, finalizing of the ATDA and payments to consultants (where applicable). Monitoring would be done via SKALA or via reports received direct from the PD/SO.
- Overseeing activities/processes leading to CPC specifically, testing and commissioning, final inspection, submission of working drawings, operating manuals, certificates of warranty, statement of final accounts (SOFA), etc.
- Adherence to JKR's SPK Senarai Semak Penyerahan.<sup>91</sup>

After the issuance of the CPC, the project enters the Defects Liability Period which runs for twelve months for conventional projects and twenty four months for design and builds projects. During this period, in accordance to the conditions of contract, I must ensure, via the SO/PD that the contractor fulfils his contractual obligation.

During this period too, the SO/PD must continue monitoring the activities during the DLP like the implementation of the Planned and Preventive Maintenance, defects rectification, rectification of new defects, etc. Towards the end of the DLP and after the contractor has fulfilled its contractual obligation fully, the Certificate of Making Good Defects (CMGD) will be issued to the contractor. In conjunction with the complete submission of the procurement deliverables (claims for VOs, outstanding claims, finalizing of the ATDA and payments to consultants etc), the Perakuan Akaun Muktamad or Statement of Final Account (SOFA) is issued to the contractor and this marks the formal finalization of the contract.

<sup>91</sup> Letter to SO, JKR Sabah and Sarawak instructing usage of Handing-over Checklist

<sup>92</sup> See 33

UNII	9: DIRECT INTEGRATION OF MULTIPLE PROJECTS/PROGRAMS
9.1.	Direct the Management of Integration Processes
ensur object speci Comr indep achie well t	curpose of integrating the processes of project management knowledge areas is the that all separate components work efficiently together in order to achieve the tive of the program. The objective of the program, in turn, is represented by the fic sub-objectives like Scope, Cost, Time, Quality, Human resource, Procureme nunication and Risk Management. In reality, these components cannot operate endently. On the contrary, they are interdependent in their management and vement of objectives. Therefore, the success of the program depends directly chese components are combined. In bringing together these components severagement tools are utilized:
be re m	roject Quality Plan (Q-Plan) represents the government's wish on how the pro- e implemented. It sets out standards on quality and timeliness, utilization of hur source, scope and cost of the project, method of procurement, communication anagement planning within one document which is regularly referred to by the and subordinate managers/officers as a guide; <sup>93</sup>
th S in pl	roject Construction Plan (C-plan), represent the proposed plan by the contract estandard of construction to adhere to. This C-plan, which has to be approved D/PD representative, incorporate items like work program, procurement plan, to spection plan, financial projection, communication plan, risk management plan, an is utilized by the SO/PD representative to manage integration at the constructions:
fii cl m	rogramme Master List is a specific tool designed by me to assist me in having agertip all the relevant information on scope, cost, quality standards, list of my charge, list of stakeholders, important dates, procurement methods. The programaster list is utilized as a quick, executive level monitoring tool, which effectively integrate all eight knowledge areas into one medium <sup>95</sup>
9.2.	Manage Within the Internal and External Environments
distin proje	rying out my duties as the HOPT in charge of health care projects, I operate winct environments. At the Internal level, I manage the implementation or operation of the wind my project team members, which comprises of my immediate team, the ne PD/So representatives in accordance to the objectives of the organization.
	e other level, I operate outside the immediate project environment, i.e. by being

.

•	artment (KKM), the end users and also other parties that will affect and be affected ects (Local authorities, service providers, politicians etc).	by th
plan	agement within the internal environment is specifically done via meetings like pre- ning meetings, project implementation coordination meetings at the planning/desigr via the technical coordination meetings during the Construction stage. 96	n sta
by th prog cont	in the external environment, as the HOPT, I regularly attend the JKTP meetings change Secretary General of the Ministry of Health, where I report on the progress of the rammes. In addition to that there are other meetings that I attend where I have dire acts with other stakeholders like pre-construction meetings, site meetings, coordinating for Walkabout Projects among others. 97	ct

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014

# 9.3. Manage Integration throughout Project Life Cycles

According to PMBOK, a project management life cycle can be summarized into four main phases as shown below. The corresponding JKR Project activities, in turn, can be organized along this Project Life Cycle. In addition, the activities of the nine knowledge areas of project management can likewise be incorporated or integrated into this Project Life Cycle. As can be expected from the nature of project management, some of these activities overlap

NO.	PROJECT LIFE CYCLE	KNOWLEDGE AREA	PROJECT ACTIVITIES
1	INITIATION/START UP	Scope, Cost, Time	Client ministries conduct feasibility study
2	PLANNING	Scope, Cost, Quality, Time, Procurement, Human Resource, Communication, Risk, Integration	<ul> <li>Client ministries         source for land and         funding</li> <li>JKR participate in         Value Assessment to         assist Client         ministries to finalize         cost estimate</li> </ul>
3	EXECUTION/IMPLEMENTATION	Scope, Cost, Quality, Time, Procurement, Human Resource, Communication, Risk, Integration	<ul> <li>Client ministries submit budget, project brief and location</li> <li>JKR implement project from Planning, Design, and Construction.</li> </ul>
4	CLOSE-OUT	Scope, Cost, Quality, Time, Procurement, Human Resource, Communication, Risk, Integration.	<ul> <li>JKR hands over projects,</li> <li>Client ministries take over project.</li> <li>Client ministries conduct post occupancy evaluation</li> </ul>

During the Planning Cycle, the client is required to justify their application for funding for their development projects. The mechanism established by the government to manage activities at this Cycle is the Value Management Laboratory conducted by the EPU of the Prime Minister's Department. During this Lab, JKR's involvement is to provide technical with regards to land/site characteristics and possible technical issues. This involvement is crucial in that it serves as a platform to establish a realistic cost estimate, to identify future risk and to give input on project implementation duration.<sup>98</sup>

<sup>98</sup> See 68, Garispanduan perlaksanaan Pengurusan Nilai

JKR Project Manager Certification Programme: Assessment Session Five: 10-03-2014 During the Execution/Implementation Cycle, JKR takes centre stage as we implement the project through the entire phase, starting from Planning, Design, Procurement, construction, handing over and closing of final account. The integration of these management processes and the tools/mechanism used, are generally covered in the Project Quality Plan, Construction Quality Plan, SKALA monitoring (Which monitors project progress, financial progress, D-plan, Q-plan & C-plan), and a Master Program List and detailed and updated project report. These documentations and reports serve to provide a holistic view of the program, while at the same time providing us with the possibility of zooming in for a more detailed viewpoint. 99 In addition, there are also other meetings or forums used which are not specific to any project life cycle which nevertheless serves as a good platform for integration. Meetings like Mesyuarat JKTP, Mesyuarat Pemantauan Projek CKK, Mesyuarat Penyelarasan Projekprojek Walkabout, among others illustrate the benefit of integrating all the project management processes. It is at these meetings, and also other occasions, that we, as Program Managers or Owners, are called to give an accounting of the projects that come under our responsibility.