JKR 29300-0006-11

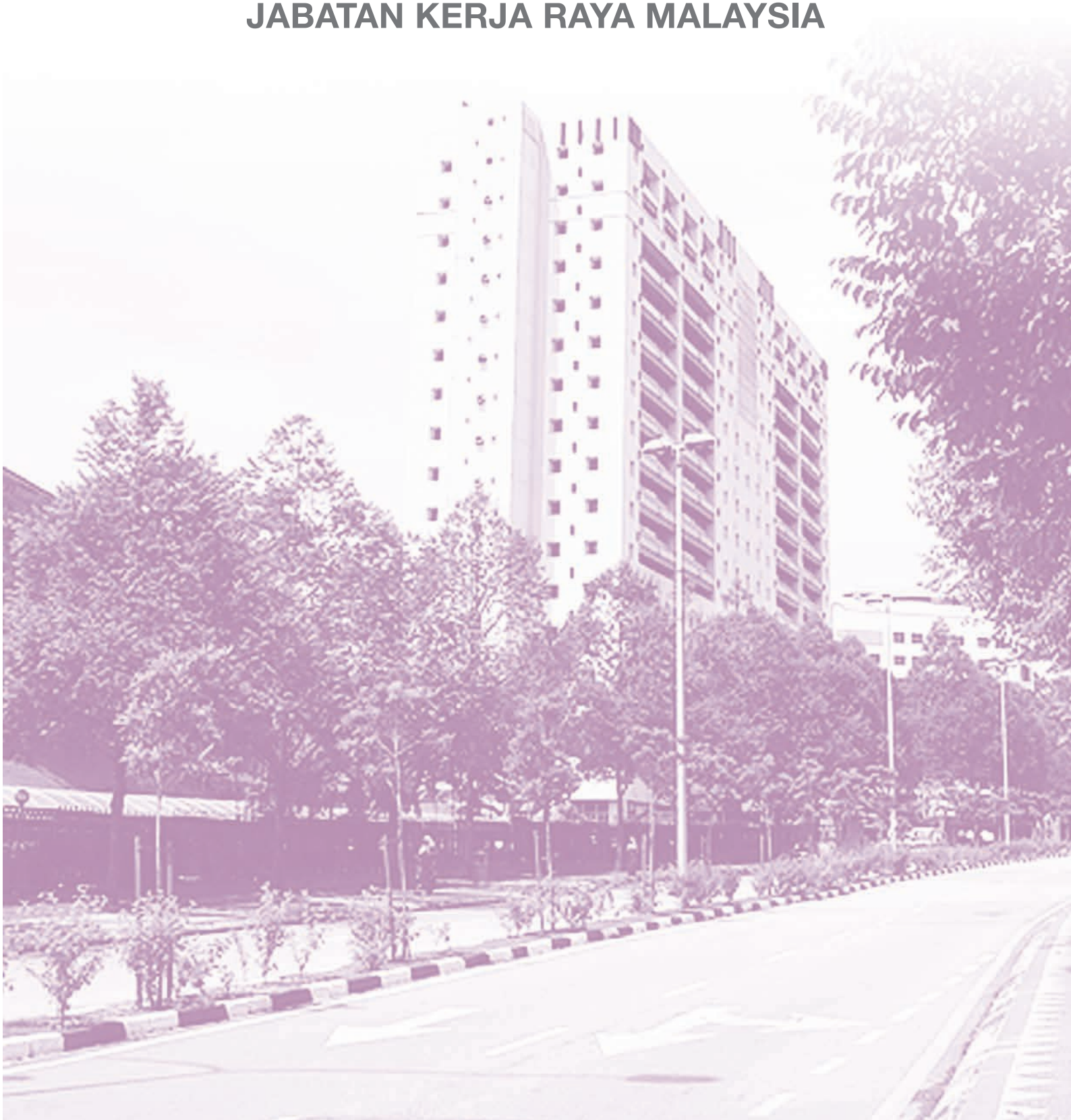
COMPETENCY
MODEL & DICTIONARY

JABATAN KERJA RAYA MALAYSIA

Kumpulan Pengurusan Tertinggi
Kumpulan Pengurusan & Professional
Skim Perkhidmatan Kejuruteraan (J)

COMPETENCY
MODEL & DICTIONARY

JABATAN KERJA RAYA MALAYSIA



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Prakata

Ketua Pengarah Kerja Raya

Sektor awam sentiasa berdepan dengan pelbagai perubahan yang kompleks seperti globalisasi, ledakan maklumat dan perkembangan teknologi, tadbir urus, ekonomi berasaskan pengetahuan dan sebagainya. Oleh itu prestasi sektor awam dalam era perubahan ini bergantung kepada kepada beberapa faktor penting seperti tahap kompetensi (pengetahuan, kemahiran dan tingkahlaku) tenaga kerjanya, sistem yang diterimapakai dan teknologi yang digunakan.

Bagi melahirkan pegawai-pegawai yang kompeten, Jabatan Kerja Raya Malaysia telah mengambil pendekatan melalui pelaksanaan Sistem Pengurusan Sumber Manusia Berasaskan Kompetensi (SPSMBK), dimana komitmen ini telah dinyatakan dalam JKR Strategic Framework 2007-2010. Asas kepada pelaksanaan SPSMBK adalah Model Kompetensi bagi setiap jawatan.

Dokumen ini yang dikenali sebagai Kamus Kompetensi, mengandungi senarai Model Kompetensi jawatan bagi Kumpulan Pengurusan Tertinggi dan Kumpulan Professional (Kejuruteraan) Jabatan Kerja Raya Malaysia. Justeru itu diharapkan Kamus Kompetensi ini akan menjadi sumber rujukan utama dalam melaksanakan fungsi-fungsi pengurusan sumber manusia berdasarkan SPSMBK.

Diharap usaha ini akan mencetuskan etos baru dalam penyampaian perkhidmatan yang cemerlang selaras dengan harapan pimpinan negara iaitu 'Rakyat Didahulukan, Pencapaian Diutamakan' dan juga mencapai status 'Negara Berpendapatan Tinggi' menjelang tahun 2020.

DATO' Ir. HJ. MOHD NOOR B. YAACOB
Ketua Pengarah Kerja Raya Malaysia

Appreciation and thanks to the members of the Project Team (CBHRM), Subject Matter Experts from JKR Branches and States for their involvement and contribution to the competency workshops, the consultant, reviewer panels and all parties who had given full support in the production of model and competency dictionary for PWD

Senior Director
Cawangan Pengurusan Projek Kompleks
Jabatan Kerja Raya Malaysia

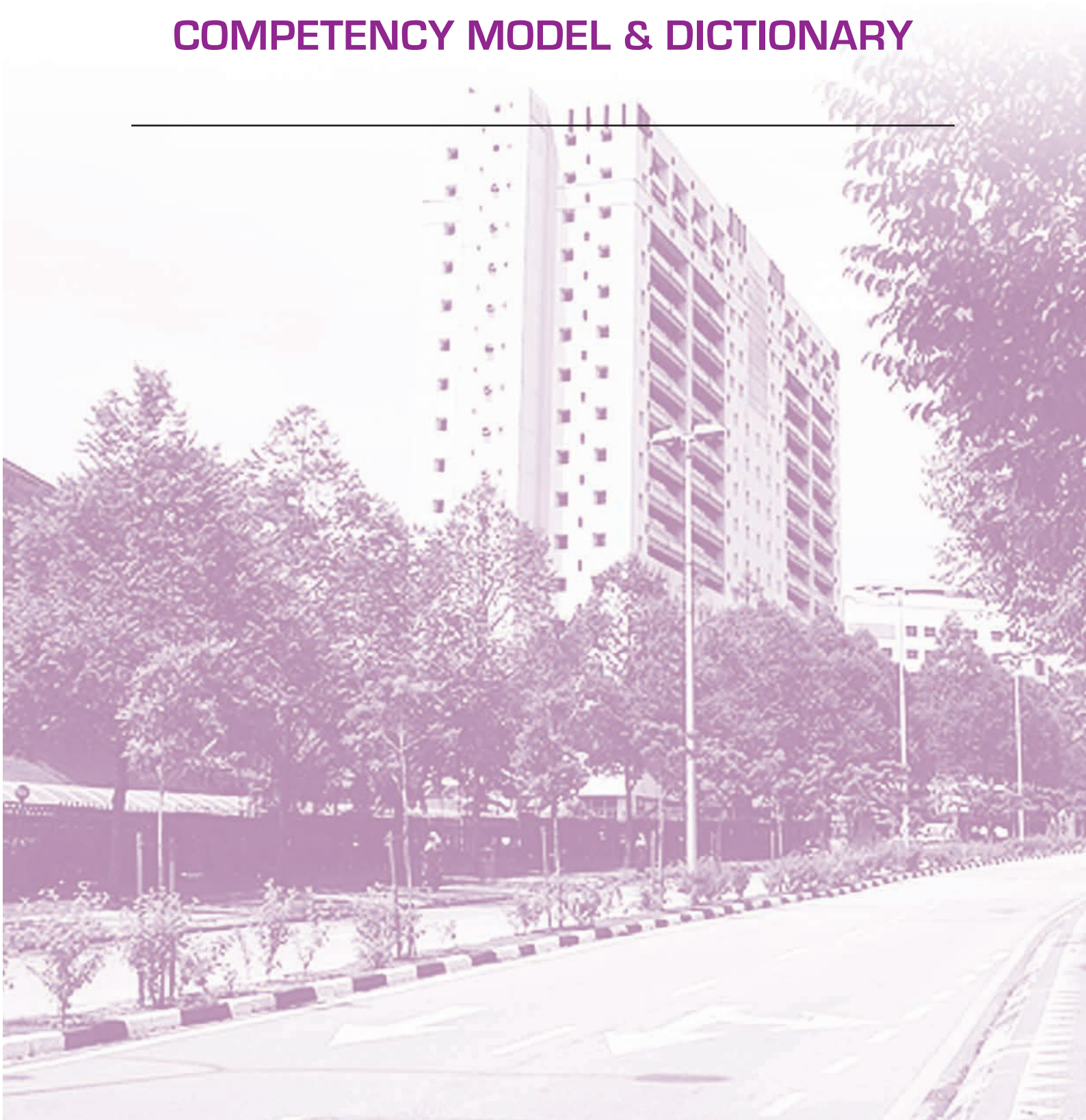
CONTENTS

PART A – COMPETENCY MODEL & DICTIONARY

PART B – COMPETENCY BASED HUMAN RESOURCE MANAGEMENT (CBHRM) REFERENCE GUIDE FOR MANAGERS/SUPERVISORS

PART A

COMPETENCY MODEL & DICTIONARY



1 WHAT YOU SHOULD KNOW BEFORE USING THE JKR COMPETENCY DICTIONARY

Each Jabatan Kerja Raya (JKR) employee is expected to fully understand this document to facilitate the understanding and application of the JKR Competency Model. The essence of the competency model is captured in this Competency Dictionary.

Understanding of the JKR Competency Model provides the basis on how JKR manages its workforce and its associated workforce management policies.

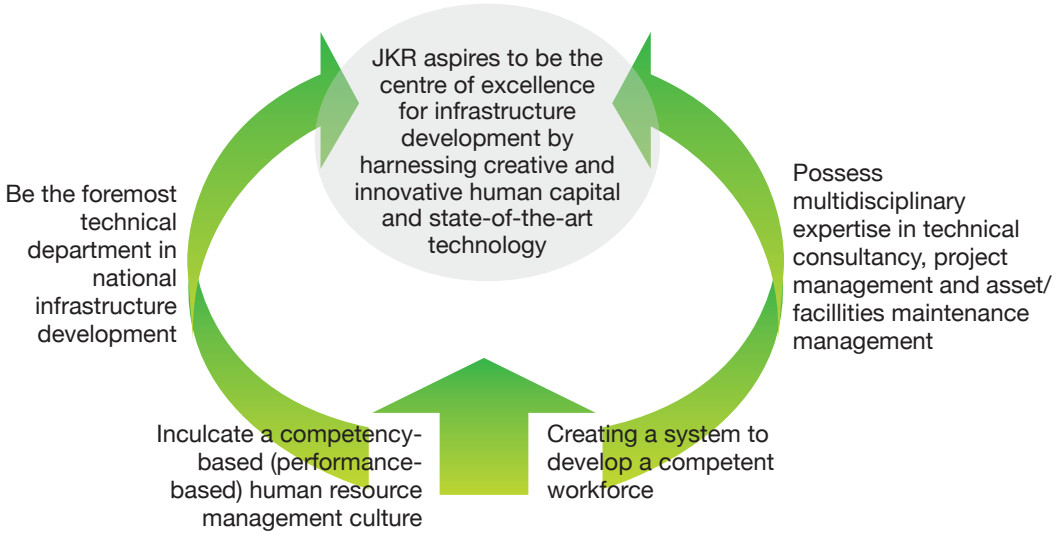
As a member of JKR's workforce, your performance and career growth shall be measured and guided by the list of competencies. For each job levels and functions there are proficiency/target levels that are been defined based on the business needs of JKR.

The Competency Model is designed to facilitate convenient and effective usage. It uses terminologies that are simple and easily understood by majority of employees.

2 INTRODUCTION

2.1 The Context

Beginning with the aspirations of Jabatan Kerja Raya Malaysia.

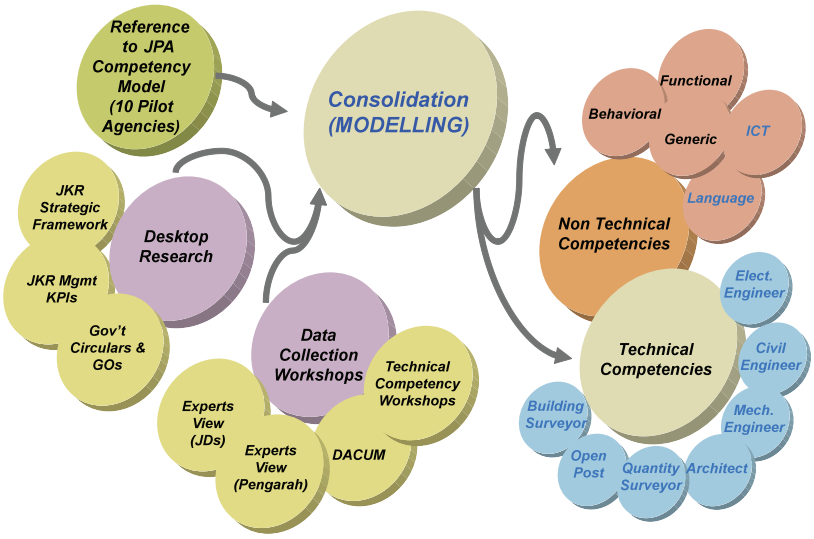


To achieve its organisational goals, the leaders of JKR wants to focus on driving operational efficiency – via ensuring that JKR has the "right" talent to drive future business continuity.

In order to drive its aspirations combined with an acute understanding of the landscape of the engineering discipline, Jabatan Kerja Raya Malaysia must have a highly capable workforce. To nurture and sustain this workforce, JKR must also have a solid workforce management framework.

At the heart of the workforce and workforce management dimensions is the JKR Competency Model. The competency model is designed specific to JKR's business aspirations.

2.2 The Methodology



Ensuring extensive coverage of accessible information to draw a model that is a best-fit for JKR.

3 UNDERSTANDING COMPETENCIES

3.1 What Are Competencies?

Competency is defined as the ability of a worker enabling him to accomplish tasks adequately, to find solutions and to realize them in work situations. This definition fits in with the need for describing competencies and assessing them.

Competencies consist of components that are trainable (knowledge, skills) and components that are more difficult to alter (attitudes, believes). In addition, competencies refer to a profession in organizational context -- Strengthening the contribution of the individual to the organization's objectives

While skills/knowledge is necessary for good performance, researches have found that behaviours are the underlying differentiating characteristics that drive long-term outstanding performance in a job.

Using the metaphor of an iceberg, skills/knowledge forms the tip of the iceberg, which is above the water surface and clearly visible, whereas behaviours are the underlying elements which are not as apparent.

Nevertheless, behaviours are critical determinants of one's effectiveness in a job.
The elements stated on the iceberg are defined as follows:

Skills:	The ability to perform a certain physical or mental task, e.g., a dentist's physical skill to fill a tooth without damaging the nerve; a computer programmer's ability to organize 50,000 lines of code in logical sequential order.
Knowledge:	Information a person has in specific content areas, e.g., a surgeon's knowledge of nerves and muscles in the human body.
Values:	Are more conscious, learned beliefs a person holds – what they believe is important to be or to do.
Social Role:	Is the image a person projects to others. It reflects a person's values - what one believes is important to do - such as developing others or providing a sense of mission & direction.
Self-Image:	Is the way a person sees him/herself - the internal concept of identity, e.g., seeing oneself as a teacher or leader.
Traits:	Are relatively enduring and stable characteristics of a person's behaviour, e.g., being a good listener, or being able to recognize patterns across seemingly unrelated elements.
Motives:	Are natural and constant thoughts and preferences in a particular area (i.e., Achievement, Affiliation, and Power) that drive, direct, and select a person's outward behaviour.

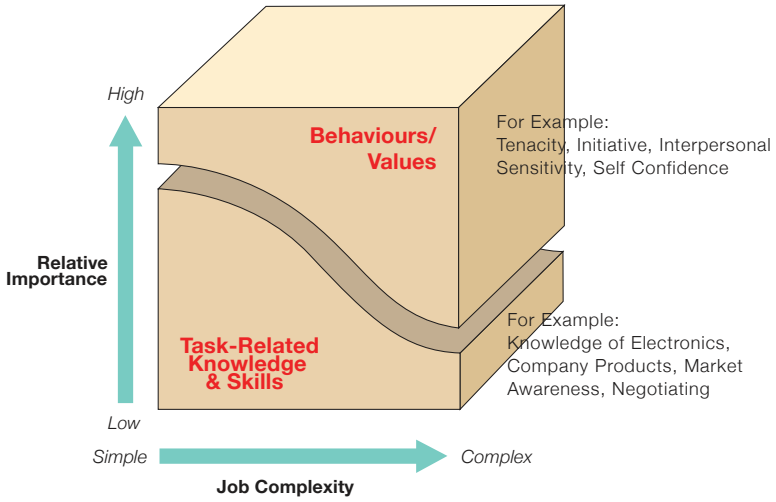
3.2 Definition of Competency Model

A Competency Model is a set of competencies that provide a model for success for a particular organization, level, job or role. It reflects all critical behaviours, skills and knowledge that affect success in a given role.

An individual will be able to use the competency model to identify

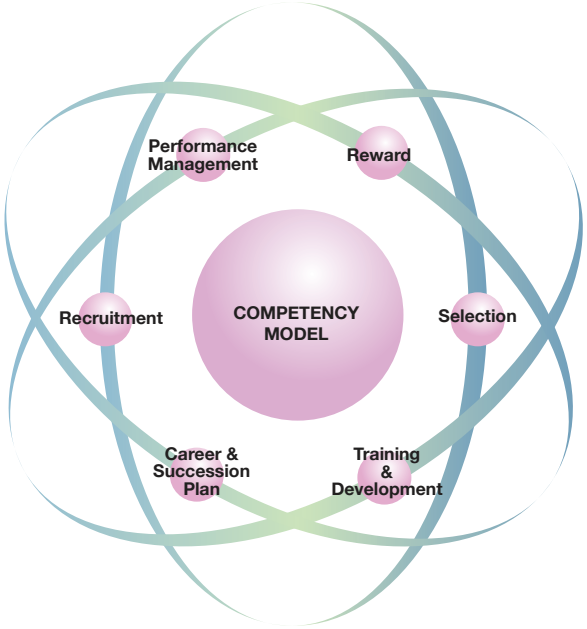
- *Competency requirements for his/her job,*
- *Strengths and areas for improvement in his/her job; and,*
- *Areas for continuous learning and professional growth.*

Some competencies become more important as job complexity increases. This is illustrated in the following diagram.

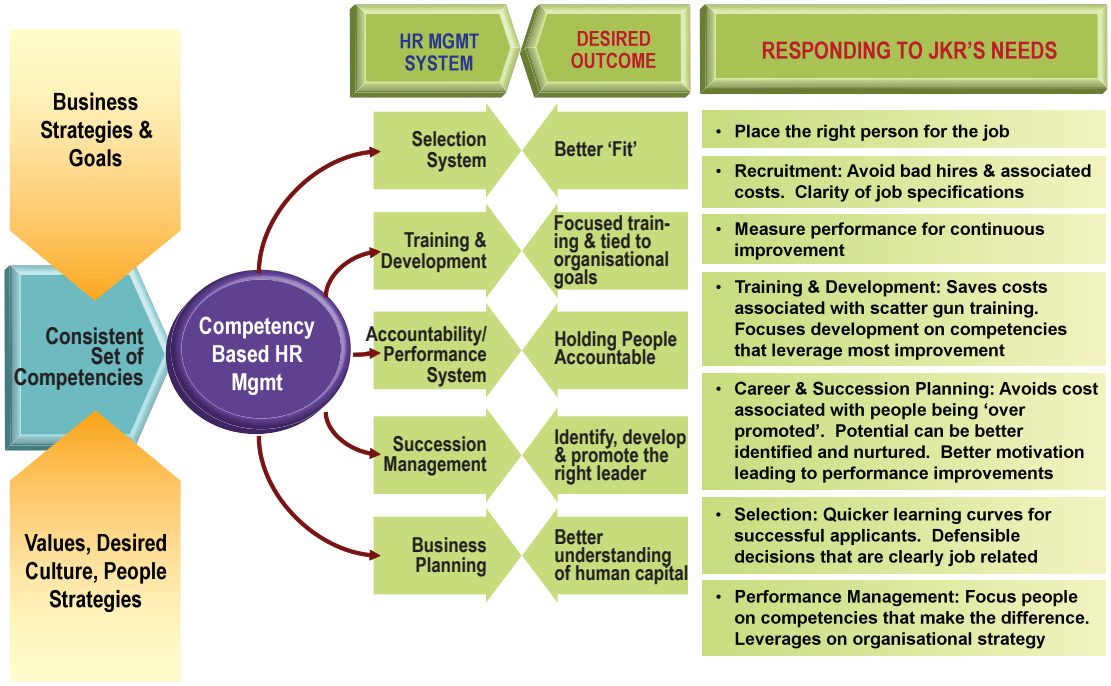


3.3 Applications of Competency Model (Competency Based Human Resource Management)

The application of a competency model spans across the functional roles in human resource management.

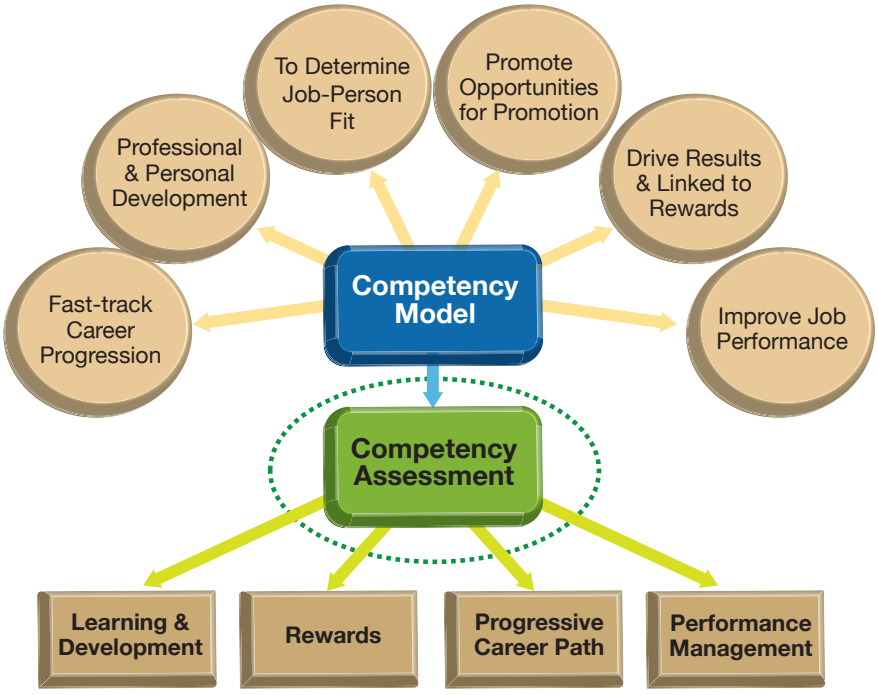


3.4 Benefits of Competency Model

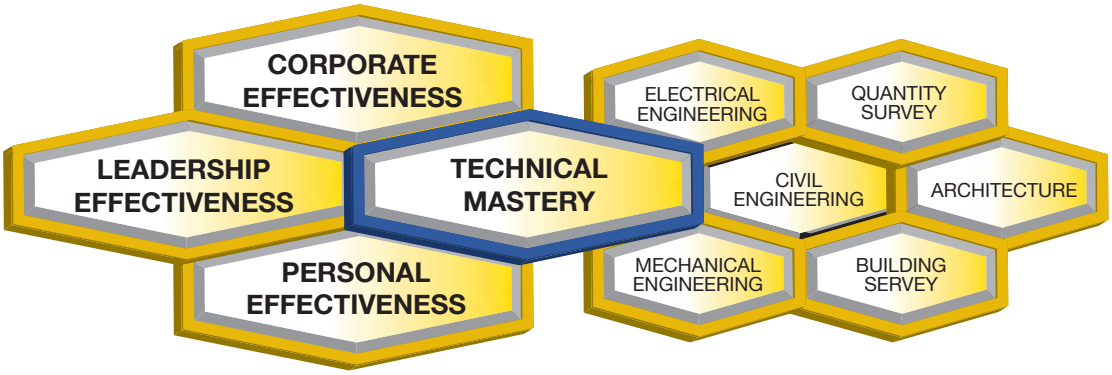


3.5 Benefit to the Workforce

Employees always ask "What-Is-In-It-For-Me" in using competencies? Competencies can help an individual to grow and expand own capabilities of knowledge and skills. It helps to build one's career progression, enhance learning & development, and improving job performance that will link to rewards.



4 THE JABATAN KERJA RAYA MALAYSIA COMPETENCY MODEL



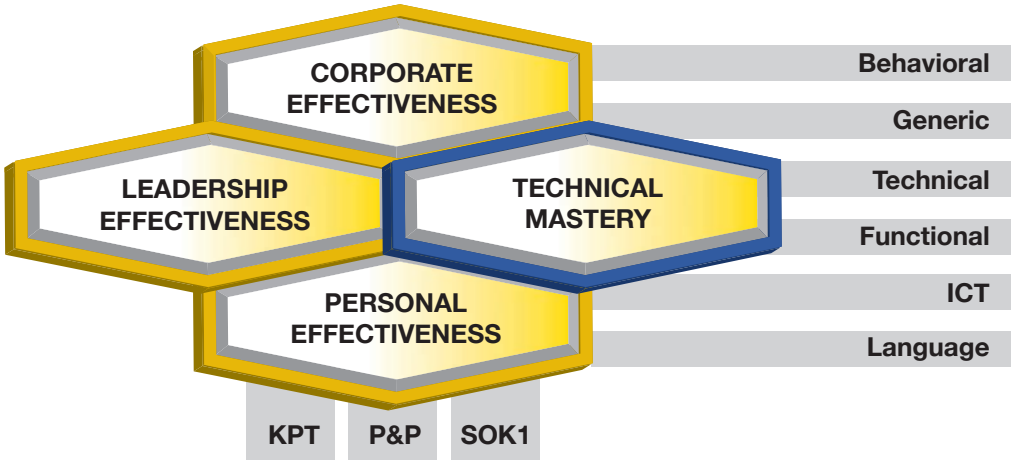
Designed to support the mandate and strategic imperatives of JKR as the lead public service agency entrusted with the upkeep and development of engineering infrastructure in the nation.

Reflects the ethos of JKR to be the centre of excellence for infrastructure development by harnessing creative and innovative human capital and state-of-the-art technology. Lending to the realisation of JKR's aspiration:

- *To be the foremost technical department in national infrastructure development*
- *Possesses multidisciplinary expertise in technical consultancy, project management, and asset/ facilities maintenance management*
- *Matches the 'Strategic Clusters' of JKR transformation blueprint (As illustrated in the following table)*

JKR Strategic Cluster	Parameter for Determining The Required Competencies
Leadership Effectiveness	These are competencies required to drive leadership excellence. It is about driving the JKR mandate at the stakeholders and workforce levels
Corporate Effectiveness	These are competencies required to drive operational excellence
Personal Effectiveness	These are competencies required for individuals to effectively contribute to the organisation
TECHNICAL MASTERY	These are competencies that support the core function of JKR. The listed competencies lends to the technical credibility of JKR in its service delivery. These are not baseline competencies, but critical proficiency areas that underpins the role and unique value propositions of JKR

5 COMPETENCY TYPES & MEASURING COMPETENCY LEVEL



In building the competency framework/model, JKR is guided by; makes reference to; and applies the parameters as defined and applied in the competency framework/model of Jabatan Perkhidmatan Awam Malaysia. This is to ensure uniformity and consistency in the application of competency related information within the Malaysian Civil Service.

In essence, JKR adopts for its application a selected list of competencies from the Behavioural, Functional. Generic, ICT and Language clusters listed in JPA Competency Dictionary.

As 'Service Owner' of the Engineering Service Scheme (Scheme J), JKR undertakes the role defining the relevant competencies for the scheme of service under its purview. This means that JKR is responsible to identify, develop and maintain competencies associated to the associated engineering disciplinary areas under its purview.

The selection of competencies for JKR is based on the following.

Competency Type	Relevance to JKR
Behavioural	Critical to achieving JKR's CURRENT mission Mandatory to achieving JKR's FUTURE mission Achieve overall effectiveness Address customer / stakeholder management
Functional	Important to deliver our KPIs Promote stewardship
Generic/ICT & Language	Important to provide delivery excellence that is guided by a common delivery framework (policies) and tools
Technical	Important to deliver our services Address new & emerging technology Meet core business requirement Unique authority / Subject Matter Expert

The responsibility/ownership in selecting and maintaining the competency list and target levels belongs to the Head of Discipline of JKR.

5.1 Competency Types Built Into the JKR Competency Framework

1. Behavioural/Core Competencies	Underlying characteristics (values) that drive outstanding performance in a job within an organisation
2. Functional Skills/ Knowledge Competencies	Skills/Knowledge used by a department/division and also by several departments/divisions that are found in a Service Classification and Job Position
3. Generic Skills/ Knowledge Competencies	Skills/Knowledge required by the whole service, whether from Service Classification, Service Group, Service Scheme, Job Position or Grade
4. Language & ICT Competencies	Baseline/Entry level skills/knowledge required by the whole service, whether from Service Classification, Service Group, Service Scheme, Job Position or Grade that is intended. Its unique treatment is due to the urgency to develop the basic proficiency levels for the listed competencies (Will eventually be removed)
5. Technical Skills/ Knowledge Competencies	Skills/Knowledge required in the context of the job which are unique to a Job Position

5.2 Level/Scale Definition

The Behavioural, Functional, Generic, ICT, Language and Technical competencies have their own measurement scales.

5.2.1 Level/Scale Definition for Behavioural Competencies

For the Core Competencies, a scale of Level 1 to Level 5 is used, with the lowest level indicating basic or simple illustration of the competency.

Because JKR's Core Competencies are behavioural based, the scale uses degree of sophistication in a particular competency, as indicators. Competencies which are complex and sophisticated are placed at the higher end of the scale. A higher-level behaviour does not always mean more of the same behaviour, but rather, more sophisticated level of the behaviour.

Each competency in this cluster has a unique level definition.

5.2.2 Level/Scale Definition for Functional, Generic, & Technical Competencies

For the Functional, Generic and Technical Competencies, a scale of level 1 to level 6 is used. The scale uses proficiency or mastery in a particular skill as indicators. For example, Level 1 or the lowest level shows entry level and level 5 is the level of an expert.

Level	Definition	Description
6	Strategist	You have the skills to set policies and provide overall direction
5	Expert	You are a source of reference to others who seek advice in a particular area/field. You are able to develop and mentor others I a technique, procedure or process. Able to create best practice in the organisation or in a broader context
4	Proficient	You have substantial experience and are able to supervise others. You demonstrate this skill independently almost all the time. You are able to diagnose issues, anticipate problems and provide reasoning. You work with practitioners in a specific skill area
3	Competent	You are able to directly apply techniques and use tools/equipment independently. Supervision is necessary from time to time. You are able to diagnose issues, anticipate problems and provide reasoning. You work with practitioners in a specific skill area
2	Basic	You are still learning or have had some prior exposure or have basic knowledge or have had some practice. You are able to analyse and interpret information. Supervision is needed. You know where to obtain help
1	Entry	You are not trained and have no experience

5.2.3 Level/Scale Definition for Language and ICT Competencies

For the Language and ICT Competencies, a scale of level 1 to level 4 is used. The scale uses proficiency or mastery in a particular skill as indicators. For example, Level 1 or the lowest level shows entry level and level 4 is the level of an expert.

Levels for Language Competencies

Level	Definition	Description
4	Mastery	Have mastery of the language; near native; ability to read, understand and write extremely difficult or abstract prose, a wide variety of vocabulary, idioms, colloquialisms, and slang
3	Proficient	Able to read and write fluently and accurately in all styles and forms of the language on any subject as well as those pertinent to professional needs
2	Basic	Able to read and write reasonably well and appreciate a wide variety of texts as well as those pertinent to professional needs
1	Poor	Poor command of the language

Levels for ICT Competencies

Level	Definition	Description
4	Mastery	High proficiency in understanding, applying & teaching of software applications
3	Proficient	Can understand & apply software applications well
2	Basic	Basic knowledge of software application; may understand and/or apply some parts of the software applications
1	None	No knowledge of the software applications

5.3 Assignment of Competencies & Competency Level to Standard/Actual Positions

Competencies and competency level assignment are done base on the job requirement. However, a unique setup for JKR (and also for the Malaysian Civil Service), is the application of Standard Positions and Actual Positions.

Standard Position (SP): This label is used to recognise and organise jobs according to the assignment of jobs based on its job scheme and discipline. For example, a J41 job of a Civil Engineer, the competencies and the competency levels for this job are those relevant to the Civil Engineering competencies.

Actual Position (AP): This label is used to recognise and organise jobs according to the assignment (posting) of jobs based on the actual role of the job in the organisation (Job Group). For example, a J41 of a Civil Engineer that is assigned to 'Open-Post in Corporate Management Branch, the competencies and the competency levels for this job are those relevant to J41 jobs in that particular branch.

Competencies and competency level between Standard Positions and Actual Position for the Behavioural, Functional, Generic, ICT and Language are similar except for possible variations for the target level assignment.

Competencies and competency level between Standard Positions and Actual Position for the Technical competencies will vary based on the actual function of the job

Job incumbents are expected to possess and attain the expected competencies and levels assigned to both the Standard and Actual Positions. To ensure that the job is delivered to its expectation, the Actual Position competencies are used to profile the job incumbent. For career management and personal development, the Standard Position competencies are used.

6 LIST OF COMPETENCIES TO SUPPORT JKR'S COMPETENCY MODEL

6.1 Behavioural, Functional, Generic, ICT & Language Competencies.

Nos.	Competency Name	Type	Group	Source
1.	Achievement Orientation	Behavior	Corporate Effectiveness	JPA
2.	Adaptive Thinking	Behavior	Corporate Effectiveness	JPA
3.	Desire For Knowledge	Behavior	Corporate Effectiveness	JPA
4.	Holding People Accountable	Behavior	Leadership Effectiveness	JPA
5.	Impact & Influence	Behavior	Corporate Effectiveness	JPA
6.	Professional Mastery	Behavior	Personal Effectiveness	JPA
7.	Visionary Leadership	Behavior	Leadership Effectiveness	JPA
8.	Advisory & Consultation	Functional	Personal Effectiveness	JPA
9.	Crisis Management Resolution	Functional	Personal Effectiveness	JPA
10.	Financial Management	Functional	Personal Effectiveness	JPA
11.	Quality Management	Functional	Personal Effectiveness	JPA
12.	Communication	Generic	Corporate Effectiveness	JPA
13.	Planning & Organisation	Generic	Personal Effectiveness	JPA
14.	People Management	Generic	Personal Effectiveness	JPA
15.	Policies & Procedures	Generic	Personal Effectiveness	JPA
16.	Customer Service	Generic	Personal Effectiveness	JPA
17.	EG Applications	ICT	Corporate Effectiveness	JPA
18.	SKALA	ICT	Corporate Effectiveness	JKR
19.	English Language	Language	Corporate Effectiveness	JPA

6.2 Technical Competencies (Generic) For All Disciplines.

Nos.	Competency Name	Type	Group	Source
1.	Project Management Methodologist	Technical (generic)	Technical Mastery	JKR
2.	Project Management Best Practices	Technical (generic)	Technical Mastery	JKR
3.	Site Supervision & Coordination	Technical (generic)	Technical Mastery	JKR
4.	Total Asset Management	Technical (generic)	Technical Mastery	JKR
5.	Infrastructure Facilities Management	Technical (generic)	Technical Mastery	JKR
6.	Change Management	Technical (generic)	Technical Mastery	JPA
7.	Enterprise System Management	Technical (generic)	Technical Mastery	JPA
8.	Human Resource Strategic Planning	Technical (generic)	Technical Mastery	JKR
9.	Organisational Development	Technical (generic)	Technical Mastery	JKR
10.	ICT Strategic Planning	Technical (generic)	Technical Mastery	JPA
11.	Public Relations	Technical (generic)	Technical Mastery	JPA
12.	Process Re-engineering & Mapping	Technical (generic)	Technical Mastery	JKR
13.	SKALA Management & Administration	Technical (generic)	Technical Mastery	JKR
14.	Workforce Learning & Competencies Management	Technical (generic)	Technical Mastery	JKR
15.	Strategic Thinking	Technical (generic)	Technical Mastery	JKR
16.	Research Methodology	Technical (generic)	Technical Mastery	JKR
17.	Specialisation / Complex Project Methodology	Technical (generic)	Technical Mastery	JKR
18.	System Thinking	Technical (generic)	Technical Mastery	JKR

6.3 Technical Competencies – Civil Engineer

Nos.	Competency Name	Type	Group	Source
1.	Water Resource Planning & Development	Technical (discipline)	Technical Mastery	JKR
2.	Water Demand Management	Technical (discipline)	Technical Mastery	JKR
3.	Water Quality Monitoring	Technical (discipline)	Technical Mastery	JKR
4.	Dam Safety Monitoring	Technical (discipline)	Technical Mastery	JKR
5.	Water Supply Design	Technical (discipline)	Technical Mastery	JKR
6.	Tunneling Design	Technical (discipline)	Technical Mastery	JKR
7.	Structure Analysis and Design	Technical (discipline)	Technical Mastery	JKR
8.	Bridge & Structural Forensic	Technical (discipline)	Technical Mastery	JKR
9.	Bridge Design	Technical (discipline)	Technical Mastery	JKR
10.	Bridge & Building Maintenance	Technical (discipline)	Technical Mastery	JKR
11.	Supervision for building/bridge & other structural work	Technical (discipline)	Technical Mastery	JKR
12.	Marine Structure Design	Technical (discipline)	Technical Mastery	JKR
13.	Airport Planning, Analysis and Design	Technical (discipline)	Technical Mastery	JKR
14.	Sewerage Design	Technical (discipline)	Technical Mastery	JKR
15.	Water Reticulation Design	Technical (discipline)	Technical Mastery	JKR
16.	Sustainable Water Recycling	Technical (discipline)	Technical Mastery	JKR
17.	Drainage Design	Technical (discipline)	Technical Mastery	JKR
18.	Earthwork Design for Building Project	Technical (discipline)	Technical Mastery	JKR
19.	Civil Works Maintenance	Technical (discipline)	Technical Mastery	JKR
20.	Coastal Engineering	Technical (discipline)	Technical Mastery	JKR
21.	Integrated Planning Analysis	Technical (discipline)	Technical Mastery	JKR

Nos.	Competency Name	Type	Group	Source
22.	Traffic Study	Technical (discipline)	Technical Mastery	JKR
23.	Internal Road Design	Technical (discipline)	Technical Mastery	JKR
24.	Geometric Design	Technical (discipline)	Technical Mastery	JKR
25.	Pavement Design	Technical (discipline)	Technical Mastery	JKR
26.	Traffic Management	Technical (discipline)	Technical Mastery	JKR
27.	Road Safety Audit	Technical (discipline)	Technical Mastery	JKR
28.	Road Safety Improvement Programs	Technical (discipline)	Technical Mastery	JKR
29.	Accident Scene Investigation	Technical (discipline)	Technical Mastery	JKR
30.	Pavement Forensic Investigation	Technical (discipline)	Technical Mastery	JKR
31.	Road Maintenance	Technical (discipline)	Technical Mastery	JKR
32.	Supervision of road work	Technical (discipline)	Technical Mastery	JKR
33.	Highway & Road Planning	Technical (discipline)	Technical Mastery	JKR
34.	Road Side Development	Technical (discipline)	Technical Mastery	JKR
35.	Site Investigation	Technical (discipline)	Technical Mastery	JKR
36.	Earthwork and Soil Treatment Design	Technical (discipline)	Technical Mastery	JKR
37.	Foundation Design	Technical (discipline)	Technical Mastery	JKR
38.	Retaining Structure and Slope Stability Design	Technical (discipline)	Technical Mastery	JKR
39.	Geotechnical Forensic Investigation	Technical (discipline)	Technical Mastery	JKR
40.	Slope Maintenance	Technical (discipline)	Technical Mastery	JKR
41.	Environmental Protection Works	Technical (discipline)	Technical Mastery	JKR
42.	Environmental Impact Assessment	Technical (discipline)	Technical Mastery	JKR

6.4 Technical Competencies – Electrical Engineer

Nos.	Competency Name	Type	Group	Source
1.	Internal & External Electrical System Design	Technical (discipline)	Technical Mastery	JKR
2.	HT Electrical Design	Technical (discipline)	Technical Mastery	JKR
3.	Acoustic Treatment	Technical (discipline)	Technical Mastery	JKR
4.	ELV System	Technical (discipline)	Technical Mastery	JKR
5.	ICT System	Technical (discipline)	Technical Mastery	JKR
6.	Usage Application & Customization	Technical (discipline)	Technical Mastery	JKR
7.	Telephony System	Technical (discipline)	Technical Mastery	JKR
8.	Electrical works supervision	Technical (discipline)	Technical Mastery	JKR
9.	Maintenance Management	Technical (discipline)	Technical Mastery	JKR
10.	Electrical Protection System	Technical (discipline)	Technical Mastery	JKR
11.	Safety Inspection of electrical installation	Technical (discipline)	Technical Mastery	JKR
12.	Energy Efficiency & Renewable Energy	Technical (discipline)	Technical Mastery	JKR
13.	Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	Technical (discipline)	Technical Mastery	JKR
14.	Forensic analysis of electrical installation	Technical (discipline)	Technical Mastery	JKR
15.	Accredited Laboratories and technology evaluation.	Technical (discipline)	Technical Mastery	JKR

6.5 Technical Competencies – Mechanical Engineer

Nos.	Competency Name	Type	Group	Source
1.	Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	Technical (discipline)	Technical Mastery	JKR
2.	Design of Fire Fighting System	Technical (discipline)	Technical Mastery	JKR
3.	Design of Lift & Escalator System	Technical (discipline)	Technical Mastery	JKR
4.	Internal Cold Water, Sanitary Plumbing System & Pumping System	Technical (discipline)	Technical Mastery	JKR
5.	Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	Technical (discipline)	Technical Mastery	JKR
6.	Design of Miscellaneous Mechanical Services	Technical (discipline)	Technical Mastery	JKR
7.	Mechanical Specialist Services	Technical (discipline)	Technical Mastery	JKR
8.	D&B Project Implementation (Mechanical)	Technical (discipline)	Technical Mastery	JKR
9.	In-House Project Implementation (Mechanical consultant)	Technical (discipline)	Technical Mastery	JKR
10.	Consultancy Services (mechanical)	Technical (discipline)	Technical Mastery	JKR
11.	Inspection & Evaluation of vehicles / machineries / equipment	Technical (discipline)	Technical Mastery	JKR
12.	Maintenance of vehicles & construction machinery.	Technical (discipline)	Technical Mastery	JKR
13.	Site supervision for mechanical project	Technical (discipline)	Technical Mastery	JKR
14.	Testing & Commissioning of mechanical system	Technical (discipline)	Technical Mastery	JKR
15.	Maintenance of mechanical systems in building	Technical (discipline)	Technical Mastery	JKR
16.	Quarry Operation, Maintenance and Road Surfacing	Technical (discipline)	Technical Mastery	JKR
17.	Quarry Design	Technical (discipline)	Technical Mastery	JKR

6.6 Technical Competencies - Architect

Nos.	Competency Name	Type	Group	Source
1.	Architectural Design Production	Technical (discipline)	Technical Mastery	JKR
2.	Architectural Design Synthesis	Technical (discipline)	Technical Mastery	JKR
3.	Architectural Works Validation	Technical (discipline)	Technical Mastery	JKR
4.	Architectural Audit	Technical (discipline)	Technical Mastery	JKR
5.	Master Planning / Urban Planning	Technical (discipline)	Technical Mastery	JKR
6.	Landscape Design	Technical (discipline)	Technical Mastery	JKR
7.	Interior Design	Technical (discipline)	Technical Mastery	JKR
8.	Conservation and Rehabilitation	Technical (discipline)	Technical Mastery	JKR
9.	Specialized Facility Planning & Design	Technical (discipline)	Technical Mastery	JKR
10.	Pre-development Planning	Technical (discipline)	Technical Mastery	JKR
11.	Architectural ICT	Technical (discipline)	Technical Mastery	JKR
12.	Sustainable Architecture	Technical (discipline)	Technical Mastery	JKR
13.	Building Legislation, statutory requirements and architectural guidelines advisory	Technical (discipline)	Technical Mastery	JKR
14.	Documentation and imaging	Technical (discipline)	Technical Mastery	JKR
15.	Architectural research and innovation	Technical (discipline)	Technical Mastery	JKR

6.7 Technical Competencies – Quantity Surveyor

Nos.	Competency Name	Type	Group	Source
1.	Contractual and Tendering Arrangement	Technical (discipline)	Technical Mastery	JKR
2.	Construction Measurement Practice	Technical (discipline)	Technical Mastery	JKR
3.	Contractual Procurement Practice and Management	Technical (discipline)	Technical Mastery	JKR
4.	Pre-Contract Cost Management	Technical (discipline)	Technical Mastery	JKR
5.	Evaluation and Preparation of Tender Reports	Technical (discipline)	Technical Mastery	JKR
6.	Appointment of QS consultant	Technical (discipline)	Technical Mastery	JKR
7.	Tender Negotiation Management	Technical (discipline)	Technical Mastery	JKR
8.	Practice and Procedure Pertaining to Contract Documentation	Technical (discipline)	Technical Mastery	JKR
9.	Project Financial Management	Technical (discipline)	Technical Mastery	JKR
10.	Contractual Claim Practice and Management	Technical (discipline)	Technical Mastery	JKR
11.	Contractual Time Management	Technical (discipline)	Technical Mastery	JKR
12.	Termination Process Management	Technical (discipline)	Technical Mastery	JKR
13.	Contract Administration Problems	Technical (discipline)	Technical Mastery	JKR
14.	Research & Development of Cost Information and Publications	Technical (discipline)	Technical Mastery	JKR
15.	Quantity Surveying ICT Application	Technical (discipline)	Technical Mastery	JKR
16.	Development of Quantity Surveying ICT Application	Technical (discipline)	Technical Mastery	JKR

6.8 Technical Competencies – Building Surveyor

Nos.	Competency Name	Type	Group	Source
1.	Building Inventory	Technical (discipline)	Technical Mastery	JKR
2.	Building Surveying	Technical (discipline)	Technical Mastery	JKR
3.	Building maintenance management	Technical (discipline)	Technical Mastery	JKR

7 COMPETENCY NAME & DEFINITION

7.1 Behavioural Competencies

No.	Competency Name	Definition
1.	Achievement Orientation	Has a concern for working well or for surpassing a standard of excellence.
2.	Adaptive Thinking	Applies strategic thinking & insights gathered from many areas & adapting it to suit the local context.
3.	Desire For Knowledge	Possesses the desire to know more about things, issues, people, or concepts which is for the purpose of getting a job done, solving a problem, improving a situation or developing oneself.
4.	Holding People Accountable	Has the intent to hold people accountable to standards of performance using one's personal or position power with the long-term aspiration of the Government in mind.
5.	Impact & Influence	Implies the intention to persuade, convince, influence, or impress others (individuals or groups) in order to get them to support the speaker's agenda.
6.	Professional Mastery	The ability to expand & use technical knowledge & distributes work related to others. At the higher level it involves commitment to think about the on-going & evolving needs of the organisation in one's own field of expertise & to initiate & drive the required change initiatives that can best meet these needs.
7.	Visionary Leadership	Sets directions, inspire team commitment and has the desire to lead others into meeting organisation/ agency/ office goals.

7.2 Functional Competencies

No.	Competency Name	Definition
1.	Advisory & Consultation	Ability to give advice or information to others based on own area of expertise to promote better understanding of relevant topics thereby enhancing decision-making for others
2.	Crisis Management Resolution	Ability to respond in a timely and effective manner and take the necessary corrective actions to rectify and control specific situations and assure the interests of all parties are protected
3.	Financial Management	Ability to compile and manage budgets, control cash flow, institute risk management and administer tender procurement processes in accordance to generally recognised financial practices to ensure the achievement of strategic organisation objectives

No.	Competency Name	Definition
4.	Quality Management	Ability to establish, control and assure adherence to plans, policies, procedures and standards to achieve organisation objectives. Activities include constant monitoring of work performance, improvement of quality standards and benchmarking to meet and exceed work requirements and process improvement. This is to inculcate quality culture and ensure Quality Management initiatives are embraced and practised by the organization.

7.3 Generic Competencies

No.	Competency Name	Definition
1.	Communication	Ability to exchange information and ideas in verbal and written form and convey messages in a manner appropriate to the audience using the right communication tools and means
2.	Planning & Organisation	Ability to establish objectives, identify needed resources and/or formulate/co-ordinate logically ordered activities including meetings, events/functions, programs, etc. to accomplish Government objectives
3.	People Management	Ability to manage, supervise and/or develop human resources effectively. This may be achieved through human resource management practices such as performance management; compensation and benefits, coaching, counselling and motivation to ensure Government objectives are achieved. At the lowest level, this skill includes having the ability to deal with peers/superiors in their daily activities
4.	Policies & Procedures	Ability to comprehend, formulate and enforce Governmental policies, laws, regulations and procedures, so as to ensure that all actions and activities taken by affected parties are aligned to the policies and procedures set. For example, compliance to General Order procedures, adherence to operating theatre protocols, building by-laws, livestock industry-related laws, among others
5.	Customer Service	Ability to understand and respond to customers' needs and requirements and provide quality services and strives to continuously improve the services to public and private sectors

7.4 ICT & Language Competencies

No.	Competency Name	Definition
1.	EG Applications	Ability to use Electronic Government (EG) applications such as Generic Office Environment (GOE), Project Monitoring System (PMS) and Human Resource Management System (HRMIS) and use word processing, spreadsheet, presentation, databases, email and internet software in order to complete work-related tasks
2.	SKALA	Ability to use SKALA to complete work-related tasks
3.	English Language	Ability to conduct a communication (verbal & written) at a proficiency level sufficient to clearly communicate message(s) or idea(s) influencing/inducing response to the message(s) or idea(s)

7.5 Technical Competencies (Generic) For all Disciplines

No.	Competency Name	Definition
1.	Project Management Methodologist	Ability to conduct research and integrate new technologies in project management to enhance current project management practices and policies; promoting the technologies, tools and techniques to JKR's project managers.
2.	Project Management Best Practices	Ability to apply project management best practices based on project management's nine knowledge areas (Integration Management, Scope Management, Time Management, Cost Management, Quality Management, Human Resource Management, Communication Management, Risk Management, Procurement Management) which benchmarked to international standard and using the tools and techniques developed by JKR.
3.	Site Supervision & Coordination	Ability to conduct on site/direct/audit supervision to ensure the compliance to the technical drawings, specifications, method statements, best engineering practices, contract requirements, legal requirements such as OSHA, SPK and EIA, and also verify the the testing procedures and results for the works or materials. Able to coordinate the construction works involving various parties such as internal teams, contractors and consultants, and also ensure the quality of materials, product used, work and finishes. Also able to manage, facilitate and conduct system and process audit and giving accurate evaluations. Understand system principles, methods and techniques in auditing of SPK,EMS and OHSAS"

No.	Competency Name	Definition
4.	Total Asset Management	Ability to apply internationally recognised best practices in asset management. Conduct research and integrate new technologies in asset management to enhance current asset management practices and policies and promoting the application of technologies, tools and techniques to all government agencies.
5.	Infrastructure Facilities Management	Ability to implement on the practices of total asset management of the government building and infrastructure and also conduct compliant audit based on written policies & procedures.
6.	Change Management	Ability to manage change, translate and apply system/process in working environment and enable people to perform their current jobs effectively and efficiently in order to achieve desired business objective while undergoing the change process.
7.	Enterprise System Management	Ability to monitor, manage and maintain large-scale computer network, equipment and environment in the context of the business of the organisation.
8.	Human Resource Strategic Planning	Ability to identify organisational workforce requirements and source initiatives for resourcing, movements, career plan, succession plan and development requirements in alignment with organisational policies and strategic needs.
9.	Organisational Development	Ability to define, implement and coordinate organisational performance expectations and source initiatives for enhancements in alignment with organisational policies and strategic needs.
10.	ICT Strategic Planning	Ability to update, support and plan long term technical infrastructure needs to ensure continuous development of a knowledge-based environment that utilises the full capabilities of the information and communication technologies.
11.	Public Relations	Ability to plan, co-ordinate, organise and monitor events and resources with various parties in promoting public awareness, education and acceptance in order to ensure successful implementation of government policies and plans. This aims at establishing and maintaining a positive public image of the Government.
12.	Process Re-engineering & Mapping	Ability to identify organisational process/delivery model/ framework needs and source initiatives for enhancements in alignment with organisational policies and strategic needs such as business process improvement project, integrate various management systems in JKR such as SPK/EMS/ OHSAS, etc.

No.	Competency Name	Definition
13.	SKALA Management & Administration	Understands the parameters (strengths, weaknesses, etc.) of SKALA and to define and implement administrative policies affecting the use of and enhancements to the system.
14.	Workforce Learning & Competencies Management	Ability to identify requirements and source programs to develop workforce capabilities via adult learning methodologies, models and knowledge taxonomy; in alignment with organisational policies and strategic needs.
15.	Strategic Thinking	Ability to analyse organisational environment and stakeholders' expectations to devise holistic and long term strategic plans (5 years time horizon) and mid term tactical plans (1-2 years time horizon) to meet the Government's and JKR's objectives and goals.
16.	Research Methodology	Ability to coordinate research programs and alignment with organisational policies and strategic needs and also able to carried out R&D in his own area of expertise in identify, gather, analyse, validate and use information for specific purposes.
17.	Specialisation / Complex Project Methodology	Ability to identify requirements and source programs to develop workforce capabilities via adult learning methodologies, models and knowledge taxonomy; in alignment with organisational policies and strategic needs. Specilisation areas either partnering, relational contracting, risk, CBHRM, PM Competency, Scheduling, ACAT, Project Health Check and any other new initiatives.
18.	System Thinking	Ability to understand a situation or problem by identifying patterns or connections and addressing key underlying issues. It includes organising the parts of an issue or situation in a systematic way, to go beyond the conventional and willingness to try out different solutions.

7.6 Technical Competencies – Civil Engineer

No.	Competency Name	Definition
1.	Water Resource Planning & Development	Ability to forecast future water demand and planning for future water resources development
2.	Water Demand Management	Ability to understand strategies and techniques of water demand management and ability to plan, implement and operationalise these techniques
3.	Water Quality Monitoring	Ability to understand the various water quality parameters for raw and drinking water, water quality monitoring programme, able to analyse water quality data to determine their compliance.
4.	Dam Safety Monitoring	Ability to understand the various functions of dam components, monitoring instrumentation, ability to analyse monitored data to determine dam performance and safety.
5.	Water Supply Design	Ability to carry out conceptual design of water supply system such as intake works, pumping system, treatment works, storage and distribution system.
6.	Tunneling Design	Ability to understand and analysis matters pertaining to tunnel safety during construction, analysis of tunnel design, rock classifications and rock burst analysis
7.	Structure Analysis and Design	Ability to analyse and design structure (timber/reinforce concrete/steel/composites/ibs) of various categories manually or using computer aided design software in accordance to standards and Codes of Practice.
8.	Bridge & Structural Forensic	Ability to carry out structure appraisal including visual inspection, detail inspection, material testing, evaluation, assessment and propose repair option.
9.	Bridge Design	Ability to identify and determine type of bridge (e.g. rc beam, precast beam, box girder, arch, suspension bridge, cable stayed), technical analysis and result interpretation based on bridge behaviour, based on the result (inclusive of road design input, hydraulic and hydrology calculation, structural design, foundation design) to design the bridge and transfer the design output to drawings & specification. Estimate the bridge construction cost and to carry out design audit on project site.
10.	Bridge & Building Maintenance	Ability to plan, execute and control preventive or periodic maintenance of building structural elements.

No.	Competency Name	Definition
11.	Supervision for building/bridge & other structural work	Ability to supervise the construction of building and other structural work in accordance to conditions of contract, technical drawings, specifications, guidelines, code of practices,QMS, EMS OS&H management system and PM Body of Knowledge. Able to manage relevant stakeholders and clients towards effective and efficient completion of the building and bridge structure.
12.	Marine Structure Design	Ability to identify and determine configuration of jetty, design analysis and result interpretation based on site condition and result of hydraulic study and transfer the design output to drawings & specification. Estimate the jetty construction cost and to carry out design audit on project site.
13.	Airport Planning, Analysis and Design	Ability to plan, analyse and design the airport infrastructure system based on international code of practices and standards
14.	Sewerage Design	Ability to analyse, compute & design sewerage system with compliance to IWK & SPAN including Population Equivalent & sewerline computation, type of pipes and sewarage treatment method.
15.	Water Reticulation Design	Ability to analyse, compute & design water reticulation system with compliance to SPAN & State Water Authority) including acquiring source of supply, estimating water demand and storage requirement, type of pipes and storage tanks.
16.	Sustainable Water Recycling	Ability to explore, develop and promote a sustainable water recycling system.
17.	Drainage Design	Ability to analyse, compute & design drainage system with compliance to MASMA and REAM drainage guideline including understanding concept, Determination of catchment and drainage network , Hydroligical & hydraulic computation , types of drain or culvert , and retention or detention system.
18.	Earthwork Design for Building Project	Ability to analyse, compute & design of earthworks including understanding soil properties, determining platform levels, Earthwork volume computation , slope & retaining structures requirement, ESCP, ground treatment requirement and construction method & testing.
19.	Civil Works Maintenance	Ability to plan, execute and control (preventive or periodic) maintenance of civil works facilities.

No.	Competency Name	Definition
20.	Coastal Engineering	Ability to analysis and compute the modeling of coastal hydraulic study (wave, wind, current & tide forecasting) based on hydrographic survey data and marine geotechnical data to Identify and determine the best configuration of jetty for any development at coastal area.
21.	Integrated Planning Analysis	Ability to analyse portfolio, program and project masterplan and identify all requirements to ensure effective delivery of constructed asset.
22.	Traffic Study	Ability to study and analyse traffic capacity - Level of Service (LOS) for Roads and Highways, traffic forecast, traffic simulation.
23.	Internal Road Design	Ability to analyse, compute & design internal road with compliance to Arahan Teknik Jalan & JKR Road Specifications including geometrical requirements, pavement design, road furniture, signages and junctions design.
24.	Geometric Design	Ability to plan, identify alignment and design roadways taking into account the components of road design such as Horizontal Alignment, Vertical Profile, and Cross Section.
25.	Pavement Design	Ability to study, identify and design road pavement, taking into account the traffic data analysis, design life and CBR of subgrade.
26.	Traffic Management	Ability to study, identify, design and monitor of traffic management.
27.	Road Safety Audit	Ability to implement formal inspection at the planning, design, and construction of a road project and operational levels for existing roads to identify potential hazards to road users.
28.	Road Safety Improvement Programs	Ability to manage and analyse data for the programs to be implemented and have the skill in carrying out investigation and study of accident locations, design concept and reassess the programs' effectiveness.
29.	Accident Scene Investigation	Ability to perform the method of investigation to identify causes of accidents and propose action improvement.
30.	Pavement Forensic Investigation	Ability to perform method of investigation to identify sources of pavement damages and propose repair action
31.	Road Maintenance	Ability to identify the functions of structural components, types and causes of defects as well as the optimum remedial actions required (preventive or periodic maintenance).

No.	Competency Name	Definition
32.	Supervision of road work	Ability to supervise the construction of road works in accordance to conditions of contracts technical drawings, specifications, guidelines, code of practices, QMS, EMS, OS&H management system and PM Body of Knowledge. Able to manage relevant stakeholders and clients towards effective and efficient completion of the road.
33.	Highway & Road Planning	Ability to identify, analyse the requirements for highway and road development based on technical and financial data.
34.	Site Investigation	Ability to plan, manage, monitor / supervise and interprete data from soil investigation works.
35.	Earthwork and Soil Treatment Design	Ability to plan, design and identify suitable materials or unsuitable materials (USM) for construction. Also able to plan, design and select the most suitable and optimal soil treatment methods.
36.	Foundation Design	Ability to plan, design and make recommendations for an appropriate foundation structures. Also able to analyze results from tests conducted on site.
37.	Retaining Structure and Slope Stability Design	Ability to plan, analyse the stability, design and select the most suitable and optimal type of retaining structures or slope treatment methods.
38.	Geotechnical Forensic Investigation	Skill to perform method of investigation to identify causes of geotechnical failure and propose remedial works.
39.	Slope Maintenance	Ability to identify the functions of structural components, types and causes of defects as well as the optimum remedial actions required (preventive or periodic maintenance), and able to use the Slope-W software.
40.	Environmental Protection Works	Ability to plan, identify and design environmental mitigation measures, including preparing Environmental Management Plan (EMP) and Environmental Protection Works (EPW).
41.	Environmental Impact Assessment	Ability to identify the requirement of EQA (Environmental Quality Act) and others relevant Act and carry out audit for environmental aspect based on JKR EMS ISO 14001.
42.	Road Side Development	Ability to plan, analyse, execute, manage and control of road side development program with compliance to “Akta Pengangkutan Jalan 1987’, local authorities policy and other relevant act to ensure effective delivery of constructured asset.

7.7 Technical Competencies – Electrical Engineer

No.	Competency Name	Definition
1.	Internal & External Electrical System Design	Ability to design an efficient basic internal and external electrical installation system for buildings. It includes illumination design, calculated load, selection of type of cable and size, power distribution system, lightning protection and earthing system, backup system (UPS, genset), street lighting and traffic signal system.
2.	HT Electrical Design	Ability to design an efficient high voltage electrical installation (above 415 V) that include power distribution, power transformer, selection of switchgear, cabling and Ring Main Unit.
3.	Acoustic Treatment	Ability to understand the sciences of sound (Acoustics) both physical and disturbance (in air), psychophysical (perceived by the ear) aspects. To apply the principles of acoustics to the audio arts/field. To understand the fundamental of sound and its effects. To design, supervise, test and commission specialised audio spaces such as studios, control rooms, auditoriums, etc.
4.	ELV System	Ability to design Security System (Public Address System, CCTV System, Card Access System and Electronic Security System), Communication System (Conference System, Video Conference System, Fireman Intercom System, Intercom System, SMATV/FM System, and selection of equipment such as Electronic Display Board System, Electronic Info Kiosk System, Master Clock. Also ability to design audio visual system which include Sound Reinforcement System, Audio Visual System, Stage Lighting System, and Stage Curtain System.
5.	ICT System	Ability to design, supervise, test and commission the passive network that meet client requirement with expected cost, time and quality. It include the design of network cabling infrastructure (Internal & external), use of network infra tester and analyze the result data. Ability to design active network equipment for networking system that conform to client's requirement. It include the configuration of network and server, analyze network security test, UPS test and wireless test. Ability to design and understand the requirement of data centre/server room and provide sufficient information of room requirement to interdicipline of electrical, mechanical, architecture, and civil.

No.	Competency Name	Definition
6.	Usage Application & Customization	Ability to give a useful tool to be used for project management and documentation such as jPengurusan, cd tender and jBina. Other applications are also useful to end-user such as Hospital Information system, Perimeter fencing and Energy management. For online project monitoring, clients and project managers able to monitor the system performance from the office using tools such as jSCADA and jVision). Ability to understand and respond to end-user' needs and requirements and provide quality services to clients (online customer portal).
7.	Telephony System	Ability to design conventional/VoIP/IP telephony system which meet client requirement with expected cost, time and quality. It includes the ability to do the test to verify the system.
8.	Electrical works supervision	Ability to interpret electrical requirement and setting quality benchmark for the works on site. Ensuring compliance of quality installation according to JKR Specification, best engineering practices and use latest technology. Be able to understand on project monitoring tools. Identify and resolve problem occurring on site regarding electrical matter. Ability to apply testing knowledge and skill on procedures and parameters that required for such equipment or installation. Be able to advice on alternative method on how to achieve those parameter required. Ability to conduct testing and commissioning standard procedures. Ability to understand and apply knowledge and skills on standard practices in calibrating and setting of protective devices in electrical installation. Ability to interpret result (analytical).
9.	Maintenance Management	Ability to plan electrical maintenance works yearly (Pelan Bisnes Senggara Tahunan). Preparing documentation, scope of works and cost (Anggaran Peruntukan Senggara Tahunan). Regular supervision and reporting during execution of maintenance programme, interpret, analyse and provide advisory information on electrical maintenance as requested, understand standard operating guidelines for electrical installation and Manual Prosedur Senggara. Ability to apply knowledge and understand on operation equipment such as switching, operation of electrical device, relays, etc. Supervise the installation as per JKR specification and best engineering practices. Also be able understand on troubleshooting to all electrical equipment.
10.	Electrical Protection System	Ability to understand and apply knowledge and skills on standard practices in calibrating and setting of protective devices in electrical installation. Ability to interpret result (analytical).

No.	Competency Name	Definition
11.	Safety Inspection of electrical installation	Ability to understand and apply knowledge on specifications, rules and regulation in undertaking inspection on electrical installation to ensure electrical safety on government premises. It includes the ability to analyse the finding and give suggestion for improvement and lesson learnt.
12.	Energy Efficiency & Renewable Energy	Ability to understand the principle of energy efficiency and renewable energy in accordance with MS standards and energy policy and undertakes to carry out energy audit and analyze the result and advice the customer accordingly.
13.	Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	Ability to verify, quality evaluation and carry out testing as per requirement of procedure and laboratory in order to make sure that materials complied to the required standards, JKR specifications and that the manufacturing activities are in accordance to the required standards, JKR specifications, Registrar of Company Act and Electricity Regulations 1994.
14.	Forensic analysis of electrical installation	Ability to identify the root cause of the faults in an installation including the material, products or component that fail or do not function as intended. Attendance of forensic training is compulsory. Ability to write a technical report.
15.	Accredited Laboratories and technology evaluation.	Application of testing is in accordance with standard MS ISO/ IEC 17025: Competence Testing Laboratories. Ability to carry out tripping tests for the MCCB, MCB and ballast's power loss in order to make sure that the materials complied to the required standards and JKR Specifications.

7.8 Technical Competencies – Mechanical Engineer

No.	Competency Name	Definition
1.	Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	Able to do heat load calculation, overall system design, system & equipment selection, air side design, water side design, refrigerant side design, hydraulic calculation for piping design, cost estimation, use application for thermal analysis, prepare tender document and technical evaluation.
2.	Design of Fire Fighting System	Able to do hydraulic calculation for piping design, total flooding system design, battery sizing, fuel consumption, system design, system & equipment selection, cost estimation, prepare tender document and technical evaluation.
3.	Design of Lift & Escalator System	Able to do cost estimation, lift traffic analysis, system & equipment selection, system design, prepare tender document and technical evaluation.
4.	Internal Cold Water, Sanitary Plumbing System & Pumping System	Able to do system design, hydraulic calculation for piping design, water demand calculation, battery sizing, fuel consumption, system & equipment selection, cost estimation, prepare tender document and technical evaluation.
5.	Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	Able to do system design, system & equipment selection, hydraulic calculation for piping design (medical & lab gas), pipe sizing, storage capacity, exhaust fan calculation (fume cupboard), cost estimation, prepare tender document and technical evaluation.
6.	Design of Miscellaneous Mechanical Services	Able to do system design, hydraulic calculation for piping design (compressed air), fuel dispensing system, crane, hoist & other equipment selection and cost estimation, prepare tender document and technical evaluation.
7.	Mechanical Specialist Services	Ability to conduct R&D, forensic and technical advice on new technology, material and equipment/system performance for mechanical services.
8.	D&B Project Implementation (Mechanical)	Ability to prepare mechanical work need statement, produce technical evaluation report of contractor's proposal based on need statement and specification including identifying weightage scoring for tenderers, generating Non Compliance Report wherever applicable and cost estimation.
9.	In-House Project Implementation (Mechanical consultant)	Ability to prepare term of reference, evaluation of Technical and Financial Proposal (Cadangan Teknikal dan Kewangan), Auditing Design Concept for suitability and appropriates, Letter Of Appointment, Memorandum of Agreement and Recommendation of Payment.

No.	Competency Name	Definition
10.	Consultancy Services (mechanical)	Ability to provide a range of mechanical engineering consultancy services especially in the field of vehicles, construction machineries, static plants, locomotives, quarry, mechanical services in the building etc. depending on job position, which includes design, procurement , installation, maintenance, feasibility studies, design/construction audit, provide input for formulation of relevant Acts & Regulations, Cost Benefit Analysis(CBA) and Value Engineering(VE).
11.	Inspection & Evaluation of vehicles / machineries / equipment	Able to do visual inspection to identify the condition of the vehicles / machineries/ plants/ equipments, identify the damages, test the operation and performance, estimate the repair cost and life span, recommendation for disposal (Beyond Economic repair-BER) and for evaluation purposes.
12.	Maintenance of vehicles & construction machinery.	Able to plan, monitor and control the scheduled maintenance and breakdown maintenance including scheduled shutdown, verify the repair work to be carried out, identify the resources to do the maintenance jobs, spare parts availability, supervise repair work, certified the completed job, control the repair cost and witness the testing and commissioning job.
13.	Site supervision for mechanical project	Ability to supervise mechanical installation work according to working drawing, specifications, method statements and best practice and setting quality benchmark for the works on site, including coordinating with others, control & monitor work scheduling and resolve problem occurring on site regarding mechanical job.
14.	Testing & Commissioning of mechanical system	Ability to witness testing procedures and processes of mechanical installation project according to testing specifications and acceptance criteria, and verify the testing data and performance of the system , including coordinating with others, control & monitor work scheduling, resolve problem occurring on site, identify the defect and arranging for handing over to client.
15.	Maintenance of mechanical systems in building	Able to plan, monitor and control the scheduled maintenance and breakdown maintenance, audit the performance of the system including scheduled shutdown, verify the repair work to be carried out, identify the resources to do the maintenance jobs, spare parts availability, supervise repair work, certified the completed job, control the repair cost and witness the testing and commissioning job.
16.	Quarry Operation, Maintenance and Road Surfacing	Able to design and supervise work of quarry operation & component, monitor and control the maintenance of quarry plants & vehicles and Able to manage the road resurfacing.

No.	Competency Name	Definition
17.	Quarry Design	Able to design overall system of quarry operation or upgrading the existing quarry operation, including identifying the capacity, design of production line layout and support services (office, store, workshop, etc.), design of certain equipment, selection of equipment for production lines and environmental control system.

7.9 Technical Competencies – Architect

No.	Competency Name	Definition
1.	Architectural Design Production	Ability to analyse the project/client brief into an architectural design solution that corresponds to functional requirements, budget and sustainability. Ability to evaluate, review and produce/ approve design concepts, detailed design and specification up to tender documentation stage.
2.	Architectural Design Synthesis	Ability to lead a team of designers and to synthesize desired design output with compliance to all relevant policies, bye laws, circulars and statutory requirements. Ability to assure a design output that achieves architectural best practice.
3.	Architectural Works Validation	Ability to set standards, assess and approve quality of materials/ workmanship based on industry standards. Ability to propose solutions to problems relating to architectural works.
4.	Architectural Audit	Ability to conduct project appraisal, post-occupancy evaluation and other audits to establish data base, specific to performance and compliance of architectural design and materials.
5.	Master Planning / Urban Planning	Ability to know, understand and apply master planning knowledge and skills in producing, analysing, coordinating and evaluating masterplan for a project proposal taking into consideration project brief, planning concepts, philosophy, zoning, statutory requirement and future needs.
6.	Landscape Design	Ability to know, understand and apply landscape design knowledge and skills in producing, analysing, coordinating and evaluating landscape proposal for a project taking into consideration project brief, planning concepts, philosophy, zoning, statutory requirement, facilities management and future needs in order to meet the desired requirement.

No.	Competency Name	Definition
7.	Interior Design	Ability to know, understand and apply interior design knowledge and skills in producing, analysing, coordinating and evaluating interior design proposal for a project taking into consideration project brief, planning concepts, philosophy, and future needs.
8.	Conservation and Rehabilitation	Ability to know, understand and apply conservation and rehabilitation knowledge and skills in producing, analysing, coordinating and evaluating conservation and rehabilitation proposal for a project taking into consideration project brief, concepts, philosophy, statutory requirements, facilities management and future needs.
9.	Specialized Facility Planning & Design	Ability to know, understand and apply specialized facility planning and design knowledge and skills in producing, analysing, coordinating and evaluating specialized facility planning and design proposal for a project taking into consideration project brief, planning concepts, philosophy, and future needs.
10.	Pre-development Planning	Ability to advise/consult a range of architectural services which includes brief development; design process, procurement and feasibility studies.
11.	Architectural ICT	Ability to give advice/consultation services/strategise on CADD (Computer Aided Design & Drafting), including standardized conventions, templates, BIM management, architectural presentation including modeling, producing illustration/ animation.
12.	Sustainable Architecture	Ability to implement/advise sustainable architecture design strategies in building design such as Green Building, Industrialised Building System, Green Building Materials and Energy Efficiency. Ability to plan and implement passive design strategies in building.
13.	Building Legislation, statutory requirements and architectural guidelines advisory	Ability to give advice/consult/formulate on Building Legislation, statutory requirements and guidelines pertaining to physical development.
14.	Documentation and imaging	Ability to formulate a systematic approach of documentation and imaging control and retrieval dissemination of data and information.
15.	Architectural research and innovation	Ability to implement architectural research in new building technology areas using appropriate research methodologies. Research outcomes to innovate future architectural designs. Ability to improve, standardise and innovate architectural design quality, its standards, guidelines and process.

7.10 Technical Competencies – Quantity Surveyor

No.	Competency Name	Definition
1.	Contractual and Tendering Arrangement	Ability to advice on procurement and implementation methods available to suit the need of particular project including options available for tendering based on latest government policies to HOPT/SBU/stakeholders.
2.	Construction Measurement Practice	Ability to prepare, review, verify and validate Bills of Quantities through understanding of drawings, application Standard Methods of Measurement (SMM) by using available softwares.
3.	Contractual Procurement Practice and Management	Ability to advice and prepare the relevant construction contract and contractual arrangement, specification, preambles, preliminaries and instruction to tenderers including compilation of tender document and tender invitation process.
4.	Pre-Contract Cost Management	Ability to prepare preliminary estimate (PDA), feasibility study, cost plan, tender estimate and life cycle costing.
5.	Evaluation and Preparation of Tender Reports	Ability to assess/evaluate tender in terms of contractors' technical and financial capability and reasonableness of the level of pricing based on current treasury and departmental policies.
6.	Appointment of QS consultant	Ability to prepare term of reference, evaluation of Technical and Financial Proposal (Cadangan Teknikal dan Kewangan), Letter Of Appointment, Memorandum of Agreement and payment matters.
7.	Tender Negotiation Management	Ability to negotiate with the contractor using his knowledge and skills on construction technology and estimating.
8.	Practice and Procedure Pertaining to Contract Documentation	Ability to prepare project budget, Letter of Acceptance, checking insurances and bond, rationalisation of rates and compilation of contract documents.
9.	Project Financial Management	Ability to evaluate, prepare and recommend progress payment and other financial post contract matters until the preparation of final account. (cash flow, value engineering)
10.	Contractual Claim Practice and Management	Ability to evaluate prolongation claim, disruption and dispute pertaining to discrepancies between contract documents.
11.	Contractual Time Management	Ability to appraise and advice on contractual matters pertaining to Extension of Time, Certificate of Non Completion, Certificate of Practical Completion and Certificate of Making Good Defects taking into account of the relevant contractual provisions.
12.	Termination Process Management	Ability to give contractual advice on termination process and procedures and relevant consequential actions.

No.	Competency Name	Definition
13.	Contract Administration Problems	Ability to advice on the contractual problems with regards to the provision of construction contract and relevant construction law.
14.	Research & Development of Cost Informations and Publications	Ability to collect, analyse, synthesise and integrate all construction cost data and materials and create to produce publication comprising of Schedule of Rates, Jadual Kadar Harga Kerja-Kerja Kecil dan Memperbaiki, Elemental Cost Analysis, Tender Price Index and Rates Online.
15.	Quantity Surveying ICT Application	Ability to understand the QS practice to use the relevant computer packages pertaining to QS related software.
16.	Development of Quantity Surveying ICT Application	Ability to conduct research, identify and provide information and data for the development / maintenance of Quantity Surveying ICT application.

7.11 Technical Competencies – Building Surveyor

No.	Competency Name	Definition
1.	Building Inventory	Ability to plan, coordinate, conduct the registration of the government buildings including providing technical inputs for ICT system development, aset registration prosedure auditing, promoting the application of the Asset Registration System, analysis and reporting.
2.	Building Surveying	Ability to apply internationally recognised best practices in Building surveying to enhance Building Surveying practices, policies and promoting the application of technologies, tools and techniques to all government agencies. Ability to plan, coordinate, implement/execute the yearly program and activity for inspection/auditing of building through investigation, inspection, survey for building conditions during operation and maintenance, space management to identify the effectiveness usage of the space and conservation for historical building including preparation of dilapidation reports, confirmation for upgrading, restoration & rehabilitation, disposal and cost estimation. Ability to analyse and prepare reports relate to Building Surveying aspect during construction phase and after construction for existing building, building materials comply with legal, standards, specifications and for future maintenance.
3.	Building maintenance management	Ability to develop and implement maintenance program for all government buildings including to identify maintenance scope, cost estimation, budget forecasting(5 years), outsourcing contract/tender, Agreed Service Level/KPI and etc.

8 BEHAVIOURAL COMPETENCIES EXTENDED/LEVEL DEFINITION

8.1 Achievement Orientation

Definition	A concern for working well or for surpassing a standard of excellence. The standard may be one's own past performance (striving for improvement); an objective measure (results orientation); outperforming others (competitiveness); challenging goals one has set, or even doing what has not been done before (unique innovation).
Core Question	Does the individual demonstrate a desire to surpass excellence and standard performance?
Why It Matters	In pursuit of continuous excellence and innovation, the personal drive to succeed is needed to lead the organisation to grow, sometimes into uncharted areas. It is also a personal conquest to continually improve one's performance fuelled by a deep sense of ambition.

Level: 1 **Wants To Do Job Well**

Possible Behaviours

Tries to do the job well or right. Expresses a desire to do better. May express frustration at waste or inefficiency.

Example

It was done. This was done but despite that the downstream activities & products are very slow in coming, in the sense that they face constraint in staff numbers & the time frame that we put for, was never able to meet, the hit. That's very, very, very frustrating & in terms of quality it is not up to mark. It has to be improved upon over & over again.

Level: 2 **Creates Own Measures Of Excellence**

Possible Behaviours

Keeps track of & measure outcomes against a standard of excellence not imposed by others. May focus on new or more precise ways of meeting goals set by management

Example

If I don't computerise my team, I feel that I will not be effective in leading my department in the future. It will just be another government department and I would just be wasting my time away, I don't like that. That's why I want this to improve Company Y because when I was a junior officer, I was an officer below my boss, I wanted to do that. They are the one who suppressed me & they were the one who said no to me & I felt the need to do this

Level: 3 **Improves Performance**

Possible Behaviours

Makes specific changes in the system or in own work methods to improve performance, e.g., does something better, faster, at lower cost, more efficiently; or improving quality, customer satisfaction, morale; without setting any specific goals

Example

Yes, & we have to improve our reporting system, because if you evaluate & you don't have the reports, I don't think with 17 staff, I can go around Malaysia to look at all the projects. So, the reporting system must be improved. Then, from there, you can evaluate. And of course, whoever who is not sending the report; we just send reminders, so I think people like to be reminded. You know that your road tax will expire at the end of December, but you know that, not until you get a reminder, you will not go & get it. So people like to be reminded, so I did follow that style

Level: 4 **Sets & Works To Meet Challenging Goals**

Possible Behaviours

Refers to a specific measure of baseline performance, compared with better performance at a later point in time, e.g., When I took over, efficiency was 20%. Now it is up to 85%. Sets out to achieve a unique standard, e.g., No one had ever done it before. Works to achieve a higher performance standard. ("Challenging" means it is a definite stretch, but realistic or not impossible.)

Example

The first major project I undertook had a lot of problems, but at the end of the day, the results spoke loudly. Because from the time frame of 4.5 months to 5 months, I have been able to reduce it to 2 weeks, so you can imagine the significant change & based upon our conservative estimates, the savings to the state, the whole state itself in one year, at that time, we conservatively estimated was around RM 3 million. That is a significant saving. The significant savings came from the fact that we were able to reduce the number of staff involved in the whole operation & also in our cost of maintenance, substantial cash holdings, the administrative centres & of course, there were elements of exposure to risk, I mean if there is fraud or misappropriation or wrong use it would be a cost to the government.

Level: 5 **Takes Calculated Entrepreneurial Risks**

Possible Behaviours

Makes decisions, sets priorities, or chooses goals on the basis of calculated inputs & outputs, e.g., makes explicit considerations of potential gains & risks. Commits significant resources and/or time (in the face of uncertainty) to increase benefits, i.e., improve performance; reach a challenging goal, etc.

Example

I got the information from the research department on the latest trend in the property market. I also had information on the net present value of the property. It indicated that we would never gain from this project. The cost of building the property was too high & it is a great risk to take, looking at the market value for properties. Upon visiting the site & discussing with the higher management, a decision that I wanted was reached, which was to put the project on hold until there is market for it.

8.2 Adaptive Thinking

Definition	Apply strategic thinking & insights gathered from various resources & adapt it to suit the local context. This involves applying learned concepts to the current situation or problem. Able to critically evaluate situations or problems in order to take appropriate actions.
Core Question	Can the individual integrate, synthesise and evaluate information or situations to provide appropriate actions and/or solutions?

Why It Matters	The evolving global and working environment, and education system has revolutionised the cognitive thinking ability required by a civil servant in his/her daily work. Not only do they need to analyse and provide solutions to situations/problems but they must also be flexible enough to adapt these solutions to meet the future needs of the organisation.

Level: 1 **Understands Situations or Problems**

Possible Behaviours

Recognises / identifies problems & understands their implication. Acts within the limit of one's authority.

Example

Because I think that in terms of planning & development, it cannot be done by a one-man show. You need to brainstorm, asked questions, do all the surveys, do research & get your data right. So if you work individually, it's very difficult for me as a boss. So I have to break that barrier.

Level: 2 **Recognises Problem That Occurs While Doing The Job**

Possible Behaviours

Analyses Situations or Problems

Example

I guess another thing that made me feel sad is that they don't understand what craft is all about. Craft is an art, not a manufactured product that you can manufacture in the factory & you produce just like that. People buy because of the art; it's expensive because of the art & craftsmanship. He wanted to change the complex into something like 'pasar seni', kind of complex like 'gerai' type of complex. When we built that complex, our boss has mentioned that he wanted crafts of a high value to be sold there & not the 'gerai' type of crafts. But our immediate head has already made up his mind to bring in many businessmen into the complex, there's a conflict of interest.

Level: 3 **Applies Reactive Situational Dexterity**

Possible Behaviours

Adapts approach based on situation or problem. Uses knowledge of theory or of different past trends or global best practices to look at situations or problem. Acts to adapt to varying situations / people across offices/agencies / ministries.

Example

We have to find an alternative farm to do the experiment since the original place wasn't available. I did find an alternative. I actually went to other faculty farms, met them & discuss with them agriculture faculty. So I told them that I need this area of farms to do an experiment & they agreed. At the end, I had a place to do the experiment

Level: 4 **Applies Proactive Situational Dexterity**

Possible Behaviours

Formulates plans & approaches to maximise & leverage opportunities for the office/agency/ ministry/country taking into consideration how best to meet stakeholders' & clients' needs

Example

The function of the human resource is only to facilitate; for example, they had to look into the human resource development as part of the industry example, especially the small & medium industries. At the same time, we also have the Ministry X & we also have stations done on the ground. They have been asked to maybe monitor to see what is the general trend of small & medium industry in, as far as human resource development is concerned. They should not be doing the implementation of courses for example. They should look for, they should do a study to find out what is lacking, put up proposal to state government to look for the funds & they have to channel the funds to the appropriate agencies to have this run & then monitor & evaluate. That is their function. In order to do that kind of function, you do not need 10 people because when we have our job analysis, we have job description, job specification, we know how much a person should be able to do, what grade a person should be to do that particular kind of job.

Level: 5 **Strategic Insights**

Possible Behaviours

Modifies / redirects strategic effort to forge a new set of strategic imperatives to ensure the country continue to progress. Redefines the country's direction to respond effectively to changing environment & opportunities. Make multiple causal links, several potential causes of events, several consequences & their impact on the country.

Example

Since there is great demand for IT & the country is looking more towards the e-government concept, we decided to come up with a project that would benefit the government service as a whole. We started with the PMS project. I am proud to say that I was the one who initiated the whole concept for the project to be developed. It is still too early for me or anyone to see the benefit of the project but I believe it will be successful in a few years time. And of course there is still room for improvement.

8.3 Desire for Knowledge

Definition	Driven by desire to know more about things, issues, people, or concepts for the purpose of getting a job done, solving a problem, improving a situation or developing oneself. It may include pressing for exact information; resolution of discrepancies by asking a series of questions; or reading and understanding various literatures.
Core Question	Does the individual demonstrate a desire to learn and gain more knowledge?
Why It Matters	Effective workers show great interest in learning and are driven by a desire to broaden their knowledge by actively seeking new information through reading, workshops or talking to colleagues. They keep themselves updated with the latest technology, issues, methods and concepts. This commitment to continuous excellence is 2 pronged: for self-development and getting the job done.

Level: 1 **Asks Questions**

Possible Behaviours

Asks direct questions to the people who are supposed to answer questions about the situation, such as people who are directly involved. Uses available information or consult other resources. Shows curiosity or interest in things, issues or people

Example

Well, they were giving me all the alternatives and in our discussion I actually asked them questions like, "How fast if we want to build a new building within the area?" and "How fast if I take this particular building; do the refurbishment, put in all the wiring and piping and install all the machines?"

Level: 2 **Investigates Or Seeks Information**

Possible Behaviours

Investigates the problem or situations beyond routine questioning. Finds those closest to the problem and investigates further, such as asking, "What happened?", "How did it happen?" (May include personally going to look at the problem). Seeks out for information; new approaches, tools, methods or technologies. Continuously keeps abreast with the demanding and changing environment on new approaches, tools, methods, technologies that may impact the organisation

Example

Y: This idea was within the first week, I took the time during the week to actually meet each one of them. INT: And what was your thinking behind doing that? Y: To introduce myself at a very personal level to all of them and to allow them the opportunity to tell me what they do, how each person fits into the unit, what are their achievements so far, how they have been doing their work, what are their constraints and how they like to overcome those constraint and so forth. I asked them to share with me.

Level: 3 **Does Research**

Possible Behaviours

Makes a systematic effort over a limited period of time to obtain needed data/ feedback / information. Conducts in-depth investigation from unusual sources; people not related to the events. Does formal research or may commission others to do formal research through newspapers, magazines, computer search systems or other resources (may include market, financial, competitor's research).

Example

By asking many people; even friends overseas. I asked them how to go about it. For example; In Malaysian Airlines, I know they got an IT project. So, I made myself available at those places to see if I could get some solutions to the problems I faced in the project.

Level: 4 **Uses On-Going Systems**

Possible Behaviours

Establishes ongoing systems or habits to get information; for example, managers can walk around, hold regular informal meetings, or scan certain publications or systems. Assigns individuals to conduct ongoing information gathering for the purpose of knowing or learning things, issues, people or literatures.

Example

I have my finger on the pulse of what's happening. They are what we call "discuss mailings", but they really are mailings with archives, letters come into some mailing list and they get archived into this mailing system. What I do as my regularly daily task, is that I look at these things; and that helps me keep my finger on the pulse of what's going on out there, what the user community needs are. In this particular case, I noticed that there was a team of people complaining about a certain enhancement to their operating system. It's hard to describe, but suffice to say, that a lot more people were discussing this enhancement through this mailing system than I had ever seen before

Level: 5 **Fosters A Learning Culture**

Possible Behaviours

Creates a learning environment /workplace /organisation by identifying and setting up the necessary infrastructures. Includes encouraging people to adopt a desire to learn or enhance their knowledge by providing them with the necessary support or resources.
Example

I realised that the staff in my department did not really like reading. So what I decided to do was to create a "reading corner" where I set up bookshelves stacked with books and magazines as well as a sofa to encourage them to spend their free time reading.

8.4 Holding People Accountable

Definition	The intent to hold people accountable to standards of performance using one's personal or position power with the long-term aspiration of the Government in mind. It includes stating the consequences & approaching others openly or directly about performance & problems & comparing it consistently against standards.
Core Question	Does the individual have and uses the authority to hold others to standards of performance?
Why It Matters	The continual revolution of the industry/environment (e.g. changing policy of the AFTA and WTO) has expedited the need to constantly hold people to standards of performance. The ability to set, evaluate and change the performance standards accordingly to the needs of the environment would provide clarity and facilitate the achievement of organisational objectives.

Level: 1 **Tells People What To Do**

Possible Behaviours

Gives clear & adequate instructions & explicitly delegates' details of routine tasks in order to free self to focus on more important tasks

Example

So I told my deputy it has to be reflected in his annual work target, in his own personal as well as in mine. This is because in my performance work target I have said that I want this accomplished.

Level: 2 **Sets Limits**

Possible Behaviours

Firmly says 'NO' to unreasonable request, or sets limits for others' behaviour. May structure situations to limit others options or to force them to make desired resources available.

Example

I gave this particular person another task. I told her that you have to go through all the papers & report to me. Because at the moment, what I observed is that she's always on leave. By giving her this task, she has to report to me daily. Therefore, she cannot find excuse for not coming to see me everyday.

Level: 3 **Demands High Performance**

Possible Behaviours

Imposes higher standards of performance with minimum input from others. Demands high performance, quality or resources. Insists on compliance with own orders or request in a no nonsense way or "put my foot down style".

Example

They have to do it, I said, If you can't cover all the departments, then you have to identify suitable officers to help you to perform the given task. I would expect the officers to be able to meet my expectations & that you are accountable for their performance as they are assisting you.

Level: 4 **Maintains Visible Standards Of Performance**

Possible Behaviours

Publicly monitors performance against clear standards (without prior notice). Issues clear warnings about the consequences of non-compliance with standards of performance

Example

By giving him the responsibility, I told him "I'm giving you the opportunity to prove yourself". He was one of the seniors; I told him that if he can prove himself, I will consider promoting him to the higher position. I told him that I didn't mind his interest in social activities after the office hour, but he must not let it affect his work. If it does, it will be hard for him to get a promotion.

Level: 5 **Holds People Accountable & Takes Effective Action To Address Performance Problems**

Possible Behaviours

Approaches others openly & directly about performance. Reviews & addresses performance problem in a timely way by assessing performance against standards to improve

Example

I had to scold her, but I had to bear the consequences of her actions. I have to report back to the ministry that a mistake had happened. I couldn't inform that person that he could not come as the invitation card has been sent to him. I have to bear the consequences because of my officer's mistake. I told the ministry that I will check on what is the protocol to deal with the situation. But what I said to the officer was "You didn't check, for mistakes. I have to bear the consequences; you should put up a letter of apology saying that you have done something wrong".

8.5 Impact & Influence

Definition	Implies the intention to persuade, convince, influence, or impress others (individuals or groups) in order to get them to support the speaker's agenda. The key is, understanding others when the person has his/her own agenda.
Core Question	Does the individual demonstrate the ability to gain buy-in and commitment to his/ her agenda?
Why It Matters	The varying situations appearing in internal and external government relations (e.g. international arena, department presentation) require the ability to impact and influence a party or audience. Notwithstanding the ability to understand the audience's needs only but to be able to identify the best tactics to suit specific situations to win support, gain co-operation, or overcome objections and barriers.

Level: 1 **Takes Single Action To Persuade**

Possible Behaviours

Uses single action to persuade but make no apparent attempt to modify presentation to suit interest of audience.

Example

My system is not a completely new system. It has been tested in one government body; I will let you have a look at it. This way you will have a better understanding of what the system is supposed to be used for.

Level: 2 **Takes Multiple Action To Persuade**

Possible Behaviours

Takes two or more steps to persuade through a combination of direct persuasion, concrete examples, visual aids, data or demonstration without attempting to adapt to interest of audience

Example

It was important that I convinced the Management to go ahead with the Project. What I did was to prepare a presentation that explained the implication of the Project to the Agency & also to invite people from other Agencies who have already implemented the system to get their feedback. I had also arranged for a demonstration of the system for the Management to try it out by themselves

Level: 3 **Calculates Impact Of Action Or Words**

Possible Behaviour

Adapts presentation or discussion to appeal to interest of audience & anticipates the effect of an action on people's perception of the speaker

Example

Usually what happens is our PR officer will contact the VIPs, however, because I wanted to make sure that the Menteri will officiate the ceremony, I contacted him myself. I told him that I wanted to indicate in the invitation, that he will be attending the opening ceremony. This is because I know for a fact that by mentioning the Menteri's attendance, there will be more media coverage

Level: 4 **Uses Indirect Influence**

Possible Behaviours

Obtains & uses experts or other third parties to influence the audience.

Example

I realised that leaving them alone will not be fair so I made frequent visits. But that was not the only thing, I have to bring the director general along so that they feel they are appreciated by the superiors & also they had the opportunity to ask for clarifications from an expert.

Level: 5 **Uses Complex Influence Strategies**

Possible Behaviours

Assembles key decision-makers, builds behind the scene support for ideas, and uses in-depth understanding of the interactions within a group to move towards specific agenda.

Example

What I did was, I held a meeting with everyone in my department to explain to them what it was I intended to do. I wanted to get their buy-in so that they would also lobby with me. I also conducted in-depth research with a few of my officers. At the same time I also identified who were the main stakeholders in the decision making process. I wanted to understand them better so that I could design my presentation to get their attention & interest. I then managed to network with members of the decision-making committee during a particular function and threw in my idea and approach to get further support.

8.6 Professional Mastery

Definition	The ability to expand & use technical knowledge & distributes work related to others. At the higher level it involves commitment to think about the on-going & evolving needs of the organisation in one's own field of expertise & to initiate & drive the required change initiatives that can best meet these needs
Core Question	Does the individual share and apply expertise / content knowledge towards meeting the needs of the organisation?
Why It Matters	Reflecting the current "brain drain" situation affecting the nation, it is the role of the Government to start instilling a knowledge-sharing behavior amongst civil servants in their own area of expertise. This would not only create a supportive environment but also help raise the professional standards of the organisation.

Level: 1 **Answers Question**

Possible Behaviours

Answers question as an expert & inform people about current understanding of technical issues when asked.

Example

I will be the one to answer question during the Q&A session as I know best of the Issue.

Level: 2 **Provides Extra Knowledge**

Possible Behaviours

Offers one's knowledge to others when one sees an opportunity to add value, even if not asked. Tries to answer deeper issues, spend time helping others resolve technical problems.

Example

I couldn't help overhearing the conversation between the two consultants. They were talking about a patient & the unidentified illness. I was really curious, as the patient's condition is pretty similar to the one I have been treating. So, I asked them offhandedly about the patient's condition, the symptoms, and background. The patient had similar like symptoms & I just shared with them my views that the illness sounded very alike…. Maybe they should conduct this test.to confirm it.

Level: 3 **Demonstrates Depth Of Knowledge**

Possible Behaviours

Demonstrates in-depth knowledge of one's area of expertise. Is able to speak knowledgeably & answer questions about relevant issues. Advises others in own area of expertise

Example

Health problems that are faced at district level are different from one district to the other. So problems are identified at that level. The causes may also differ from district to district, for example even when I was talking about whether the maternal death is related to the patient factor. If it is a poor district, low income then the medical problem will be different in that district compared to the population of a higher income, the health status are much better. If they are from poor income district, the household income is very low & they are very prone to things like anaemia.

Level: 4 **Advocates Knowledge Content**

Possible Behaviours

Advocates use of the most effective application of knowledge content within the organisation. Works to get new approaches accepted by explaining to individuals on advantages of knowledge content.

Example

We have been doing this study on types of immunisation & new cases involving babies. There was a significant increase in cases such as meningitis & pneumonia across the years, which basically concerns us. Currently, babies are only required to have DPT plus polio jabs which is in the national immunisation schedule. So, a study was done & approved by the board to include HIB (to prevent meningitis & pneumonia) into the national immunisation schedule. We received a lot of mixed reactions to this, number one, patients getting it from private hospitals have to pay more, therefore, have been asking only for the DPT plus polio jab. It did not help that the private practitioners only wanted to retain their customers & basically fulfil their request. I decided then to write a paper to promote the benefits of the new immunisation to the public. Obviously, the best way is to educate the public on the safety & benefits of it. I think one of the causes for the mixed reactions is probably because there was not enough publicity going around & people were oblivious to the schedule that they have to adhere to. My paper was accepted & translated into posters, advertisements.to basically create more awareness.

Level: 5 **Follows Through In Imparting & Sustaining Knowledge.**

Possible Behaviours

Takes specific & sustained action to ensure the successful implementation of changes in the area of expertise. Drives & reinforces the message with own actions & attitudes.Publicly recognise individuals who are demonstrating behaviours consistent with the new organisation.

Example

With the variety of milk products today, mothers have the choice not to breastfeed. Being humans, we are all spoilt for choices, this is where we come in & reinstate the importance of breast-feeding. Where should it start? Definitely at the hospitals, where all babies are delivered & mothers can be educated.. That's how I came up with the baby friendly hospital concept. This status would bring the hospital to a good status: the status reflects level of healthcare, one of the country's health criteria is the maternal mortality rate & for the hospital to acquire that status to achieve that standard—it's a very big thing. Furthermore, it would create a conducive environment for mother & child & helps increase family bonding. The whole concept is about encouraging mother-child bonding through breast-feeding because of the many benefits like antibody, doesn't need preparation, reduces breast cancer, cancer in the endometrium. Therefore, for all hospitals to acquire this status, everyone in the hospital would need to know the importance of breast-feeding & will be taught how to do it. To truly ensure the implementation is carried out, we have this yearly assessment which measures the hospital according to set guidelines. For instance, we will interview selected doctors, nurses & even patients on breast-feeding education, questions like how long should they start breast-feeding after delivery, what is the proper position, we would even ask them to demonstrate to us. This is to ensure that they have been educated correctly & sufficiently by the hospital. We even have courses every year conducted in each hospital to reiterate the importance of breastfeeding, the role of the hospital, doctors, nurses, & mothers & put up pamphlets in the wards.

8.7 Visionary Leadership

Definition	Ability to set directions, inspire team commitment and have the desire to lead others into meeting organisation/ agency/ office goals. This includes adapting one's approach to the changing requirements of the situation to support the overall team agenda. The "team" should be understood broadly as any group in which the individual takes on a leadership role, including unit, office, agency or the organisation as a whole.
Core Question	Can the individual engage people in sustaining excellence? Or in meeting organisation initiatives?
Why It Matters	All organisations need a driver to lead and pull together its resources to work together effectively in meeting the challenges and objectives. The same applies to the Government, where leaders are needed to inspire and engage people to support the Government's initiatives. An outstanding leader can create excitement and engage their team/ group to take on any challenges, whether it's delivering outcomes or spearheading the organisation's critical change initiatives. They take action with a view that the team's effectiveness and success would be the major catalyst in sustaining excellence and in driving the Government's change requirements. With this in mind, the leader supports, guide and protects the team/group to ensure all barriers are removed.

Level: 1 **Actively Contributes**

Possible Behaviours

Shares and/or ensures team members receive all relevant information. Supports and acts consistently with team decision. Plays an active and relevant role in the team. Expresses positive attitudes and expectations of others in terms of their abilities, expected contributions, etc. Is receptive and positive towards change, sees change as a challenge and as an opportunity for themselves as well as for department/ organisation (but do not necessarily change their behaviour accordingly).

Example

I prepared the agenda for the meeting and distributed it to all members of the meeting to ensure that they will know what to expect during the meeting and what their roles are.

Level: 2 **Promotes Team Effectiveness**

Possible Behaviours

Genuinely values and solicits others' inputs to promote team effectiveness. Takes specific actions with the intent of enabling the team to function optimally. Creates the conditions that enable the team to perform at its best. Adopts flexible and open-minded approach to impending change and modifies own behaviour to changing circumstances.

Example

I set a committee to basically be accountable for the work to be carried out, delegated who should be in charge of the promotions, invitation list, preparation of the venue, so these are some of the stuff that I list down. So everyone was given the guidelines and they are basically clear on who is responsible for what, so that the process is much clearer to make the event a success. Then, during the proposal meeting, we had a brainstorming session, because I believe that some of my colleagues have got different ideas, so we discussed, if it is good, then we'll take it.

Level: 3 Energises the Team

Possible Behaviours

Takes specific action to create oneness of the team e.g. creates an identity for the team. Encourages and empowers others and making them feel needed and important. Get resources for team. Shares and communicates team goal and norm to promote team cohesiveness

Example

It is very important I said, the team should not be just like a team, you have to have some shared values, you have to discuss what you believe and what are your shared values should be when you work in a team. And also I want them to know how it operates, is it a specific meeting at a time or once a week or etc.

Level: 4 Challenges Mindsets

Possible Behaviours

Creates vision for change and challenges status quo. Takes action to ensure vision is clearly communicated and engaged (with heart and mind) by others. Inspires confidence in the compelling vision. Personally exemplifies or embodies the desired change through strong, symbolic actions that are consistent with the change.

Example

My role as facilitator and as a speaker is to tell them what we want to achieve. Actually motivating them through sharing the vision and after that, showing to them that we are serious to achieve it. I was always sincere with them. I was not just talking about it, I was serious to achieve it. I was always with them (the students) when I could, on the field. Because I believe to be an effective principal in school, I need to work in 3 dimensions, from student dimension (a principal who can talk to them, smile with them, play with them, chit chat with them, is a good principal. Take care of them, support them, and tolerate, not meaning you cannot be strict with them, yes, I am strict. But you can't tell them that you hate them, but you love them although you punish them. You must really show sincerely, it must come from your heart, you cannot just mould it and make it, make that thing happen, real when you are actually not really want to have that. That's quite difficult to state all these things, because it's in holistic manner.

Level: 5 Embodies Change

Possible Behaviours

Takes a dramatic action to reinforce or enforce the change effort. Anticipates and recognises forthcoming changes in internal and external environment and adapt own strategies and plans and encourages others to do the same. Defines a clear change vision for self and others. Becomes the catalyst to make change happen in the organisation

9 GENERIC NON-TECHNICAL COMPETENCIES FOR ALL DISCIPLINES

COMPETENCIES (All Disciplines)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Achievement Oientation	5	4	4	4	3	3	3	2	1
Adaptive Thinking	5	5	5	5	4	3	3	2	1
Desire For Knowledge	5	5	5	5	4	3	3	2	1
Holding People Accountable	5	5	5	5	4	3	3	2	1
Impact & Influence	5	5	5	5	5	4	4	3	2
Professional Mastery	5	5	5	5	4	3	3	2	1
Visionary Leadership	5	5	5	5	4	3	3	2	1
Advisory & Consultation	4	4	4	4	4	4	4	3	2
Crisis Management Resolution	4	4	4	4	4	4	4	3	2
Financial Management	4	4	4	4	4	4	4	3	2
Quality Management	4	4	4	4	4	4	4	3	2
Communication	4	4	4	4	4	4	4	3	3
Planning & Organisation	4	4	4	4	4	4	4	3	2
People Management	4	4	4	4	4	4	4	3	2
Policies & Procedures	4	4	4	4	4	4	4	3	3
Customer Service	4	4	4	4	4	4	4	3	3
EG Applications	-	-	-	-	3	3	3	3	3
SKALA	-	-	-	-	3	3	3	3	3
English Language	-	-	-	-	3	3	3	3	2

10 COMPETENCY MODELS FOR CIVIL ENGINEER

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
10.1 STANDARD POSITION (*GRED HAKIKI*)									
Non-technical competencies and their target levels (refer Para. 9)									
Water Resource Planning & Development	3	3	3	3	3	3	3	2	2
Water Demand Management	3	3	3	3	3	3	3	2	2
Water Quality Monitoring	3	3	3	3	3	3	3	2	2
Dam Safety Monitoring	3	3	3	3	3	3	3	2	2
Water Supply Design	3	3	3	3	3	3	3	2	2
Tunneling Design	3	3	3	3	3	3	3	2	2
Structure Analysis and Design	3	3	3	3	3	3	3	2	2
Bridge & Structural Forensic	3	3	3	3	3	3	3	2	2
Bridge Design	3	3	3	3	3	3	3	2	2
Bridge & Building Maintenance	3	3	3	3	3	3	3	2	2
Supervision for building/bridge & other structural work	3	3	3	3	3	3	3	2	2
Marine Structure Design	3	3	3	3	3	3	3	2	2
Airport Planning, Analysis and Design	3	3	3	3	3	3	3	2	2
Sewerage Design	3	3	3	3	3	3	3	2	2
Water Reticulation Design	3	3	3	3	3	3	3	2	2
Sustainable Water Recycling	3	3	3	3	3	3	3	2	2
Drainage Design	3	3	3	3	3	3	3	2	2
Earthwork Design for Building Project	3	3	3	3	3	3	3	2	2
Civil Works Maintenance	3	3	3	3	3	3	3	2	2
Coastal Engineering	3	3	3	3	3	3	3	2	2
Integrated Planning Analysis	3	3	3	3	3	3	3	2	2
Traffic Study	3	3	3	3	3	3	3	2	2
Internal Road Design	3	3	3	3	3	3	3	2	2
Geometric Design	3	3	3	3	3	3	3	2	2
Pavement Design	3	3	3	3	3	3	3	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Traffic Management	3	3	3	3	3	3	3	2	2
Road Safety Audit	3	3	3	3	3	3	3	2	2
Road Safety Improvement Programs	3	3	3	3	3	3	3	2	2
Accident Scene Investigation	3	3	3	3	3	3	3	2	2
Pavement Forensic Investigation	3	3	3	3	3	3	3	2	2
Road Maintenance	3	3	3	3	3	3	3	2	2
Supervision of road work	3	3	3	3	3	3	3	2	2
Highway & Road Planning	3	3	3	3	3	3	3	2	2
Site Investigation	3	3	3	3	3	3	3	2	2
Earthwork and Soil Treatment Design	3	3	3	3	3	3	3	2	2
Foundation Design	3	3	3	3	3	3	3	2	2
Retaining Structure and Slope Stability Design	3	3	3	3	3	3	3	2	2
Geotechnical Forensic Investigation	3	3	3	3	3	3	3	2	2
Slope Maintenance	3	3	3	3	3	3	3	2	2
Environmental Protection Works	3	3	3	3	3	3	3	2	2
Environmental Impact Assessment	3	3	3	3	3	3	3	2	2
Road Side Development	3	3	3	3	3	3	3	2	2
Project Management Methodologist	3	3	3	3	3	3	3	2	2
Project Management Best Practices	3	3	3	3	3	3	3	2	2
Site Supervision & Coordination	3	3	3	3	3	3	3	2	2
Total Asset Management	3	3	3	3	3	3	3	2	2
Infrastructure Facilities Management	3	3	3	3	3	3	3	2	2
Change Management	3	3	3	3	3	3	3	2	2
Enterprise System Management	3	3	3	3	3	3	3	2	2
Human Resource Strategic Planning	3	3	3	3	3	3	3	2	2
Organisational Development	3	3	3	3	3	3	3	2	2
ICT Strategic Planning	3	3	3	3	3	3	3	2	2
Public Relations	3	3	3	3	3	3	3	2	2
Process Re-engineering & Mapping	3	3	3	3	3	3	3	2	2
SKALA Management & Administration	3	3	3	3	3	3	3	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Workforce Learning & Competencies Management	3	3	3	3	3	3	3	2	2
Strategic Thinking	3	3	3	3	3	3	3	2	2
Research Methodology	3	3	3	3	3	3	3	2	2
Specialisation / Complex Project Methodology	3	3	3	3	3	3	3	2	2
System Thinking	3	3	3	3	3	3	3	2	2
10.2 ACTUAL POSITIONS:									
10.2.1 Director/Manager - Cawangan Kejuruteraan Jalan & Geoteknik									
Non-technical competencies and their target levels (refer Para. 9)									
Drainage Design	-	-	-	3	2	2	2	2	2
Integrated Planning Analysis	-	-	-	3	3	2	2	2	2
Traffic Study	-	-	-	3	2	2	2	2	2
Geometric Design	-	-	-	3	2	2	2	2	2
Pavement Design	-	-	-	3	2	2	2	2	2
Traffic Management	-	-	-	3	2	2	2	2	2
Road Safety Audit	-	-	-	3	2	2	2	2	2
Road Safety Improvement Programs	-	-	-	3	2	2	2	2	2
Accident Scene Investigation	-	-	-	3	2	2	2	2	2
Pavement Forensic Investigation	-	-	-	3	2	2	2	2	2
Road Maintenance	-	-	-	2	2	2	2	2	2
Supervision of road work	-	-	-	2	2	2	2	2	2
Highway & Road Planning	-	-	-	3	2	2	2	2	2
Site Investigation	-	-	-	3	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	3	2	2	2	2	2
Foundation Design	-	-	-	3	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	3	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	3	2	2	2	2	2
Environmental Protection Works	-	-	-	3	2	2	2	2	2
Project Management Best Practices	-	-	-	3	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
10.2.2 Designer - Roads									
Non-technical competencies and their target levels (refer Para. 9)									
Drainage Design	-	-	-	-	5	4	3	3	2
Traffic Study	-	-	-	-	5	4	3	3	2
Geometric Design	-	-	-	-	5	4	3	3	2
Pavement Design	-	-	-	-	5	4	3	3	2
Traffic Management	-	-	-	-	5	4	3	3	2
Road Safety Audit	-	-	-	-	4	3	3	3	2
Road Safety Improvement Programs	-	-	-	-	3	3	2	2	2
Accident Scene Investigation	-	-	-	-	3	3	2	2	2
Pavement Forensic Investigation	-	-	-	-	3	3	2	2	2
Road Maintenance	-	-	-	-	2	2	2	2	2
Supervision of road work	-	-	-	-	2	2	2	2	2
Highway & Road Planning	-	-	-	-	5	4	3	3	2
Site Investigation	-	-	-	-	4	3	3	3	2
Earthwork and Soil Treatment Design	-	-	-	-	3	3	2	2	2
Foundation Design	-	-	-	-	3	3	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	-	3	3	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	3	3	2	2	2
Environmental Protection Works	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.3 Engineer - Road Safety									
Non-technical competencies and their target levels (refer Para. 9)									
Drainage Design	-	-	-	-	3	3	2	2	2
Traffic Study	-	-	-	-	4	4	3	2	2
Geometric Design	-	-	-	-	4	4	3	2	2
Pavement Design	-	-	-	-	3	3	2	2	2
Traffic Management	-	-	-	-	4	4	3	2	2
Road Safety Audit	-	-	-	-	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Road Safety Improvement Programs	-	-	-	-	5	4	3	3	2
Accident Scene Investigation	-	-	-	-	5	4	3	3	2
Pavement Forensic Investigation	-	-	-	-	3	3	2	2	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	-	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2
Environmental Protection Works	-	-	-	-	3	3	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.4 Designer - Geotechnic									
Non-technical competencies and their target levels (refer Para. 9)									
Drainage Design	-	-	-	-	4	4	3	2	2
Traffic Study	-	-	-	-	2	2	2	2	2
Geometric Design	-	-	-	-	2	2	2	2	2
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	2	2	2	2	2
Road Safety Audit	-	-	-	-	2	2	2	2	2
Road Safety Improvement Programs	-	-	-	-	2	2	2	2	2
Accident Scene Investigation	-	-	-	-	2	2	2	2	2
Pavement Forensic Investigation	-	-	-	-	2	2	2	2	2
Site Investigation	-	-	-	-	5	4	3	3	2
Earthwork and Soil Treatment Design	-	-	-	-	5	4	3	3	2
Foundation Design	-	-	-	-	5	4	3	3	2
Retaining Structure and Slope Stability Design	-	-	-	-	5	4	3	3	2
Geotechnical Forensic Investigation	-	-	-	-	5	4	3	3	2
Environmental Protection Works	-	-	-	-	3	3	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
10.2.5 Director/Manager - Cawangan Kejuruteraan Awam, Struktur & Jambatan									
Non-technical competencies and their target levels (refer Para. 9)									
Tunneling Design	-	-	2	2	2	2	2	2	2
Structure Analysis & Design	-	-	3	3	2	2	2	2	2
Bridge & Structural Forensic	-	-	3	3	2	2	2	2	2
Bridge Design	-	-	3	3	2	2	2	2	2
Bridge & Building Maintenance	-	-	2	2	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	2	2	2	2	2	2	2
Marine Structure Design	-	-	3	3	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	3	3	2	2	2	2	2
Sewerage Design	-	-	3	3	2	2	2	2	2
Water Reticulation Design	-	-	3	3	2	2	2	2	2
Sustainable Water Recycling	-	-	3	3	2	2	2	2	2
Drainage Design	-	-	3	3	2	2	2	2	2
Earthwork Design for Building Project	-	-	3	3	2	2	2	2	2
Civil Works Maintenance	-	-	2	2	2	2	2	2	2
Coastal Engineering	-	-	3	3	2	2	2	2	2
Integrated Planning Analysis	-	-	3	3	3	2	2	2	2
Traffic Study	-	-	2	2	2	2	2	2	2
Internal Road Design	-	-	3	3	2	2	2	2	2
Traffic Management	-	-	2	2	2	2	2	2	2
Road Safety Audit	-	-	2	2	2	2	2	2	2
Road Maintenance	-	-	2	2	2	2	2	2	2
Supervision of road work	-	-	2	2	2	2	2	2	2
Site Investigation	-	-	3	3	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	3	3	2	2	2	2	2
Foundation Design	-	-	3	3	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	3	3	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	2	2	2	2	2	2	2
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
10.2.6 Designer - Structures									
Non-technical competencies and their target levels (refer Para. 9)									
Tunneling Design	-	-	-	-	2	2	2	2	2
Structure Analysis & Design	-	-	-	-	5	4	3	3	2
Bridge & Structural Forensic	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	2	2	2	2	2
Marine Structure Design	-	-	-	-	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	-	-	2	2	2	2	2
Civil Works Maintenance	-	-	-	-	2	2	2	2	2
Site Investigation	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.7 Designer - Bridges									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	-	2	2	2	2	2
Bridge & Structural Forensic	-	-	-	-	2	2	2	2	2
Bridge Design	-	-	-	-	5	4	3	3	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	2	2	2	2	2
Drainage Design	-	-	-	-	2	2	2	2	2
Traffic Study	-	-	-	-	2	2	2	2	2
Geometric Design	-	-	-	-	2	2	2	2	2
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	2	2	2	2	2
Road Safety Audit	-	-	-	-	2	2	2	2	2
Road Maintenance	-	-	-	-	2	2	2	2	2
Supervision of road work	-	-	-	-	2	2	2	2	2
Site Investigation	-	-	-	-	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	5	4	3	3	2
Retaining Structure and Slope Stability Design	-	-	-	-	4	4	3	2	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.8 Designer - Civil Works									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	2	2	2	2	2
Sewerage Design	-	-	-	-	5	4	3	3	2
Water Reticulation Design	-	-	-	-	5	4	3	3	2
Sustainable Water Recycling	-	-	-	-	5	4	3	3	2
Drainage Design	-	-	-	-	5	4	3	3	2
Earthwork Design for Building Project	-	-	-	-	5	4	3	3	2
Civil Works Maintenance	-	-	-	-	2	2	2	2	2
Internal Road Design	-	-	-	-	5	4	3	3	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	5	4	3	3	2
Retaining Structure and Slope Stability Design	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.9 Forensic Engineer - Bridges & Buildings									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	-	5	4	3	3	2
Bridge & Structural Forensic	-	-	-	-	5	4	3	3	2
Bridge Design	-	-	-	-	5	4	3	3	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Supervision of bridge/building and other structural work	-	-	-	-	2	2	2	2	2
Marine Structure Design	-	-	-	-	5	4	3	3	2
Airport Planning, Analysis & Design	-	-	-	-	5	4	3	3	2
Civil Works Maintenance	-	-	-	-	2	2	2	2	2
Coastal Engineering	-	-	-	-	5	4	3	3	2
Road Maintenance	-	-	-	-	2	2	2	2	2
Supervision of road work	-	-	-	-	2	2	2	2	2
Site Investigation	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.10 Director/Manager - State PWD									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	3	3	2	2	2	2	2
Bridge & Structural Forensic	-	-	2	2	2	2	2	2	2
Bridge Design	-	-	3	3	2	2	2	2	2
Bridge & Building Maintenance	-	-	3	3	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	3	3	2	2	2	2	2
Marine Structure Design	-	-	2	2	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	2	2	2	2	2	2	2
Sewerage Design	-	-	2	2	2	2	2	2	2
Water Reticulation Design	-	-	2	2	2	2	2	2	2
Sustainable Water Recycling	-	-	2	2	2	2	2	2	2
Drainage Design	-	-	2	2	2	2	2	2	2
Earthwork Design for Building Project	-	-	2	2	2	2	2	2	2
Civil Works Maintenance	-	-	3	3	2	2	2	2	2
Coastal Engineering	-	-	2	2	2	2	2	2	2
Integrated Planning Analysis	-	-	3	3	3	2	2	2	2
Traffic Study	-	-	2	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Internal Road Design	-	-	2	2	2	2	2	2	2
Traffic Management	-	-	3	3	2	2	2	2	2
Road Safety Audit	-	-	3	3	2	2	2	2	2
Road Safety Improvement Programs	-	-	3	3	2	2	2	2	2
Accident Scene Investigation	-	-	2	2	2	2	2	2	2
Pavement Forensic Investigation	-	-	2	2	2	2	2	2	2
Road Maintenance	-	-	3	3	2	2	2	2	2
Supervision of road work	-	-	3	3	2	2	2	2	2
Site Investigation	-	-	2	2	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	2	2	2	2	2	2	2
Foundation Design	-	-	2	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	2	2	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	2	2	2	2	2	2	2
Slope Maintenance	-	-	3	3	2	2	2	2	2
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Environmental Impact Assessment	-	-	2	2	2	2	2	2	2
Road Side development	-	-	3	3	2	2	2	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
10.2.11 District Engineer									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	-	2	2	2	2	2
Bridge & Structural Forensic	-	-	-	-	2	2	2	2	2
Bridge Design	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	5	4	3	3	2
Supervision of bridge/building and other structural work	-	-	-	-	5	4	3	3	2
Marine Structure Design	-	-	-	-	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	-	-	2	2	2	2	2
Sewerage Design	-	-	-	-	2	2	2	2	2
Water Reticulation Design	-	-	-	-	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Sustainable Water Recycling	-	-	-	-	2	2	2	2	2
Drainage Design	-	-	-	-	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	-	2	2	2	2	2
Civil Works Maintenance	-	-	-	-	5	4	3	3	2
Coastal Engineering	-	-	-	-	2	2	2	2	2
Integrated Planning Analysis	-	-	-	-	3	3	3	3	3
Traffic Study	-	-	-	-	2	2	2	2	2
Internal Road Design	-	-	-	-	2	2	2	2	2
Geometric Design	-	-	-	-	2	2	2	2	2
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	5	4	3	3	2
Road Safety Audit	-	-	-	-	5	4	3	3	2
Road Safety Improvement Programs	-	-	-	-	5	4	3	3	2
Accident Scene Investigation	-	-	-	-	2	2	2	2	2
Pavement Forensic Investigation	-	-	-	-	2	2	2	2	2
Road Maintenance	-	-	-	-	5	4	3	3	2
Supervision of road work	-	-	-	-	5	4	3	3	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	-	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2
Slope Maintenance	-	-	-	-	5	4	3	3	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Environmental Impact Assessment	-	-	-	-	2	2	2	2	2
Road Site development	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
10.2.12 State Project Engineer - Building Project									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	-	5	4	3	3	2
Bridge & Structural Forensic	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	5	4	3	3	2
Marine Structure Design	-	-	-	-	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	-	-	2	2	2	2	2
Sewerage Design	-	-	-	-	2	2	2	2	2
Water Reticulation Design	-	-	-	-	2	2	2	2	2
Sustainable Water Recycling	-	-	-	-	2	2	2	2	2
Drainage Design	-	-	-	-	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	-	2	2	2	2	2
Civil Works Maintenance	-	-	-	-	2	2	2	2	2
Coastal Engineering	-	-	-	-	2	2	2	2	2
Internal Road Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	5	4	3	3	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	-	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2
Slope Maintenance	-	-	-	-	2	2	2	2	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Environmental Impact Assessment	-	-	-	-	2	2	2	2	2
Road Site development	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
10.2.13 State Project Engineer - Road Project									
Non-technical competencies and their target levels (refer Para. 9)									
Bridge Design	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	5	4	3	3	2
Drainage Design	-	-	-	-	2	2	2	2	2
Traffic Study	-	-	-	-	2	2	2	2	2
Internal Road Design	-	-	-	-	2	2	2	2	2
Geometric Design	-	-	-	-	2	2	2	2	2
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	5	4	3	3	2
Road Safety Audit	-	-	-	-	2	2	2	2	2
Road Safety Improvement Programs	-	-	-	-	2	2	2	2	2
Accident Scene Investigation	-	-	-	-	2	2	2	2	2
Pavement Forensic Investigation	-	-	-	-	2	2	2	2	2
Road Maintenance	-	-	-	-	2	2	2	2	2
Supervision of road work	-	-	-	-	5	4	3	3	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	-	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2
Slope Maintenance	-	-	-	-	2	2	2	2	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Environmental Impact Assessment	-	-	-	-	2	2	2	2	2
Road Site development	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
10.2.14 State Asset/Maintenance Engineer									
Non-technical competencies and their target levels (refer Para. 9)									
Water Resource Planning & Development	-	-	-	-					
Structure Analysis & Design	-	-	-	-	2	2	2	2	2
Bridge & Structural Forensic	-	-	-	-	2	2	2	2	2
Bridge Design	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	5	4	3	3	2
Supervision of bridge/building and other structural work	-	-	-	-	2	2	2	2	2
Marine Structure Design	-	-	-	-	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	-	-	2	2	2	2	2
Sewerage Design	-	-	-	-	2	2	2	2	2
Water Reticulation Design	-	-	-	-	2	2	2	2	2
Sustainable Water Recycling	-	-	-	-	2	2	2	2	2
Drainage Design	-	-	-	-	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	-	2	2	2	2	2
Civil Works Maintenance	-	-	-	-	5	4	3	3	2
Coastal Engineering	-	-	-	-	2	2	2	2	2
Traffic Study	-	-	-	-	2	2	2	2	2
Internal Road Design	-	-	-	-	2	2	2	2	2
Geometric Design	-	-	-	-	2	2	2	2	2
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	2	2	2	2	2
Road Safety Audit	-	-	-	-	2	2	2	2	2
Road Safety Improvement Programs	-	-	-	-	2	2	2	2	2
Accident Scene Investigation	-	-	-	-	2	2	2	2	2
Pavement Forensic Investigation	-	-	-	-	2	2	2	2	2
Road Maintenance	-	-	-	-	5	4	3	3	2
Supervision of road work	-	-	-	-	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	-	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Slope Maintenance	-	-	-	-	5	4	3	3	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Environmental Impact Assessment	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.15 Designer/Engineer - Water Supply									
Non-technical competencies and their target levels (refer Para. 9)									
Water Resource Planning & Development	-	-	3	3	5	4	3	3	2
Water Demand Management	-	-	3	3	5	4	3	3	2
Water Quality Monitoring	-	-	3	3	5	4	3	3	2
Dam Safety Monitoring	-	-	3	3	5	4	3	3	2
Water Supply Design	-	-	3	3	5	4	3	3	2
Tunneling Design	-	-	3	3	5	4	3	3	2
Structure Analysis & Design	-	-	2	2	2	2	2	2	2
Bridge Design	-	-	2	2	2	2	2	2	2
Internal Road Design	-	-	2	2	2	2	2	2	2
Traffic Management	-	-	2	2	2	2	2	2	2
Site Investigation	-	-	2	2	2	2	2	2	2
Foundation Design	-	-	2	2	2	2	2	2	2
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Environmental Impact Assessment	-	-	2	2	2	2	2	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
10.2.16 Project Manager/Project Team - Road Project									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	2	2	2	2	2	2	2
Bridge Design	-	-	2	2	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	3	3	5	4	3	3	2
Sewerage Design	-	-	2	2	2	2	2	2	2
Water Reticulation Design	-	-	2	2	2	2	2	2	2
Sustainable Water Recycling	-	-	2	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Drainage Design	-	-	2	2	2	2	2	2	2
Earthwork Design for Building Project	-	-	2	2	2	2	2	2	2
Integrated Planning Analysis	-	-	3	3	5	4	3	3	2
Traffic Study	-	-	3	3	5	4	3	3	2
Internal Road Design	-	-	2	2	2	2	2	2	2
Geometric Design	-	-	2	2	2	2	2	2	2
Pavement Design	-	-	2	2	2	2	2	2	2
Traffic Management	-	-	2	2	2	2	2	2	2
Supervision of road work	-	-	3	3	5	4	3	3	2
Highway & Road Planning	-	-	3	3	5	4	3	3	2
Site Investigation	-	-	2	2	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	2	2	2	2	2	2	2
Foundation Design	-	-	2	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	2	2	2	2	2	2	2
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Environmental Impact Assessment	-	-	2	2	2	2	2	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
10.2.17 Engineer - Technical Advisory & Policy Development									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	2	2	2	2	2	2	2
Bridge & Structural Forensic	-	-	2	2	2	2	2	2	2
Bridge Design	-	-	2	2	2	2	2	2	2
Bridge & Building Maintenance	-	-	2	2	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	3	3	5	4	3	3	2
Marine Structure Design	-	-	2	2	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	2	2	2	2	2	2	2
Sewerage Design	-	-	2	2	2	2	2	2	2
Water Reticulation Design	-	-	2	2	2	2	2	2	2
Sustainable Water Recycling	-	-	2	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Drainage Design	-	-	2	2	2	2	2	2	2
Earthwork Design for Building Project	-	-	2	2	2	2	2	2	2
Civil Works Maintenance	-	-	2	2	2	2	2	2	2
Coastal Engineering	-	-	2	2	2	2	2	2	2
Traffic Study	-	-	2	2	2	2	2	2	2
Internal Road Design	-	-	2	2	2	2	2	2	2
Geometric Design	-	-	2	2	2	2	2	2	2
Pavement Design	-	-	2	2	2	2	2	2	2
Traffic Management	-	-	2	2	2	2	2	2	2
Road Safety Audit	-	-	2	2	2	2	2	2	2
Road Safety Improvement Programs	-	-	2	2	2	2	2	2	2
Accident Scene Investigation	-	-	2	2	2	2	2	2	2
Pavement Forensic Investigation	-	-	2	2	2	2	2	2	2
Road Maintenance	-	-	2	2	2	2	2	2	2
Supervision of road work	-	-	3	3	5	4	3	3	2
Site Investigation	-	-	2	2	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	2	2	2	2	2	2	2
Foundation Design	-	-	2	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	2	2	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	2	2	2	2	2	2	2
Slope Maintenance	-	-	2	2	2	2	2	2	2
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Environmental Impact Assessment	-	-	2	2	2	2	2	2	2
10.2.18 Director/Manager - Cawangan Jalan									
Non-technical competencies and their target levels (refer Para. 9)									
Tunneling Design	-	-	2	2	2	2	2	2	2
Bridge Design	-	-	2	2	2	2	2	2	2
Bridge & Building Maintenance	-	-	2	2	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	3	3	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Drainage Design	-	-	2	2	2	2	2	2	2
Integrated Planning Analysis	-	-	3	3	3	2	2	2	2
Traffic Study	-	-	2	2	2	2	2	2	2
Internal Road Design	-	-	2	2	2	2	2	2	2
Geometric Design	-	-	2	2	2	3	3	3	3
Pavement Design	-	-	2	2	2	3	3	3	3
Traffic Management	-	-	2	2	2	2	2	2	2
Road Safety Audit	-	-	2	2	2	2	2	2	2
Road Safety Improvement Programs	-	-	2	2	2	2	2	2	2
Road Maintenance	-	-	2	2	2	2	2	2	2
Supervision of road work	-	-	3	3	2	2	2	2	2
Highway & Road Planning	-	-	3	3	2	2	2	2	2
Site Investigation	-	-	2	2	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	2	2	2	2	2	2	2
Foundation Design	-	-	2	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	2	2	2	2	2	2	2
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Environmental Impact Assessment	-	-	2	2	2	2	2	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
10.2.19 Project Engineer - Cawangan Jalan									
Non-technical competencies and their target levels (refer Para. 9)									
Tunneling Design	-	-	-	-	2	2	2	2	2
Bridge Design	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	5	4	3	3	2
Drainage Design	-	-	-	-	2	2	2	2	2
Integrated Planning Analysis	-	-	-	-	5	4	3	3	2
Traffic Study	-	-	-	-	2	2	2	2	2
Internal Road Design	-	-	-	-	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Geometric Design	-	-	-	-	2	2	2	2	2
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	2	2	2	2	2
Road Safety Audit	-	-	-	-	2	2	2	2	2
Road Safety Improvement Programs	-	-	-	-	2	2	2	2	2
Road Maintenance	-	-	-	-	2	2	2	2	2
Supervision of road work	-	-	-	-	5	4	3	3	2
Highway & Road Planning	-	-	-	-	5	4	3	3	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	-	2	2	2	2	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Environmental Impact Assessment	-	-	-	-	2	2	2	2	2
Road Site development	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.20 Director/Manager - Cawangan Pengkalan Udara & Maritim (CPUM)									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	2	2	2	2	2	2
Bridge & Structural Forensic	-	-	-	2	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	2	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	2	2	2	2	2	2
Marine Structure Design	-	-	-	3	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	-	3	2	2	2	2	2
Sewerage Design	-	-	-	2	2	2	2	2	2
Water Reticulation Design	-	-	-	2	2	2	2	2	2
Sustainable Water Recycling	-	-	-	2	2	2	2	2	2
Drainage Design	-	-	-	2	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Civil Works Maintenance	-	-	-	2	2	2	2	2	2
Coastal Engineering	-	-	-	3	2	2	2	2	2
Integrated Planning Analysis	-	-	-	3	3	2	2	2	2
Internal Road Design	-	-	-	2	2	2	2	2	2
Pavement Design	-	-	-	2	2	2	2	2	2
Traffic Management	-	-	-	2	2	2	2	2	2
Site Investigation	-	-	-	2	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	2	2	2	2	2	2
Foundation Design	-	-	-	3	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	3	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	2	2	2	2	2	2
Environmental Protection Works	-	-	-	2	2	2	2	2	2
Environmental Impact Assessment	-	-	-	2	2	2	2	2	2
Project Management Best Practices	-	-	-	3	5	4	3	3	2
10.2.21 Designer - Maritime Structures									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	-	2	2	2	2	2
Bridge & Structural Forensic	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	2	2	2	2	2
Marine Structure Design	-	-	-	-	5	4	3	3	2
Sewerage Design	-	-	-	-	2	2	2	2	2
Water Reticulation Design	-	-	-	-	2	2	2	2	2
Sustainable Water Recycling	-	-	-	-	2	2	2	2	2
Drainage Design	-	-	-	-	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	-	2	2	2	2	2
Civil Works Maintenance	-	-	-	-	2	2	2	2	2
Coastal Engineering	-	-	-	-	5	4	3	3	2
Internal Road Design	-	-	-	-	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	2	2	2	2	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	5	4	3	3	2
Retaining Structure and Slope Stability Design	-	-	-	-	5	4	3	3	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Environmental Impact Assessment	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.22 Designer - Airports									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	-	2	2	2	2	2
Bridge & Structural Forensic	-	-	-	-	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	-	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	-	-	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	-	-	5	4	3	3	2
Sewerage Design	-	-	-	-	2	2	2	2	2
Water Reticulation Design	-	-	-	-	2	2	2	2	2
Sustainable Water Recycling	-	-	-	-	2	2	2	2	2
Drainage Design	-	-	-	-	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	-	2	2	2	2	2
Civil Works Maintenance	-	-	-	-	2	2	2	2	2
Coastal Engineering	-	-	-	-	2	2	2	2	2
Internal Road Design	-	-	-	-	2	2	2	2	2
Pavement Design	-	-	-	-	2	2	2	2	2
Traffic Management	-	-	-	-	2	2	2	2	2
Site Investigation	-	-	-	-	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Foundation Design	-	-	-	-	5	4	3	3	2
Retaining Structure and Slope Stability Design	-	-	-	-	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	-	2	2	2	2	2
Environmental Protection Works	-	-	-	-	2	2	2	2	2
Environmental Impact Assessment	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.23 Engineer - Environmental Management (Civil)									
Non-technical competencies and their target levels (refer Para. 9)									
Drainage Design	-	-	-	-	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	-	2	2	2	2	2
Site Investigation	-	-	-	-	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	-	-	2	2	2	2	2
Slope Maintenance	-	-	-	-	2	2	2	2	2
Environmental Protection Works	-	-	-	-	5	4	3	3	2
Environmental Impact Assessment	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
10.2.24 Program/Project Manager (Building) - Business Sector									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	2	2	2	2	2	2	2
Bridge & Structural Forensic	-	-	2	2	2	2	2	2	2
Bridge Design	-	-	2	2	2	2	2	2	2
Bridge & Building Maintenance	-	-	2	2	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	3	3	5	4	3	3	2
Sewerage Design	-	-	2	2	2	2	2	2	2
Water Reticulation Design	-	-	2	2	2	2	2	2	2
Sustainable Water Recycling	-	-	2	2	2	2	2	2	2
Drainage Design	-	-	2	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Earthwork Design for Building Project	-	-	2	2	2	2	2	2	2
Civil Works Maintenance	-	-	2	2	2	2	2	2	2
Integrated Planning Analysis	-	-	3	3	5	4	3	3	2
Internal Road Design	-	-	2	2	2	2	2	2	2
Traffic Management	-	-	2	2	2	2	2	2	2
Site Investigation	-	-	2	2	2	2	2	2	2
Earthwork and Soil Treatment Design	-	-	2	2	2	2	2	2	2
Foundation Design	-	-	2	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	2	2	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	2	2	2	2	2	2	2
Slope Maintenance	-	-	2	2	2	2	2	2	2
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Environmental Impact Assessment	-	-	2	2	2	2	2	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
10.2.25 Engineer - Maintenance Management									
Non-technical competencies and their target levels (refer Para. 9)									
Tunneling Design	-	-	2	2	2	2	2	2	2
Structure Analysis & Design	-	-	2	2	2	2	2	2	2
Bridge & Structural Forensic	-	-	2	2	2	2	2	2	2
Bridge Design	-	-	2	2	2	2	2	2	2
Bridge & Building Maintenance	-	-	3	3	2	2	2	2	2
Supervision of bridge/building and other structural work	-	-	2	2	2	2	2	2	2
Marine Structure Design	-	-	2	2	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	2	2	2	2	2	2	2
Sewerage Design	-	-	2	2	2	2	2	2	2
Water Reticulation Design	-	-	2	2	2	2	2	2	2
Sustainable Water Recycling	-	-	2	2	2	2	2	2	2
Drainage Design	-	-	2	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Earthwork Design for Building Project	-	-	2	2	2	2	2	2	2
Civil Works Maintenance	-	-	3	3	2	2	2	2	2
Coastal Engineering	-	-	2	2	2	2	2	2	2
Integrated Planning Analysis	-	-	3	3	3	2	2	2	2
Traffic Study	-	-	2	2	2	2	2	2	2
Geometric Design	-	-	2	2	2	2	2	2	2
Pavement Design	-	-	2	2	2	2	2	2	2
Traffic Management	-	-	2	2	2	2	2	2	2
Road Safety Audit	-	-	2	2	2	2	2	2	2
Road Safety Improvement Programs	-	-	2	2	2	2	2	2	2
Accident Scene Investigation	-	-	2	2	2	2	2	2	2
Pavement Forensic Investigation	-	-	2	2	2	2	2	2	2
Road Maintenance	-	-	3	3	3	3	3	3	3
Supervision of road work	-	-	2	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	2	2	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	2	2	2	2	2	2	2
Slope Maintenance	-	-	3	3	3	3	3	3	3
Environmental Protection Works	-	-	2	2	2	2	2	2	2
Environmental Impact Assessment	-	-	2	2	2	2	2	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
10.2.26 Engineer - Road & Bridge Maintenances									
Non-technical competencies and their target levels (refer Para. 9)									
Bridge & Structural Forensic	-	-	-	2	2	2	2	2	2
Bridge Design	-	-	-	2	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	3	5	4	3	3	2
Supervision of bridge/building and other structural work	-	-	-	2	2	2	2	2	2
Drainage Design	-	-	-	2	2	2	2	2	2
Traffic Study	-	-	-	2	2	2	2	2	2
Geometric Design	-	-	-	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Pavement Design	-	-	-	2	2	2	2	2	2
Traffic Management	-	-	-	2	2	2	2	2	2
Road Safety Audit	-	-	-	2	2	2	2	2	2
Road Safety Improvement Programs	-	-	-	2	2	2	2	2	2
Accident Scene Investigation	-	-	-	2	2	2	2	2	2
Pavement Forensic Investigation	-	-	-	3	5	4	3	3	2
Road Maintenance	-	-	-	3	5	4	3	3	2
Supervision of road work	-	-	-	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	2	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	2	2	2	2	2	2
Slope Maintenance	-	-	-	3	5	4	3	3	2
Environmental Protection Works	-	-	-	2	2	2	2	2	2
Environmental Impact Assessment	-	-	-	2	2	2	2	2	2
Project Management Best Practices	-	-	-	3	5	4	3	3	2
10.2.27 Engineer - Building & Infrastructure Maintenances									
Non-technical competencies and their target levels (refer Para. 9)									
Structure Analysis & Design	-	-	-	2	2	2	2	2	2
Bridge & Structural Forensic	-	-	-	2	2	2	2	2	2
Bridge & Building Maintenance	-	-	-	3	5	4	3	3	2
Supervision of bridge/building and other structural work	-	-	-	2	2	2	2	2	2
Marine Structure Design	-	-	-	2	2	2	2	2	2
Airport Planning, Analysis & Design	-	-	-	2	2	2	2	2	2
Sewerage Design	-	-	-	2	2	2	2	2	2
Water Reticulation Design	-	-	-	2	2	2	2	2	2
Sustainable Water Recycling	-	-	-	2	2	2	2	2	2
Drainage Design	-	-	-	2	2	2	2	2	2
Earthwork Design for Building Project	-	-	-	2	2	2	2	2	2
Civil Works Maintenance	-	-	-	3	5	4	3	3	2
Coastal Engineering	-	-	-	2	2	2	2	2	2

COMPETENCIES (Civil Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Internal Road Design	-	-	-	2	2	2	2	2	2
Retaining Structure and Slope Stability Design	-	-	-	2	2	2	2	2	2
Geotechnical Forensic Investigation	-	-	-	2	2	2	2	2	2
Environmental Protection Works	-	-	-	2	2	2	2	2	2
Environmental Impact Assessment	-	-	-	2	2	2	2	2	2
Project Management Best Practices	-	-	-	3	5	4	3	3	2

Job group for the incumbent who is sitting on Open Post (Engineer/ Architect/ Quantity Surveyor) or performing job not relating to the core business of his/her discipline are listed in para.16 below.

11 COMPETENCY MODELS FOR ELECTRICAL ENGINEER

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
11.1 STANDARD POSITION (*GRED HAKIKI*)									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	3	3	3	3	3	3	3	2	2
HT Electrical Design	3	3	3	3	3	3	3	2	2
Acoustic Treatment	3	3	3	3	3	3	3	2	2
ELV system	3	3	3	3	3	3	3	2	2
ICT System	3	3	3	3	3	3	3	2	2
Usage Application & Customization	3	3	3	3	3	3	3	2	2
Telephony System	3	3	3	3	3	3	3	2	2
Electrical works supervision	3	3	3	3	3	3	3	2	2
Maintenance Management	3	3	3	3	3	3	3	2	2
Electrical Protection System	3	3	3	3	3	3	3	2	2
Safety Inspection of electrical installation	3	3	3	3	3	3	3	2	2
Energy Efficiency & Renewable Energy	3	3	3	3	3	3	3	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	3	3	3	3	3	3	3	2	2
Forensic analysis of electrical installation	3	3	3	3	3	3	3	2	2
Accredited Laboratories and technology evaluation.	3	3	3	3	3	3	3	2	2
Project Management Methodologist	3	3	3	3	3	3	3	2	2
Project Management Best Practices	3	3	3	3	3	3	3	2	2
Site Supervision & Coordination	3	3	3	3	3	3	3	2	2
Total Asset Management	3	3	3	3	3	3	3	2	2
Infrastructure Facilities Management	3	3	3	3	3	3	3	2	2
Change Management	3	3	3	3	3	3	3	2	2
Enterprise System Management	3	3	3	3	3	3	3	2	2
Human Resource Strategic Planning	3	3	3	3	3	3	3	2	2

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Organisational Development	3	3	3	3	3	3	3	2	2
ICT Strategic Planning	3	3	3	3	3	3	3	2	2
Public Relations	3	3	3	3	3	3	3	2	2
Process Re-engineering & Mapping	3	3	3	3	3	3	3	2	2
SKALA Management & Administration	3	3	3	3	3	3	3	2	2
Workforce Learning & Competencies Management	3	3	3	3	3	3	3	2	2
Strategic Thinking	3	3	3	3	3	3	3	2	2
Research Methodology	3	3	3	3	3	3	3	2	2
Specialisation / Complex Project Methodology	3	3	3	3	3	3	3	2	2
System Thinking	3	3	3	3	3	3	3	2	2
11.2 ACTUAL POSITIONS:									
11.2.1 Director/Manager - Cawangan Elektrik/State PWD									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	3	3	3	3	3	2	2
HT Electrical Design	-	-	3	3	3	3	3	2	2
Acoustic Treatment	-	-	3	3	3	3	3	2	2
ELV system	-	-	3	3	3	3	3	2	2
ICT System	-	-	3	3	3	3	3	2	2
Usage Application & Customization	-	-	3	3	3	3	3	2	2
Telephony System	-	-	3	3	3	3	3	2	2
Electrical works supervision	-	-	3	3	3	3	3	2	2
Maintenance Management	-	-	3	3	3	3	3	2	2
Electrical Protection System	-	-	3	3	3	3	3	2	2
Safety Inspection of electrical installation	-	-	3	3	3	3	3	2	2
Energy Efficiency & Renewable Energy	-	-	3	3	3	3	3	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	3	3	3	3	3	2	2
Forensic analysis of electrical installation	-	-	3	3	3	3	3	2	2

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Accredited Laboratories and technology evaluation.	-	-	3	3	3	3	3	2	2
Project Management Best Practices	-	-	3	3	3	3	3	2	2
Infrastructure Facilities Management	-	-	3	3	3	3	3	2	2
11.2.2 Designer - Electrical Works									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	5	4	3	3	2
HT Electrical Design	-	-	-	-	5	4	3	3	2
Acoustic Treatment	-	-	-	-	2	2	2	2	2
ELV system	-	-	-	-	2	2	2	2	2
ICT System	-	-	-	-	2	2	2	2	2
Usage Application & Customization	-	-	-	-	2	2	2	2	2
Telephony System	-	-	-	-	2	2	2	2	2
Electrical works supervision	-	-	-	-	4	3	3	2	2
Maintenance Management	-	-	-	-	2	2	2	2	2
Electrical Protection System	-	-	-	-	4	4	4	3	2
Safety Inspection of electrical installation	-	-	-	-	2	2	2	2	2
Energy Efficiency & Renewable Energy	-	-	-	-	2	2	2	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	2	2	2	2	2
Forensic analysis of electrical installation	-	-	-	-	2	2	2	2	2
Accredited Laboratories and technology evaluation.	-	-	-	-	-	-	-	-	-
Project Management Best Practices	-	-	-	-	3	3	3	2	2
Infrastructure Facilities Management	-	-	-	-	3	3	3	2	2
11.2.3 Maintenance Engineer - Electrical Works									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	4	4	4	3	2
HT Electrical Design	-	-	-	-	4	4	3	2	2

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Acoustic Treatment	-	-	-	-	3	2	2	2	2
ELV system	-	-	-	-	3	2	2	2	2
ICT System	-	-	-	-	3	2	2	2	2
Usage Application & Customization	-	-	-	-	3	2	2	2	2
Telephony System	-	-	-	-	3	2	2	2	2
Electrical works supervision	-	-	-	-	4	4	4	3	2
Maintenance Management	-	-	-	-	5	4	3	3	2
Electrical Protection System	-	-	-	-	4	4	4	3	2
Safety Inspection of electrical installation	-	-	-	-	3	3	2	2	2
Energy Efficiency & Renewable Energy	-	-	-	-	3	3	2	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	2	2	2	2	2
Forensic analysis of electrical installation	-	-	-	-	2	2	2	2	2
Accredited Laboratories and technology evaluation.	-	-	-	-	-	-	-	-	-
Project Management Best Practices	-	-	-	-	5	4	3	3	2
Infrastructure Facilities Management	-	-	-	-	5	4	3	3	2
11.2.4 Specialist Engineer - ICT									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	3	3	3	2	2
HT Electrical Design	-	-	-	-	2	2	2	2	2
Acoustic Treatment	-	-	-	-	2	2	2	2	2
ELV system	-	-	-	-	2	2	2	2	2
ICT System	-	-	-	-	5	4	3	3	2
Usage Application & Customization	-	-	-	-	5	4	3	3	2
Telephony System	-	-	-	-	5	4	3	3	2
Electrical works supervision	-	-	-	-	4	3	3	2	2
Maintenance Management	-	-	-	-	2	2	2	2	2
Electrical Protection System	-	-	-	-	2	2	2	2	2

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Safety Inspection of electrical installation	-	-	-	-	2	2	2	2	2
Energy Efficiency & Renewable Energy	-	-	-	-	2	2	2	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	2	2	2	2	2
Forensic analysis of electrical installation	-	-	-	-	2	2	2	2	2
Accredited Laboratories and technology evaluation.	-	-	-	-	-	-	-	-	-
Project Management Best Practices	-	-	-	-	3	3	3	2	2
Infrastructure Facilities Management	-	-	-	-	3	3	3	2	2
11.2.5 Specialist Engineer - Acoutic & ELV									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	4	3	3	2	2
HT Electrical Design	-	-	-	-	2	2	2	2	2
Acoustic Treatment	-	-	-	-	5	4	3	3	2
ELV system	-	-	-	-	5	4	3	3	2
ICT System	-	-	-	-	2	2	2	2	2
Usage Application & Customization	-	-	-	-	2	2	2	2	2
Telephony System	-	-	-	-	2	2	2	2	2
Electrical works supervision	-	-	-	-	4	3	3	2	2
Maintenance Management	-	-	-	-	2	2	2	2	2
Electrical Protection System	-	-	-	-	2	2	2	2	2
Safety Inspection of electrical installation	-	-	-	-	2	2	2	2	2
Energy Efficiency & Renewable Energy	-	-	-	-	2	2	2	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	2	2	2	2	2
Forensic analysis of electrical installation	-	-	-	-	2	2	2	2	2
Accredited Laboratories and technology evaluation.	-	-	-	-	-	-	-	-	-
Project Management Best Practices	-	-	-	-	3	3	3	2	2
Infrastructure Facilities Management	-	-	-	-	3	3	3	2	2

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
11.2.6 Specialist Engineer - Inspectorate & Energy Management									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	3	3	3	2	2
HT Electrical Design	-	-	-	-	3	3	3	2	2
Acoustic Treatment	-	-	-	-	3	2	2	2	2
ELV system	-	-	-	-	3	2	2	2	2
ICT System	-	-	-	-	3	2	2	2	2
Usage Application & Customization	-	-	-	-	3	2	2	2	2
Telephony System	-	-	-	-	3	2	2	2	2
Electrical works supervision	-	-	-	-	4	3	3	2	2
Maintenance Management	-	-	-	-	4	3	3	2	2
Electrical Protection System	-	-	-	-	4	3	3	2	2
Safety Inspection of electrical installation	-	-	-	-	5	4	3	3	2
Energy Efficiency & Renewable Energy	-	-	-	-	5	4	3	3	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	3	2	2	2	2
Forensic analysis of electrical installation	-	-	-	-	2	2	2	2	2
Accredited Laboratories and technology evaluation.	-	-	-	-	-	-	-	-	-
Project Management Best Practices	-	-	-	-	3	3	3	2	2
Infrastructure Facilities Management	-	-	-	-	3	3	3	2	2
11.2.7 Specialist Engineer - Standard, Testing & Laboratory									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	3	3	3	2	2
HT Electrical Design	-	-	-	-	3	3	3	2	2
Acoustic Treatment	-	-	-	-	3	2	2	2	2
ELV system	-	-	-	-	3	2	2	2	2
ICT System	-	-	-	-	3	2	2	2	2

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Usage Application & Customization	-	-	-	-	3	2	2	2	2
Telephony System	-	-	-	-	3	2	2	2	2
Electrical works supervision	-	-	-	-	4	3	3	2	2
Maintenance Management	-	-	-	-	3	2	2	2	2
Electrical Protection System	-	-	-	-	3	2	2	2	2
Safety Inspection of electrical installation	-	-	-	-	3	2	2	2	2
Energy Efficiency & Renewable Energy	-	-	-	-	3	2	2	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	5	4	3	3	2
Forensic analysis of electrical installation	-	-	-	-	5	4	3	3	2
Accredited Laboratories and technology evaluation.	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	3	3	3	2	2
Infrastructure Facilities Management	-	-	-	-	3	3	3	2	2
11.2.8 Program/Project Manager									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	4	4	3	3	2
HT Electrical Design	-	-	-	-	4	4	4	3	2
Acoustic Treatment	-	-	-	-	3	3	2	2	2
ELV system	-	-	-	-	3	3	2	2	2
ICT System	-	-	-	-	3	3	2	2	2
Usage Application & Customization	-	-	-	-	3	3	2	2	2
Telephony System	-	-	-	-	3	3	2	2	2
Electrical works supervision	-	-	-	-	4	4	3	2	2
Maintenance Management	-	-	-	-	2	2	2	2	2
Electrical Protection System	-	-	-	-	3	3	3	2	2
Safety Inspection of electrical installation	-	-	-	-	2	2	2	2	2
Energy Efficiency & Renewable Energy	-	-	-	-	2	2	2	2	2

COMPETENCIES (Electrical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	2	2	2	2	2
Forensic analysis of electrical installation	-	-	-	-	-	-	-	-	-
Accredited Laboratories and technology evaluation.	-	-	-	-	-	-	-	-	-
Project Management Best Practices	-	-	-	-	5	4	3	2	2
Infrastructure Facilities Management	-	-	-	-	3	3	3	2	2
11.2.9 Project Engineer - Electrical Works									
Non-technical competencies and their target levels (refer Para. 9)									
Internal & External Electrical System Design	-	-	-	-	4	4	4	3	2
HT Electrical Design	-	-	-	-	4	4	4	3	2
Acoustic Treatment	-	-	-	-	3	2	2	2	2
ELV system	-	-	-	-	3	2	2	2	2
ICT System	-	-	-	-	3	2	2	2	2
Usage Application & Customization	-	-	-	-	3	2	2	2	2
Telephony System	-	-	-	-	3	2	2	2	2
Electrical works supervision	-	-	-	-	5	4	3	3	2
Maintenance Management	-	-	-	-	3	2	2	2	2
Electrical Protection System	-	-	-	-	3	2	2	2	2
Safety Inspection of electrical installation	-	-	-	-	4	4	3	2	2
Energy Efficiency & Renewable Energy	-	-	-	-	2	2	2	2	2
Application of Regulations, Codes and Standard on Electrical Equipment, Material and Systems	-	-	-	-	2	2	2	2	2
Forensic analysis of electrical installation	-	-	-	-	2	2	2	2	2
Accredited Laboratories and technology evaluation.	-	-	-	-	-	-	-	-	-
Project Management Best Practices	-	-	-	-	3	3	3	2	2
Infrastructure Facilities Management	-	-	-	-	3	3	3	2	2

Job group for the incumbent who is sitting on Open Post (Engineer/ Architect/ Quantity Surveyor) or performing job not relating to the core business of his/her discipline are listed in para.16 below.

12 COMPETENCY MODELS FOR MECHANICAL ENGINEER

COMPETENCIES (Mechanical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
12.1 STANDARD POSITION (*GRED HAKIKI*)									
Non-technical competencies and their target levels (refer Para. 9)									
Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	3	3	3	3	3	3	3	2	2
Design of Fire Fighting System	3	3	3	3	3	3	3	2	2
Design of Lift & Escalator System	3	3	3	3	3	3	3	2	2
Internal Cold Water, Sanitary Plumbing System & Pumping System	3	3	3	3	3	3	3	2	2
Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	3	3	3	3	3	3	3	2	2
Design of Miscellaneous Mechanical Services	3	3	3	3	3	3	3	2	2
Mechanical Specialist Services	3	3	3	3	3	3	3	2	2
D&B Project Implementation (Mechanical)	3	3	3	3	3	3	3	2	2
In-House Project Implementation (Mechanical consultant)	3	3	3	3	3	3	3	2	2
Consultancy Services (mechanical)	3	3	3	3	3	3	3	2	2
Inspection & Evaluation of vehicles / machineries / equipment	3	3	3	3	3	3	3	2	2
Maintenance of vehicles & construction machinery.	3	3	3	3	3	3	3	2	2
Site supervision for mechanical project	3	3	3	3	3	3	3	2	2
Testing & Commissioning of mechanical system	3	3	3	3	3	3	3	2	2
Maintenance of mechanical systems in building	3	3	3	3	3	3	3	2	2
Quarry Operation, Maintenance and Road Surfacing	3	3	3	3	3	3	3	2	2
Quarry Design	3	3	3	3	3	3	3	2	2
Project Management Methodologist	3	3	3	3	3	3	3	2	2
Project Management Best Practices	3	3	3	3	3	3	3	2	2
Site Supervision & Coordination	3	3	3	3	3	3	3	2	2

COMPETENCIES (Mechanical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Total Asset Management	3	3	3	3	3	3	3	2	2
Infrastructure Facilities Management	3	3	3	3	3	3	3	2	2
Change Management	3	3	3	3	3	3	3	2	2
Enterprise System Management	3	3	3	3	3	3	3	2	2
Human Resource Strategic Planning	3	3	3	3	3	3	3	2	2
Organisational Development	3	3	3	3	3	3	3	2	2
ICT Strategic Planning	3	3	3	3	3	3	3	2	2
Public Relations	3	3	3	3	3	3	3	2	2
Process Re-engineering & Mapping	3	3	3	3	3	3	3	2	2
SKALA Management & Administration	3	3	3	3	3	3	3	2	2
Workforce Learning & Competencies Management	3	3	3	3	3	3	3	2	2
Strategic Thinking	3	3	3	3	3	3	3	2	2
Research Methodology	3	3	3	3	3	3	3	2	2
Specialisation / Complex Project Methodology	3	3	3	3	3	3	3	2	2
System Thinking	3	3	3	3	3	3	3	2	2
12.2 ACTUAL POSITIONS:									
12.2.1 Director/Manager - Cawangan Mekanikal/State PWD									
Non-technical competencies and their target levels (refer Para. 9)									
Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	-	-	3	3	3	3	3	2	2
Design of Fire Fighting System	-	-	3	3	3	3	3	2	2
Design of Lift & Escalator System	-	-	3	3	3	3	3	2	2
Internal Cold Water, Sanitary Plumbing System & Pumping System	-	-	3	3	3	3	3	2	2
Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	-	-	3	3	3	3	3	2	2
Design of Miscellaneous Mechanical Services	-	-	3	3	3	3	3	2	2
Mechanical Specialist Services	-	-	3	3	3	3	3	2	2

COMPETENCIES (Mechanical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
D&B Project Implementation (Mechanical)	-	-	3	3	3	3	3	2	2
In-House Project Implementation (Mechanical consultant)	-	-	3	3	3	3	3	2	2
Consultancy Services (mechanical)	-	-	3	3	3	3	3	2	2
Inspection & Evaluation of vehicles / machineries / equipment	-	-	3	3	3	3	3	2	2
Maintenance of vehicles & construction machinery.	-	-	3	3	3	3	3	2	2
Site supervision for mechanical project	-	-	3	3	3	3	3	2	2
Testing & Commissioning of mechanical system	-	-	3	3	3	3	3	2	2
Maintenance of mechanical systems in building	-	-	3	3	3	3	3	2	2
Quarry Operation, Maintenance and Road Surfacing	-	-	3	3	3	3	3	2	2
Quarry Design	-	-	3	3	3	3	3	2	2
Project Management Best Practices	-	-	3	3	3	3	3	2	2
12.2.2 Specialist Engineer - Mechanical									
Non-technical competencies and their target levels (refer Para. 9)									
Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	-	-	-	-	5	4	3	3	2
Design of Fire Fighting System	-	-	-	-	5	4	3	3	2
Design of Lift & Escalator System	-	-	-	-	5	4	3	3	2
Internal Cold Water, Sanitary Plumbing System & Pumping System	-	-	-	-	5	4	3	3	2
Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	-	-	-	-	5	4	3	3	2
Design of Miscellaneous Mechanical Services	-	-	-	-	5	4	3	3	2
Mechanical Specialist Services	-	-	-	-	5	4	3	3	2
Consultancy Services (mechanical)	-	-	-	-	3	3	3	2	2
Testing & Commissioning of mechanical system	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

COMPETENCIES (Mechanical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
12.2.3 Designer - Mechanical									
Non-technical competencies and their target levels (refer Para. 9)									
Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	-	-	-	-	5	4	3	3	2
Design of Fire Fighting System	-	-	-	-	5	4	3	3	2
Design of Lift & Escalator System	-	-	-	-	5	4	3	3	2
Internal Cold Water, Sanitary Plumbing System & Pumping System	-	-	-	-	5	4	3	3	2
Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	-	-	-	-	5	4	3	3	2
Design of Miscellaneous Mechanical Services	-	-	-	-	5	4	3	3	2
Mechanical Specialist Services	-	-	-	-	3	3	3	2	2
D&B Project Implementation (Mechanical)	-	-	-	-	5	4	3	3	2
In-House Project Implementation (Mechanical consultant)	-	-	-	-	5	4	3	3	2
Site supervision for mechanical project	-	-	-	-	3	3	3	2	2
Testing & Commissioning of mechanical system	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
12.2.4 Maintenance Engineer - Building Services									
Non-technical competencies and their target levels (refer Para. 9)									
Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	-	-	-	-	3	3	3	2	2
Design of Fire Fighting System	-	-	-	-	3	3	3	2	2
Design of Lift & Escalator System	-	-	-	-	3	3	3	2	2
Internal Cold Water, Sanitary Plumbing System & Pumping System	-	-	-	-	3	3	3	2	2
Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	-	-	-	-	3	3	3	2	2
Design of Miscellaneous Mechanical Services	-	-	-	-	3	3	3	2	2
Consultancy Services (mechanical)	-	-	-	-	5	4	3	3	2

COMPETENCIES (Mechanical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Testing & Commissioning of mechanical system	-	-	-	-	5	4	3	3	2
Maintenance of mechanical systems in building	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
12.2.5 Maintenance Engineer - Vehicle Maintenance									
Non-technical competencies and their target levels (refer Para. 9)									
Consultancy Services (mechanical)	-	-	-	-	2	2	2	2	2
Inspection & Evaluation of vehicles / machineries / equipment	-	-	-	-	5	4	3	3	2
Maintenance of vehicles & construction machinery.	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
12.2.6 Program/Project Manager									
Non-technical competencies and their target levels (refer Para. 9)									
Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	-	-	-	-	3	3	3	2	2
Design of Fire Fighting System	-	-	-	-	3	3	3	2	2
Design of Lift & Escalator System	-	-	-	-	3	3	3	2	2
Internal Cold Water, Sanitary Plumbing System & Pumping System	-	-	-	-	3	3	3	2	2
Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	-	-	-	-	3	3	3	2	2
Design of Miscellaneous Mechanical Services	-	-	-	-	3	3	3	2	2
D&B Project Implementation (Mechanical)	-	-	-	-	5	4	3	3	2
In-House Project Implementation (Mechanical consultant)	-	-	-	-	5	4	3	3	2
Consultancy Services (mechanical)	-	-	-	-	5	4	3	3	2
Site supervision for mechanical project	-	-	-	-	5	4	3	3	2
Testing & Commissioning of mechanical system	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

COMPETENCIES (Mechanical Engineer)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
12.2.7 Engineer - Quarry & Plant Management									
Non-technical competencies and their target levels (refer Para. 9)									
Design of Miscellaneous Mechanical Services	-	-	-	-	2	2	2	2	2
Mechanical Specialist Services	-	-	-	-	2	2	2	2	2
Consultancy Services (mechanical)	-	-	-	-	3	3	3	2	2
Maintenance of vehicles & construction machinery.	-	-	-	-	3	3	3	2	2
Site supervision for mechanical project	-	-	-	-	3	3	3	2	2
Testing & Commissioning of mechanical system	-	-	-	-	3	3	3	2	2
Quarry Operation, Maintenance and Road Surfacing	-	-	-	-	5	4	3	3	2
Quarry Design	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
12.2.8 Engineer - Asset Management									
Non-technical competencies and their target levels (refer Para. 9)									
Inspection & Evaluation of vehicles / machineries / equipment	-	-	-	-	5	4	3	3	2
Maintenance of vehicles & construction machinery.	-	-	-	-	2	2	2	2	2
Testing & Commissioning of mechanical system	-	-	-	-	2	2	2	2	2
Maintenance of mechanical systems in building	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

Job group for the incumbent who is sitting on Open Post (Engineer/ Architect/ Quantity Surveyor) or performing job not relating to the core business of his/her discipline are listed in para.16 below.

13 COMPETENCY MODELS FOR ARCHITECT

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
13.1 STANDARD POSITION (*GRED HAKIKI*)									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	3	3	3	3	3	3	3	2	2
Architectural Design Synthesis	3	3	3	3	3	3	3	2	2
Architectural Works Validation	3	3	3	3	3	3	3	2	2
Architectural Audit	3	3	3	3	3	3	3	2	2
Master Planning / Urban Planning	3	3	3	3	3	3	3	2	2
Landscape Design	3	3	3	3	3	3	3	2	2
Interior Design	3	3	3	3	3	3	3	2	2
Conservation and Rehabilitation	3	3	3	3	3	3	3	2	2
Specialized Facility Planning & Design	3	3	3	3	3	3	3	2	2
Pre-development Planning	3	3	3	3	3	3	3	2	2
Architectural ICT	3	3	3	3	3	3	3	2	2
Sustainable Architecture	3	3	3	3	3	3	3	2	2
Building Legislation, statutory requirements and architectural guidelines advisory	3	3	3	3	3	3	3	2	2
Documentation and imaging	3	3	3	3	3	3	3	2	2
Architectural research and innovation	3	3	3	3	3	3	3	2	2
Project Management Methodologist	3	3	3	3	3	3	3	2	2
Project Management Best Practices	3	3	3	3	3	3	3	2	2
Site Supervision & Coordination	3	3	3	3	3	3	3	2	2
Total Asset Management	3	3	3	3	3	3	3	2	2
Infrastructure Facilities Management	3	3	3	3	3	3	3	2	2
Change Management	3	3	3	3	3	3	3	2	2
Enterprise System Management	3	3	3	3	3	3	3	2	2
Human Resource Strategic Planning	3	3	3	3	3	3	3	2	2

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Organisational Development	3	3	3	3	3	3	3	2	2
ICT Strategic Planning	3	3	3	3	3	3	3	2	2
Public Relations	3	3	3	3	3	3	3	2	2
Process Re-engineering & Mapping	3	3	3	3	3	3	3	2	2
SKALA Management & Administration	3	3	3	3	3	3	3	2	2
Workforce Learning & Competencies Management	3	3	3	3	3	3	3	2	2
Strategic Thinking	3	3	3	3	3	3	3	2	2
Research Methodology	3	3	3	3	3	3	3	2	2
Specialisation / Complex Project Methodology	3	3	3	3	3	3	3	2	2
System Thinking	3	3	3	3	3	3	3	2	2
13.2 ACTUAL POSITIONS:									
13.2.1 Director/Manager - Cawangan Arkitek / State PWD									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	3	3	3	3	3	2	2
Architectural Design Synthesis	-	-	3	3	3	3	3	2	2
Architectural Works Validation	-	-	3	3	3	3	3	2	2
Architectural Audit	-	-	3	3	3	3	3	2	2
Master Planning / Urban Planning	-	-	3	3	3	3	3	2	2
Landscape Design	-	-	3	3	3	3	3	2	2
Interior Design	-	-	3	3	3	3	3	2	2
Conservation and Rehabilitation	-	-	3	3	3	3	3	2	2
Specialized Facility Planning & Design	-	-	3	3	3	3	3	2	2
Pre-development Planning	-	-	3	3	3	3	3	2	2
Architectural ICT	-	-	3	3	3	3	3	2	2
Sustainable Architecture	-	-	3	3	3	3	3	2	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	3	3	5	4	3	3	2
Documentation and imaging	-	-	3	3	3	3	3	2	2

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Architectural research and innovation	-	-	3	3	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.2 Designer - Architecture									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	5	4	3	3	2
Architectural Design Synthesis	-	-	-	-	5	4	3	3	2
Architectural Works Validation	-	-	-	-	5	4	3	3	2
Architectural Audit	-	-	-	-	5	4	3	3	2
Master Planning / Urban Planning	-	-	-	-	5	4	3	3	2
Landscape Design	-	-	-	-	5	4	3	3	2
Interior Design	-	-	-	-	5	4	3	3	2
Conservation and Rehabilitation	-	-	-	-	5	4	3	3	2
Specialized Facility Planning & Design	-	-	-	-	5	4	3	3	2
Pre-development Planning	-	-	-	-	5	4	3	3	2
Architectural ICT	-	-	-	-	3	3	3	3	2
Sustainable Architecture	-	-	-	-	5	4	3	3	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.3 Architect - Architectural Development									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	3	3	3	2	2
Architectural Design Synthesis	-	-	-	-	3	3	3	2	2
Architectural Works Validation	-	-	-	-	3	3	3	2	2
Architectural Audit	-	-	-	-	4	4	3	3	2

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Master Planning / Urban Planning	-	-	-	-	4	4	3	3	2
Landscape Design	-	-	-	-	4	4	3	3	2
Interior Design	-	-	-	-	4	4	3	3	2
Conservation and Rehabilitation	-	-	-	-	4	4	3	3	2
Specialized Facility Planning & Design	-	-	-	-	4	4	3	3	2
Pre-development Planning	-	-	-	-	3	3	3	2	2
Architectural ICT	-	-	-	-	3	3	3	2	2
Sustainable Architecture	-	-	-	-	5	4	3	3	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.4 Architect - ICT Management									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	3	3	3	2	2
Architectural Design Synthesis	-	-	-	-	3	3	3	2	2
Architectural Works Validation	-	-	-	-	3	3	3	2	2
Architectural Audit	-	-	-	-	3	3	3	2	2
Master Planning / Urban Planning	-	-	-	-	3	3	3	2	2
Landscape Design	-	-	-	-	3	3	3	2	2
Interior Design	-	-	-	-	3	3	3	2	2
Conservation and Rehabilitation	-	-	-	-	3	3	3	2	2
Specialized Facility Planning & Design	-	-	-	-	3	3	3	2	2
Pre-development Planning	-	-	-	-	3	3	3	2	2
Architectural ICT	-	-	-	-	5	4	3	3	2
Sustainable Architecture	-	-	-	-	2	2	2	2	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Documentation and imaging	-	-	-	-	5	4	3	3	2
Architectural research and innovation	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.5 Program/Project/Construction Manager									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	5	4	3	3	2
Architectural Design Synthesis	-	-	-	-	5	4	3	3	2
Architectural Works Validation	-	-	-	-	5	4	3	3	2
Architectural Audit	-	-	-	-	5	4	3	3	2
Master Planning / Urban Planning	-	-	-	-	3	3	3	2	2
Landscape Design	-	-	-	-	3	3	3	2	2
Interior Design	-	-	-	-	3	3	3	2	2
Conservation and Rehabilitation	-	-	-	-	3	3	3	2	2
Specialized Facility Planning & Design	-	-	-	-	3	3	3	2	2
Pre-development Planning	-	-	-	-	5	4	3	3	2
Architectural ICT	-	-	-	-	4	3	2	2	2
Sustainable Architecture	-	-	-	-	4	4	4	3	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.6 Architect - Building Maintenance									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	3	3	3	2	2
Architectural Design Synthesis	-	-	-	-	3	3	3	2	2
Architectural Works Validation	-	-	-	-	3	3	3	2	2

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Architectural Audit	-	-	-	-	5	4	3	3	2
Master Planning / Urban Planning	-	-	-	-	3	3	3	2	2
Landscape Design	-	-	-	-	3	3	3	2	2
Interior Design	-	-	-	-	3	3	3	2	2
Conservation and Rehabilitation	-	-	-	-	4	4	4	4	3
Specialized Facility Planning & Design	-	-	-	-	4	4	3	2	3
Pre-development Planning	-	-	-	-	3	3	3	2	2
Architectural ICT	-	-	-	-	4	4	3	3	2
Sustainable Architecture	-	-	-	-	4	4	3	3	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.7 State Architect									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	5	4	3	3	2
Architectural Design Synthesis	-	-	-	-	5	4	3	3	2
Architectural Works Validation	-	-	-	-	5	4	3	3	2
Architectural Audit	-	-	-	-	5	4	3	3	2
Master Planning / Urban Planning	-	-	-	-	4	3	3	2	2
Landscape Design	-	-	-	-	3	3	3	2	2
Interior Design	-	-	-	-	5	4	3	3	2
Conservation and Rehabilitation	-	-	-	-	4	4	4	3	3
Specialized Facility Planning & Design	-	-	-	-	3	2	2	2	2
Pre-development Planning	-	-	-	-	5	4	3	3	2
Architectural ICT	-	-	-	-	4	4	4	3	2
Sustainable Architecture	-	-	-	-	4	4	4	3	2

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.8 Project Architect									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	5	4	3	3	2
Architectural Design Synthesis	-	-	-	-	5	4	3	3	2
Architectural Works Validation	-	-	-	-	5	4	3	3	2
Architectural Audit	-	-	-	-	5	4	3	3	2
Master Planning / Urban Planning	-	-	-	-	4	4	4	3	2
Landscape Design	-	-	-	-	3	3	3	2	2
Interior Design	-	-	-	-	4	4	3	3	3
Conservation and Rehabilitation	-	-	-	-	4	4	3	3	3
Specialized Facility Planning & Design	-	-	-	-	4	4	4	3	2
Pre-development Planning	-	-	-	-	3	3	3	2	2
Architectural ICT	-	-	-	-	3	3	3	2	2
Sustainable Architecture	-	-	-	-	3	3	3	2	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
13.2.9 Architect - Cadre Post									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	5	4	3	3	2
Architectural Design Synthesis	-	-	-	-	5	4	3	3	2
Architectural Works Validation	-	-	-	-	5	4	3	3	2
Architectural Audit	-	-	-	-	5	4	3	3	2
Master Planning / Urban Planning	-	-	-	-	3	3	3	2	2
Landscape Design	-	-	-	-	3	3	3	2	2
Interior Design	-	-	-	-	5	4	3	3	2
Conservation and Rehabilitation	-	-	-	-	3	3	3	2	2
Specialized Facility Planning & Design	-	-	-	-	4	4	3	3	2
Pre-development Planning	-	-	-	-	5	4	3	3	2
Architectural ICT	-	-	-	-	3	3	3	2	2
Sustainable Architecture	-	-	-	-	3	3	3	2	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation					3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
13.2.10 Architect - Architectural Policies Management									
Non-technical competencies and their target levels (refer Para. 9)									
Architectural Design Production	-	-	-	-	3	3	3	2	2
Architectural Design Synthesis	-	-	-	-	3	3	3	2	2
Architectural Works Validation	-	-	-	-	3	3	3	2	2
Architectural Audit	-	-	-	-	3	3	3	2	2
Master Planning / Urban Planning	-	-	-	-	5	4	3	3	2
Landscape Design	-	-	-	-	4	4	4	3	3
Interior Design	-	-	-	-	4	4	4	3	3

COMPETENCIES (Architect)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Conservation and Rehabilitation	-	-	-	-	4	4	4	3	3
Specialized Facility Planning & Design	-	-	-	-	4	4	4	3	3
Pre-development Planning	-	-	-	-	5	4	3	3	2
Architectural ICT	-	-	-	-	3	3	3	2	2
Sustainable Architecture	-	-	-	-	4	4	3	3	2
Building Legislation, statutory requirements and architectural guidelines advisory	-	-	-	-	5	4	3	3	2
Documentation and imaging	-	-	-	-	3	3	3	2	2
Architectural research and innovation	-	-	-	-	3	3	3	2	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2

Job group for the incumbent who is sitting on Open Post (Engineer/ Architect/ Quantity Surveyor) or performing job not relating to the core business of his/her discipline are listed in para.16 below.

14 COMPETENCY MODEL FOR QUANTITY SURVEYOR

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
14.1 STANDARD POSITION (*GRED HAKIKI*)									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	3	3	3	3	3	3	3	2	2
Construction Measurement Practice	3	3	3	3	3	3	3	2	2
Contractual Procurement Practice and Management	3	3	3	3	3	3	3	2	2
Pre-Contract Cost Management	3	3	3	3	3	3	3	2	2
Evaluation and Preparation of Tender Reports	3	3	3	3	3	3	3	2	2
Appointment of QS consultant	3	3	3	3	3	3	3	2	2
Tender Negotiation Management	3	3	3	3	3	3	3	2	2
Practice and Procedure Pertaining to Contract Documentation	3	3	3	3	3	3	3	2	2
Project Financial Management	3	3	3	3	3	3	3	2	2
Contractual Claim Practice and Management	3	3	3	3	3	3	3	2	2
Contractual Time Management	3	3	3	3	3	3	3	2	2
Termination Process Management	3	3	3	3	3	3	3	2	2
Contract Administration Problems	3	3	3	3	3	3	3	2	2
Research & Development of Cost Informations and Publications	3	3	3	3	3	3	3	2	2
Quantity Surveying ICT Application	3	3	3	3	3	3	3	2	2
Development of Quantity Surveying ICT Application	3	3	3	3	3	3	3	2	2
Project Management Methodologist	3	3	3	3	3	3	3	2	2
Project Management Best Practices	3	3	3	3	3	3	3	2	2
Site Supervision & Coordination	3	3	3	3	3	3	3	2	2

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Total Asset Management	3	3	3	3	3	3	3	2	2
Infrastructure Facilities Management	3	3	3	3	3	3	3	2	2
Change Management	3	3	3	3	3	3	3	2	2
Enterprise System Management	3	3	3	3	3	3	3	2	2
Human Resource Strategic Planning	3	3	3	3	3	3	3	2	2
Organisational Development	3	3	3	3	3	3	3	2	2
ICT Strategic Planning	3	3	3	3	3	3	3	2	2
Public Relations	3	3	3	3	3	3	3	2	2
Process Re-engineering & Mapping	3	3	3	3	3	3	3	2	2
SKALA Management & Administration	3	3	3	3	3	3	3	2	2
Workforce Learning & Competencies Management	3	3	3	3	3	3	3	2	2
Strategic Thinking	3	3	3	3	3	3	3	2	2
Research Methodology	3	3	3	3	3	3	3	2	2
Specialisation / Complex Project Methodology	3	3	3	3	3	3	3	2	2
System Thinking	3	3	3	3	3	3	3	2	2
14.2 ACTUAL POSITIONS:									
14.2.1 Director/Manager - Cawangan Kontrak & Ukur Bahan / State PWD									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	-	-	-	-	2	2	2	2	2
Construction Measurement Practice	-	-	-	-	2	2	2	2	2
Contractual Procurement Practice and Management	-	-	-	-	5	4	3	3	2
Pre-Contract Cost Management	-	-	-	-	3	3	3	2	2
Evaluation and Preparation of Tender Reports	-	-	-	-	4	4	3	2	2
Appointment of QS consultant	-	-	-	-	3	3	3	2	2
Tender Negotiation Management	-	-	-	-	3	3	3	2	2

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Practice and Procedure Pertaining to Contract Documentation	-	-	-	-	3	3	3	2	2
Project Financial Management	-	-	-	-	3	3	3	2	2
Contractual Claim Practice and Management	-	-	-	-	3	3	3	2	2
Contractual Time Management	-	-	-	-	3	3	3	2	2
Termination Process Management	-	-	-	-	3	3	3	2	2
Contract Administration Problems	-	-	-	-	3	3	3	2	2
Research & Development of Cost Informations and Publications	-	-	-	-	3	3	3	2	2
Quantity Surveying ICT Application	-	-	-	-	3	3	3	2	2
Development of Quantity Surveying ICT Application	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	3	3	3	2	2
14.2.2 Quantity Surveyor - Quantity Surveying & Control Services									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	-	-	-	-	5	4	3	3	2
Construction Measurement Practice	-	-	-	-	5	4	3	3	2
Contractual Procurement Practice and Management	-	-	-	-	5	4	3	3	2
Pre-Contract Cost Management	-	-	-	-	5	4	3	3	2
Evaluation and Preparation of Tender Reports	-	-	-	-	5	4	3	3	2
Appointment of QS consultant	-	-	-	-	5	4	3	3	2
Tender Negotiation Management	-	-	-	-	5	4	3	3	2
Practice and Procedure Pertaining to Contract Documentation	-	-	-	-	5	4	3	3	2
Project Financial Management	-	-	-	-	5	4	3	3	2
Contractual Claim Practice and Management	-	-	-	-	5	4	3	3	2

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Contractual Time Management	-	-	-	-	5	4	3	3	2
Termination Process Management	-	-	-	-	5	4	3	3	2
Contract Administration Problems	-	-	-	-	5	4	3	3	2
Research & Development of Cost Informations and Publications	-	-	-	-	3	3	3	2	2
Quantity Surveying ICT Application	-	-	-	-	3	3	3	2	2
Development of Quantity Surveying ICT Application	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	2	2
14.2.3 Quantity Surveyor - Tender Secretariat									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	-	-	-	-	2	2	2	2	2
Construction Measurement Practice	-	-	-	-	2	2	2	2	2
Contractual Procurement Practice and Management	-	-	-	-	5	4	3	3	2
Pre-Contract Cost Management	-	-	-	-	3	3	3	2	2
Evaluation and Preparation of Tender Reports	-	-	-	-	5	4	3	3	2
Appointment of QS consultant	-	-	-	-	5	4	3	3	2
Tender Negotiation Management	-	-	-	-	5	4	3	3	2
Practice and Procedure Pertaining to Contract Documentation	-	-	-	-	3	3	3	2	2
Project Financial Management	-	-	-	-	3	3	3	2	2
Contractual Claim Practice and Management	-	-	-	-	5	4	3	3	2
Contractual Time Management	-	-	-	-	3	3	3	2	2
Termination Process Management	-	-	-	-	3	3	3	2	2
Contract Administration Problems	-	-	-	-	3	3	3	2	2

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Research & Development of Cost Informations and Publications	-	-	-	-	3	3	3	2	2
Quantity Surveying ICT Application	-	-	-	-	3	3	3	2	2
Development of Quantity Surveying ICT Application	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	3	3	3	2	2
14.2.4 Quantity Surveyor Documentation & ICT									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	-	-	-	-	2	2	2	2	2
Construction Measurement Practice	-	-	-	-	3	3	2	2	2
Contractual Procurement Practice and Management	-	-	-	-	5	4	3	3	2
Pre-Contract Cost Management	-	-	-	-	3	3	3	2	2
Evaluation and Preparation of Tender Reports	-	-	-	-	4	4	3	2	2
Appointment of QS consultant	-	-	-	-	3	3	3	2	2
Tender Negotiation Management	-	-	-	-	3	3	3	2	2
Practice and Procedure Pertaining to Contract Documentation	-	-	-	-	5	4	3	3	2
Project Financial Management	-	-	-	-	3	3	3	2	2
Contractual Claim Practice and Management	-	-	-	-	3	3	3	2	2
Contractual Time Management	-	-	-	-	3	3	3	2	2
Termination Process Management	-	-	-	-	3	3	3	2	2
Contract Administration Problems	-	-	-	-	3	3	3	2	2
Research & Development of Cost Informations and Publications	-	-	-	-	3	3	3	2	2
Quantity Surveying ICT Application	-	-	-	-	5	4	3	3	2
Development of Quantity Surveying ICT Application	-	-	-	-	5	4	3	3	2
Project Management Best Practices	-	-	-	-	3	3	3	2	2

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
14.2.5 Quantity Surveyor - Management and Policy Development									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	-	-	-	-	3	3	3	2	2
Construction Measurement Practice	-	-	-	-	2	2	2	2	2
Contractual Procurement Practice and Management	-	-	-	-	5	4	3	3	2
Pre-Contract Cost Management	-	-	-	-	3	3	3	2	2
Evaluation and Preparation of Tender Reports	-	-	-	-	3	3	3	2	2
Appointment of QS consultant	-	-	-	-	3	3	3	2	2
Tender Negotiation Management	-	-	-	-	3	3	3	2	2
Practice and Procedure Pertaining to Contract Documentation	-	-	-	-	3	3	3	2	2
Project Financial Management	-	-	-	-	3	3	3	2	2
Contractual Claim Practice and Management	-	-	-	-	5	4	3	3	2
Contractual Time Management	-	-	-	-	3	3	3	2	2
Termination Process Management	-	-	-	-	3	3	3	2	2
Contract Administration Problems	-	-	-	-	5	4	3	3	2
Research & Development of Cost Informations and Publications	-	-	-	-	3	3	3	2	2
Quantity Surveying ICT Application	-	-	-	-	3	3	3	2	2
Development of Quantity Surveying ICT Application	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2
14.2.6 Quantity Surveyor - Cost									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	-	-	-	-	3	3	3	2	2
Construction Measurement Practice	-	-	-	-	3	3	2	2	2

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Contractual Procurement Practice and Management	-	-	-	-	5	4	3	3	2
Pre-Contract Cost Management	-	-	-	-	4	4	3	2	2
Evaluation and Preparation of Tender Reports	-	-	-	-	3	3	3	2	2
Appointment of QS consultant	-	-	-	-	3	3	3	2	2
Tender Negotiation Management	-	-	-	-	3	3	3	2	2
Practice and Procedure Pertaining to Contract Documentation	-	-	-	-	3	3	3	2	2
Project Financial Management	-	-	-	-	3	3	3	2	2
Contractual Claim Practice and Management	-	-	-	-	3	3	3	2	2
Contractual Time Management	-	-	-	-	3	3	3	2	2
Termination Process Management	-	-	-	-	3	3	3	2	2
Contract Administration Problems	-	-	-	-	3	3	3	2	2
Research & Development of Cost Informations and Publications	-	-	-	-	5	4	3	3	2
Quantity Surveying ICT Application	-	-	-	-	3	3	3	2	2
Development of Quantity Surveying ICT Application	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	3	3	3	2	2
14.2.7 Quantity Surveyor - Technical Advisory									
Non-technical competencies and their target levels (refer Para. 9)									
Contractual and Tendering Arrangement	-	-	-	-	5	4	3	3	2
Construction Measurement Practice	-	-	-	-	5	4	3	3	2
Contractual Procurement Practice and Management	-	-	-	-	5	4	3	3	2
Pre-Contract Cost Management	-	-	-	-	5	4	3	3	2
Evaluation and Preparation of Tender Reports	-	-	-	-	5	4	3	3	2

COMPETENCIES (Quantity Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Appointment of QS consultant	-	-	-	-	5	4	3	3	2
Tender Negotiation Management	-	-	-	-	5	4	3	3	2
Practice and Procedure Pertaining to Contract Documentation	-	-	-	-	5	4	3	3	2
Project Financial Management	-	-	-	-	5	4	3	3	2
Contractual Claim Practice and Management	-	-	-	-	5	4	3	3	2
Contractual Time Management	-	-	-	-	5	4	3	3	2
Termination Process Management	-	-	-	-	5	4	3	3	2
Contract Administration Problems	-	-	-	-	5	4	3	3	2
Research & Development of Cost Informations and Publications	-	-	-	-	3	3	3	2	2
Quantity Surveying ICT Application	-	-	-	-	3	3	3	2	2
Development of Quantity Surveying ICT Application	-	-	-	-	2	2	2	2	2
Project Management Best Practices	-	-	-	-	5	4	3	3	2

Job group for the incumbent who is sitting on Open Post (Engineer/ Architect/ Quantity Surveyor) or performing job not relating to the core business of his/her discipline are listed in para.16 below.

15 COMPETENCY MODELS FOR BUILDING SURVEYOR

COMPETENCIES (Building Surveyor)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
15.1 STANDARD POSITION (*GRED HAKIKI*)									
Non-technical competencies and their target levels (refer Para. 9)									
Building Inventory	3	3	3	3	3	3	3	2	2
Building Surveying	3	3	3	3	3	3	3	2	2
Building maintenance management	3	3	3	3	3	3	3	2	2
Project Management Best Practices	3	3	3	3	3	3	3	2	2
15.2 ACTUAL POSITIONS:									
15.2.1 Building Surveyor - Cawangan Senggara									
Non-technical competencies and their target levels (refer Para. 9)									
Building Inventory	-	-	3	3	4	4	3	3	2
Building Surveying	-	-	3	3	5	4	3	3	2
Building maintenance management	-	-	3	3	5	4	3	3	2
Project Management Best Practices	-	-	3	3	3	3	3	2	2
15.2.2 Building Surveyor - State PWD									
Non-technical competencies and their target levels (refer Para. 9)									
Building Inventory	-	-	3	3	4	4	3	2	2
Building Surveying	-	-	3	3	5	4	3	3	2
Building maintenance management	-	-	3	3	5	4	3	3	2
Project Management Best Practices	-	-	3	3	3	3	3	2	2

16 COMPETENCY MODELS FOR OPEN POST (ENGINEER / ARCHITECT/ QUANTITY SURVEYOR)

COMPETENCIES (Open Post)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
16.1 ACTUAL POSITIONS:									
16.1.1 Program/Project Manager - Cawangan Pengurusan Projek Kompleks									
Non-technical competencies (refer Para 9)									
Project Management Methodologist	-	-	3	3	5	4	3	3	2
Project Management Best Practices	-	-	3	3	5	4	3	3	2
Change Management	-	-	3	3	5	4	3	3	2
Organisational Development	-	-	3	3	3	3	3	2	2
Strategic Thinking	-	-	3	3	3	3	3	2	2
Research Methodology	-	-	3	3	3	3	3	2	2
Specialisation / Complex Project Methodology	-	-	3	3	5	4	3	3	2
System Thinking	-	-	3	3	3	3	3	2	2
16.1.2 Training / R&D Manager - Bahagian Latihan & Penyelidikan									
Non-technical competencies (refer Para 9)									
Workforce Learning & Competencies Management	-	-	3	3	4	4	3	2	2
Research Methodology	-	-	3	3	4	4	3	2	2
Project Management Best Practices	-	-	3	3	3	3	3	2	2
16.1.3 HR/ICT/System Manager - Cawangan Pengurusan Korporat									
Non-technical competencies (refer Para 9)									
Change Management	-	-	3	3	4	3	2	2	2
Enterprise System Management	-	-	3	3	4	3	3	2	2
Human Resource Strategic Planning	-	-	3	3	4	3	3	2	2
Organisational Development	-	-	3	3	4	3	3	2	2
ICT Strategic Planning	-	-	3	3	4	3	3	2	2
Public Relations	-	-	3	3	4	3	3	2	2

COMPETENCIES (Open Post)	JOB GRADE								
	TURUS	JUSA A	JUSA B	JUSA C	J54	J52	J48	J44	J41
Process Re-engineering & Mapping	-	-	3	3	4	3	3	2	2
SKALA Management & Administration	-	-	3	3	4	3	3	2	2
Strategic Thinking	-	-	3	3	4	3	3	2	2
Project Management Best Practices	-	-	3	3	3	3	3	2	2
16.1.4 Maintenance Manager - Cawangan Senggara									
Non-technical competencies (refer Para 9)									
Total Asset Management	-	-	3	3	5	4	3	3	2
Infrastructure Facilities Management	-	-	3	3	5	4	3	3	2
Strategic Thinking	-	-	3	3	2	2	2	2	2
Project Management Best Practices	-	-	3	3	3	3	3	2	2
16.1.5 Program/Project Manager - Business Branches									
Non-technical competencies (refer Para 9)									
Project Management Best Practices	-	-	3	3	5	4	3	3	2
Site Supervision & Coordination	-	-	3	3	5	4	3	3	2
Strategic Thinking	-	-	3	3	4	3	3	2	2
16.1.6 PWD Top Management									
Non-technical competencies (refer Para 9)									
Project Management Best Practices	3	3	3	3	3	-	-	-	-
Change Management	3	3	3	3	3	-	-	-	-
Strategic Thinking	3	3	3	3	3	-	-	-	-
System Thinking	3	3	3	3	3	-	-	-	-

17 JOB GROUP DEFINITION

17.1 Civil Engineer

No.	Job Group Name	Definition (Role Description)
1.	Director/Manager - Cawangan. Kejuruteraan Jalan & Geoteknik	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
2.	Designer - Roads	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
3.	Engineer – Road Safety	Manage and perform technical works related to the specialised area of his/her job in the department.
4.	Designer - Geotechnics	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
5.	Director/Manager - Cawangan Kejuruteraan Awam,Struktur & Jambatan	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
6.	Designer - Structures	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
7.	Designer - Bridges	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
8.	Designer - Civil Works	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
9.	Forensic Engineer – Bridges & Buildings.	Manage and perform technical works related to the specialised area of his/her job in the department
10.	Director/Manager – State PWD.	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.

No.	Job Group Name	Definition (Role Description)
11.	District Engineer	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
12.	State Project Engineer – Building Project	Managing the implementation and supervision of the projects related to his/her discipline of engineering.
13.	State Project Engineer – Road Project	Managing the implementation and supervision of the projects related to his/her discipline of engineering.
14.	State Asset/Maintenance Engineer.	Manage and perform maintenance works and asset management related to the specialised area of his/her job in the department.
15.	Designer/Engineer – Water Supply	Manage and perform the design, consultancy, water management and other works related to the specialised area of his/her job in the department.
16.	Project Manager / Project Team – Road Project	Managing and coordinating the implementation of projects related to his/her job position in the department.
17.	Engineer - technical advisory& policy development	Manage and perform technical works, consultancy, policies related to the specialised area of his/her job in the department.
18.	Director/Manager – Cawangan Jalan	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
19.	Project Engineer - Cawangan Jalan	Managing the implementation and supervision of the projects related to his/her discipline of engineering.
20.	Director/Manager - Cawangan Pengkalan Udara & Maritim(CPUM)	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
21.	Designer – Maritime Structures	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.

No.	Job Group Name	Definition (Role Description)
22.	Designer – Airports	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
23.	Engineer – Environmental Management (civil)	Manage and perform technical works related to the specialised area of his/her job in the department
24.	Program/Project Manager (Building) – Business Sector	Managing and coordinating the implementation of building projects related to his/her job position in the department (all Branches in Business Sector except CPUM & Cawangan Jalan).
25.	Engineer – Maintenance Management	Managing and coordinating the implementation of the maintenance works, asset management, policies and other works related to the specialised area of his/her job in the department.
26.	Engineer – Road & Bridge Maintenances	Manage and perform maintenance works related to the specialised area of his/her job in the department
27.	Engineer – Building & Infrastructure Maintenances	Manage and perform maintenance works related to the specialised area of his/her job in the department

17.2 Electrical Engineer

No.	Job Group Name	Definition (Role Description)
1.	Director/Manager - Cawangan Elektrik/ State PWD.	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
2.	Designer-electrical works	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
3.	Maintenance Engineer -electrical works	Manage and perform maintenance works related to the specialised area of his/her job in the department
4.	Specialist Engineer - ICT	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
5.	Specialist Engineer - Acoutic & ELV	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
6.	Specialist Engineer - Inspectorate & energy management	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
7.	Specialist Engineer - Standard, testing & laboratory	Manage and perform the laboratory testing, developing standards and consultancy work related to the specialised area of his/her job in the department.
8.	Program/Project Manager	Managing and coordinating the implementation of projects related to his/her job position in the department.
9.	Project Engineer – electrical works	Managing the implementation and supervision of the projects related to his/her discipline of engineering.

17.3 Mechanical Engineer

No.	Job Group Name	Definition (Role Description)
1.	Director/Manager - Cawangan Mekanikal / State PWD.	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
2.	Specialist Engineer - mechanical	Manage and perform the research, design and consultancy works related to the specialised area of his/her job in the department.
3.	Designer - mechanical	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
4.	Maintenance Engineer – building services	Manage and perform maintenance works related to the specialised area of his/her job in the department
5.	Maintenance Engineer – vehicle maintenace	Manage and perform maintenance works related to the specialised area of his/her job in the department
6.	Program/Project Manager	Managing and coordinating the implementation of projects related to his/her job position in the department.
7.	Engineer – quarry & plant management	Managing the operation, maintenance, asset management, policies and other works related to the specialised area of his/her job in the department.
8.	Engineer – asset management	Managing and coordinating the implementation of the maintenance works, asset management, policies and other works related to the specialised area of his/her job in the department.

17.4 Architect

No.	Job group Name	Definition (Role Description)
1.	Director/Manager - Cawangan Arkitek / State PWD.	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
2.	Designer - architecture	Manage and perform the design and consultancy works related to the specialised area of his/her job in the department.
3.	Architect – architectural development	Manage and perform architectural development works, consultancy and policies related to the specialised area of his/her job in the department.
4.	Architect – ICT management	Manage and perform architectural ICT management, consultancy and policies related to the specialised area of his/her job in the department.
5.	Program/Project/Construction Manager	Managing and coordinating the implementation of projects related to his/her job position in the department.
6.	Architect – building maintenance	Manage and perform maintenance works related to the specialised area of his/her job in the department
7.	State Architect	Manage and perform the design, consultancy works and supervise project related to the specialised area of his/her job in the department.
8.	Project Architect	Managing the implementation and supervision of the projects related to his/her discipline.
9.	Architect – Cadre Post	Manage and perform the architectural services, consultancy and policies related to the specialised area of his/her job in the department
10.	Architect – architectural policies management	Manage and perform the architectural policies management and consultancy related to the specialised area of his/her job in the department

17.5 Quantity Surveyor

No.	Job group Name	Definition (Role Description)
1.	Director/Manager - Cawangan Kontrak & Ukur Bahan / State PWD.	Leading a Branch / Division / Unit which involves the office management, personnel management and managing technical matters related to his/her department.
2.	Quantity Surveyor – quantity surveying & contract services	Manage and perform the quantity surveying services and contract management related to the specialised area of his/her job in the department
3.	Quantity Surveyor –tender secretariat	Manage and perform the quantity surveying services and contract management related to the specialised area of his/her job in the department
4.	Quantity Surveyor - documentation & ICT	Manage and perform the quantity surveying services and contract management related to the specialised area of his/her job in the department
5.	Quantity Surveyor - management and policy development	Manage and perform the management and policy development of quantity surveying services and contract management related to the specialised area of his/her job in the department
6.	Quantity Surveyor - cost	Manage and perform the quantity surveying services and contract management related to the specialised area of his/her job in the department
7.	Quantity Surveyor - technical advisory	Manage and perform the consultancy services of quantity surveying and contract management related to the specialised area of his/her job in the department

17.6 Building Surveyor

No.	Job group Name	Definition (Role Description)
1.	Buiding Surveyor - Cawangan Senggara	Manage and perform the building surveying services related to the specialised area of his/her job in the department
2.	Building Surveyor – State PWD	Manage and perform the building surveying services related to the specialised area of his/her job in the department

17.7 Open Post (Civil Engineer/ Mechanical Engineer/ Electrical Engineer/ Architect/ Quantity Surveyor

No.	Job group Name	Definition (Role Description)
1.	Program/Project Manager – Cawangan Pengurusan Projek Kompleks	Managing, coordinating and implementation of projects management system and organisational development related to his/her job position in the department.
2.	Training / R&D Manager - Bahagian Latihan & Penyelidikan	Managing, coordinating and implementation of training, development and R&D related to his/her job position in the department
3.	HR/ICT/System Manager - Cawangan Pengurusan Korporat	Managing, coordinating and implementation of HR development & policies, corporate communications, quality management, ICT management and etc.
4.	Maintenance Manager - Cawangan Senggara	Managing and coordinating the implementation of the maintenance works, asset management, policies and other works related to the specialised area of his/her job in the department.
5.	Program/Project Manager – Business Branches	Managing and coordinating the implementation of projects related to his/her job position in the department.
6.	PWD Top Management	PWD Director General, Deputy Director Generals and Branch Directors.

For example, an incumbent is a Mechanical Engineer Grade J48 and now he is sitting on position

18 EXAMPLE OF AN INCUMBENT COMPETENCY PROFILE

of Grade J52 (memangku) at Design Divison (Health Project) in Cawangan Kejuruteraan Mekanikal. Therefore his Standard Position (SP) is J48 and Actual Position (AP) is J52. His main job function is designing mechanical systems for Health projects (Ministry Of Health); hence his job group is 'Designer – mechanical'.

Referring to Para. 12.1 for Standard Position Grade J48 and Para 12.2.3 for Actual Position Grade J52, the list of competencies and their target level are listed in the table below. Using this competency model, the level of competency of the incumbent or competency identification (C.I) can be identified, for example the results are as shown in column "Person C.I Score". Hence the competency gap at SP and AP can be calculated.

No.	Competency Name	Type	Person C.I Score	Target / Expected Score		Competency Gap	
				SP (J48)	AP (J52)	SP	AP
			(a)	(b)	(c)	(a-b)	(a-c)
1	Achievement Orientation	Behavior	3	3	3	0	0
2	Adaptive Thinking	Behavior	2	3	3	-1	-1
3	Desire For Knowledge	Behavior	3	3	3	0	0
4	Holding People Accountable	Behavior	4	3	3	1	1
5	Impact & Influence	Behavior	3	4	4	-1	-1
6	Professional Mastery	Behavior	3	3	3	0	0
7	Visionary Leadership	Behavior	3	3	3	0	0
8	Advisory & Consultation	Functional	5	4	4	1	1
9	Crisis Management Resolution	Functional	2	4	4	-2	-2
10	Financial Management	Functional	5	4	4	1	1
11	Quality Management	Functional	4	4	4	0	0
12	Communication	Generic	5	4	4	1	1
13	Planning & Organisation	Generic	4	4	4	0	0
14	People Management	Generic	4	4	4	0	0
15	Policies & Procedures	Generic	2	4	4	-2	-2
16	Customer Service	Generic	4	4	4	0	0
17	EG Applications	ICT	3	3	3	0	0
18	SKALA	ICT	3	3	3	0	0
19	English Language	Language	3	3	3	0	0
20	Design of Air-Conditioning, Mechanical Ventilation System & Building Management System	Technical (discipline)	5	3	4	2	1

No.	Competency Name	Type	Person C.I Score	Target / Expected Score		Competency Gap	
				SP (J48)	AP (J52)	SP	AP
			(a)	(b)	(c)	(a-b)	(a-c)
21	Design of Fire Fighting System	Technical (discipline)	3	3	4	0	-1
22	Design of Lift & Escalator System	Technical (discipline)	5	3	4	2	1
23	Internal Cold Water, Sanitary Plumbing System & Pumping System	Technical (discipline)	5	3	4	2	1
24	Design of Laboratory & Medical Equipment and Design of Piped Gas System (LPG/NG)	Technical (discipline)	4	3	4	1	0
25	Design of Miscellaneous Mechanical Services	Technical (discipline)	3	3	4	0	-1
26	Mechanical Specialist Services	Technical (discipline)	3	3	3	0	0
27	D&B Project Implementation (Mechanical)	Technical (discipline)	5	3	4	2	1
28	In-House Project Implementation (Mechanical consultant)	Technical (discipline)	4	3	4	1	0
29	Consultancy Services (mechanical)	Technical (discipline)	3	3	-	0	-
30	Inspection & Evaluation of vehicles / machineries / equipment	Technical (discipline)	3	3	-	0	-
31	Maintenance of vehicles & construction machinery.	Technical (discipline)	3	3	-	0	-
32	Site supervision for mechanical project	Technical (discipline)	3	3	3	0	0
33	Testing & Commissioning of mechanical system	Technical (discipline)	3	3	3	0	0
34	Maintenance of mechanical systems in building	Technical (discipline)	3	3	-	0	-
35	Quarry Operation, Maintenance and Road Surfacing	Technical (discipline)	4	3	-	1	-
36	Quarry Design	Technical (discipline)	4	3	-	1	-
37	Project Management Methodologist	Technical (generic)	3	3	-	0	-
38	Project Management Best Practices	Technical (generic)	4	3	4	1	0

No.	Competency Name	Type	Person C.I Score	Target / Expected Score		Competency Gap	
				SP (J48)	AP (J52)	SP	AP
			(a)	(b)	(c)	(a-b)	(a-c)
39	Site Supervision & Coordination	Technical (generic)	4	3	-	1	-
40	Total Asset Management	Technical (generic)	3	3	-	0	-
41	Infrastructure Facilities Management	Technical (generic)	3	3	-	0	-
42	Change Management	Technical (generic)	2	3	-	-1	-
43	Enterprise System Management	Technical (generic)	2	3	-	-1	-
44	Human Resource Strategic Planning	Technical (generic)	2	3	-	-1	-
45	Organisational Development	Technical (generic)	2	3	-	-1	-
46	ICT Strategic Planning	Technical (generic)	2	3	-	-1	-
47	Public Relations	Technical (generic)	1	3	-	-2	-
48	Process Re-engineering & Mapping	Technical (generic)	1	3	-	-2	-
49	SKALA Management & Administration	Technical (generic)	3	3	-	0	-
50	Workforce Learning & Competencies Management	Technical (generic)	2	3	-	-1	-
51	Strategic Thinking	Technical (generic)	3	3	-	0	-
52	Research Methodology	Technical (generic)	2	3	-	-1	-
53	Specialisation / Complex Project Methodology	Technical (generic)	1	3	-	-2	-
54	System Thinking	Technical (generic)	1	3	-	-2	-

19 APPLYING COMPETENCIES – YOUR RESPONSIBILITY

People learn new competencies by going through at least a six-step process:

- ☐ Recognition - “I know it when I see it”
- ☐ Understanding - “I get how it impacts performance”
- ☐ Accurate Self-Assessment - “I know I’m not doing it”
- ☐ Experimentation – “I’ve tried it on for size”
- ☐ Practice - “I’m practicing and getting better”
- ☐ On-the-job-application - “It now comes naturally to me”

Understanding the expected job competency requirement and also your competency level gives you some control over your career growth and potentials. Discuss with your supervisor the options that you have during your performance review. Guided by the Competency Dictionary, discussion on matters such as career-path, performance gaps and developmental needs is more objective.

20 FREQUENTLY-ASKED QUESTIONS

The following is a list of questions frequently asked by Agency employees while using this dictionary, accompanied by suitable answers. The objective of listing down the questions is to enable each Agency employee have a good understanding of the dictionary and Competency Model without doubt or confusion.

1. What is competency?
   A competency is an "underlying characteristic" of and individual that is "causally related" to "criterion-reference" effective and/or superior performance in a job or situation.

2. What is Behavioural Competency?
   A Behavioural competency is an underlying characteristic in an individual which is causally related to performance, whether he/she is effective or successful in his/her job or when faced with a situation.

3. What does underlying characteristic mean?
   Underlying characteristic means the competency is a fairly deep and enduring part of a person's personality and can predict behaviours in a wide variety of situations and job tasks.

4. What does causally related mean?
   Causally related means that a competency causes or predicts behaviour and performance.

5. What does criterion-reference mean?
   Criterion-reference means that the competency actually predicts who does something well or poorly, as measured on a specific criterion or standard. Examples of criteria are the dollar volume of sales for salespeople or the number of applications processed in a day by an officer.

6. What are the underlying characteristics of competency?
   The underlying characteristics of competency are Skills, Knowledge, Values, Social Role, Self-image, Traits and Motives.

7. What is Skill?
   Skill is the ability to perform a certain physical or mental task. An example would be; A dentist's physical skill to fill a tooth without damaging the nerve; a computer programmer's ability to organize 50,000 lines of code in logical sequential order.

8. What is Knowledge?
   Knowledge is information a person has in specific content areas. An example; a surgeon's knowledge of nerves and muscles in the human body.

9. What are Values?
   Values are more conscious, learned beliefs a person holds – what they believe to be important to do or be. Example, behaving according to the Agency's Core Values.

10. What in Social Role?
    Social Role is the image that an individual projects to the society. Example, the Village head must always be seen as wise and fair.

11. What is Self-Image?
Self-Image is the identity or self-worth that the individual has. Example, how an individual sees himself as the group leader.

12. What are Traits?
Traits are the general disposition that an individual has to behave in a certain way. Example, reaction time and good eyesight are physical trait competencies of combat pilots.

13. What are Motives?
Motives are the recurrent needs or thoughts the drive behaviour. They are the things a person consistently thinks about or wants that causes action. Motives "drive, direct and select" behaviour towards certain actions or goals and away for others. For example; Achievement motivated people consistently set challenging goals for themselves, takes personal responsibility for accomplishing them, and uses feedback to do better.

14. What is a Competency Model/Dictionary?
A Competency Model is a set of competencies that provide a model for success for a particular organization, level, job or role. It reflects all critical behaviours, skills and knowledge that affect success in a given role. An individual will be able to use the competency model to identify competency requirements for his/her job strengths and areas for improvement in his/her job; and, areas for continuous learning and professional growth.

15. What are the differences between Skills & Knowledge and Behavioural Competencies?
Skills & knowledge are easier to identify and develop. They are necessary but not sufficient to differentiate an outstanding performer from a typical performer. Behavioural competencies are more difficult to identify and develop. It is behavioural competencies that will differentiate the outstanding performer from the typical performer.

16. The dictionary contains the part on behaviour and skills, where is the part on knowledge?
Knowledge is the foundation of skills. Knowledge is information a person has in specific content areas. An example; a surgeon's knowledge of nerves and muscles in the human body.

17. How will the competency model/dictionary be used?
The competency model/dictionary will be used to provide the guidelines of what competencies are required to carry out a job competently.

18. Will the competency model be used to determine my career path / salary progression?
The competency model will not be used to determine career path / salary progression at this stage. There will be a process of internalizing the concept of competencies before it should be used for such activities.

19. What are the modules in HRMIS that will use the competency model?
The modules, which will involve the competency model, include, Strategy Formulation & Review, Resourcing, Performance Management, Career Management, Competency Assessment, Development, and Employee Communications & Behavioural Management.

20. What was used to build the competency model?
Various kinds of data was used to build the Competency Model:

- ☐ Inductive Data

  Information on strategic imperatives (mission, vision, strategy, roles and objectives) and current/future challenges facing the Government service were gathered and analysed. This pool of data provided perspectives on the behaviours/values and skills/knowledge espoused by the Government for their employees.

- Deductive Data

  Evidence-based data collection activities (in-depth interviews and focus groups workshops) were conducted across Government samples from various Service Groups, service classification and job schemes. This pool of data provided evidence on the behaviours and skills/knowledge demonstrated in day-to-day activities by different levels of Government employees.

  - Now and the Future
  - All inductive and deductive data were gathered to reflect current and future states of the Government service and were analysed thematically and statistically to determine implications on behaviours and skills/knowledge of the Government employees NOW and in the FUTURE.

21. How was the data collected?
    The data was collected through Expert Panel Session, Literature Review, and Focus Groups Sessions.

22. What is an Expert Panel Session?
    An Expert Panel Session is where senior people of the Agencies get together to understand and discuss about where they think the Organisation is heading and what are the competencies required to support this direction.

23. What is Focus Group Session?
    Focus Group is a session where incumbents of the job get together to provide information about their jobs, i.e. what are the competencies required carrying out the tasks involved for that position and also providing examples of characteristics in outstanding performers.

24. Why wasn't everyone required to participate in the data collection?
    The data collection process was based on the JOB and not the jobholder. Therefore, it was not necessary for every jobholder to participate in the data collection.

25. Are other Public Sectors using Competencies in their Service? How do they use it?
    Yes, they are. Some adopt the competency approach based on trends in other organizations; other uses it for Performance Management, Training & Development, Pay & Grading, Integrated HR Strategy and Culture Change.

26. Will I have access to the competency model/dictionary?
    Yes, all information will be available via HRMIS.

27. How will MY competencies be assessed?
    Competencies will be assessed via a self-assessment system and validated by a superior.

21 DICTIONARY & COMPETENCY MODEL MAINTENANCE

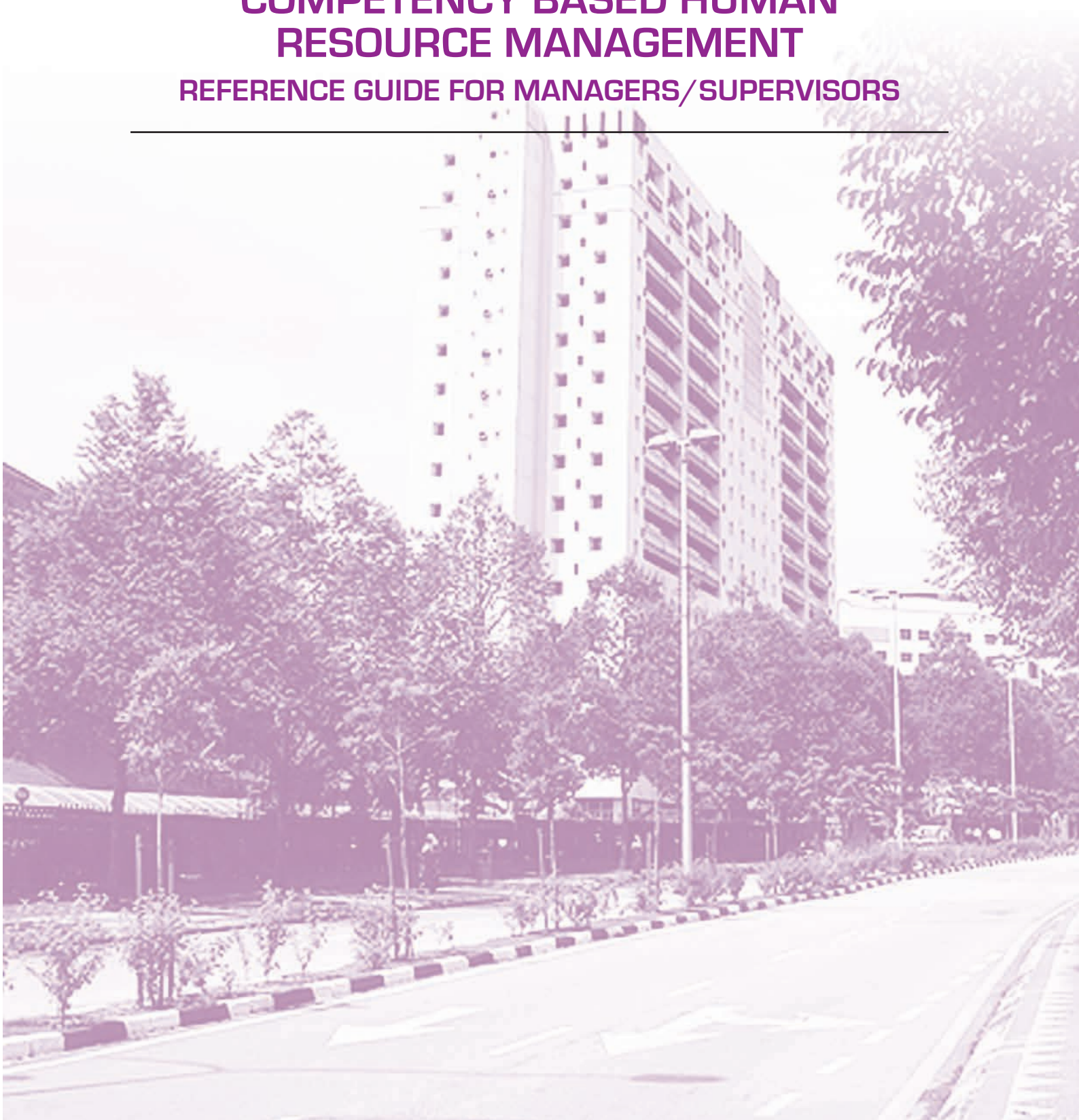
The competency model is built using data that was obtained from various sources, which provided evidence on the behaviours and skills/knowledge demonstrated by Agency employees, now and the future, that is, about 3 to 5 years down the road. At the end of this period, each agency is advised to revisit its competency model and evaluate its applicability. This is because jobs and posts at the agency are dynamic in nature and the scope of work may have grown by then, thus requiring additional behavioural competencies and/or skills and knowledge.

The Dictionary and Competency Model maintenance process will be managed by your Agency HR Function or any appointment function set by your Agency... The appointed party is then expected to meet and regularly update JPA on any changes made to either the dictionary or the competency model. All in all, the success of this process is hugely dependent on the commitment shown by each employee of this Agency.

PART B

COMPETENCY BASED HUMAN RESOURCE MANAGEMENT

REFERENCE GUIDE FOR MANAGERS/SUPERVISORS



1 INTRODUCTION

Effective supervision and management of individuals and/or teams is a role of competent managers/ supervisors. Garnering the individual/collective skills, knowledge, experience, and aspirations; and channelling them toward achieving JKR's organisational mandate can be challenging. To manage this challenge, a framework is needed.

Organisational workforce management demand organisations to understand its workforce profile for addressing current and future needs. Adapting best practices in workflow/process management; the most prudent investment in enabling-technologies; may not lead to organisational success. This becomes more obvious in organisations that depends much of its drive and delivery on its workforce (workforce centric organisations). To manage this challenge, a framework is also needed.

Both imperatives (supervision/management and organisational workforce management) must operate in tandem and this is achieved via a common framework. The application of a competency model spans across the functional roles in human resource management.

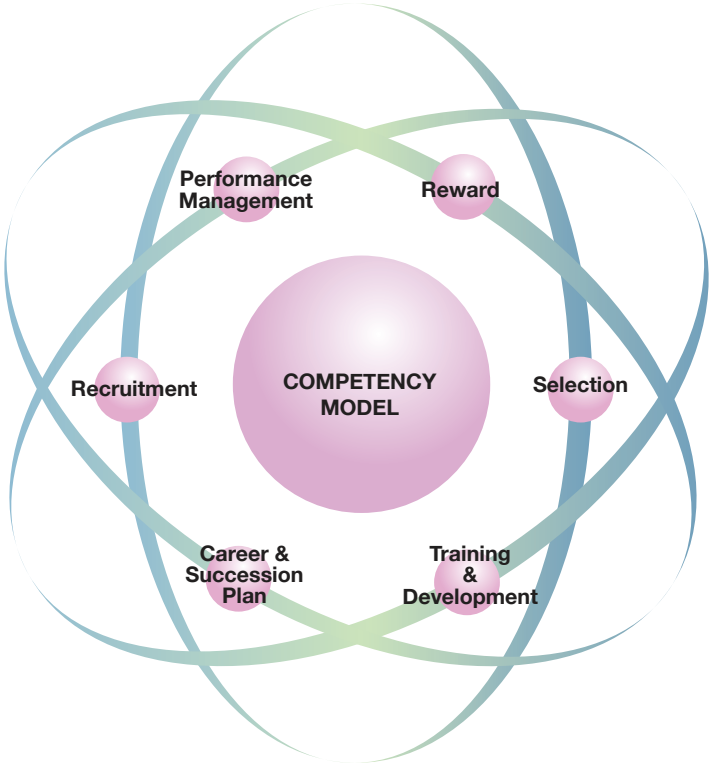
2 WHAT YOU SHOULD KNOW BEFORE USING THIS REFERENCE GUIDE

Each JKR manager/supervisor is expected to appreciate and understand this reference to facilitate the application of CBHRM while guided by the overarching human resource management framework of the Malaysian Civil Service in its policies/acts, orders and circulars.

A pre-requisite for using this guideline is an understanding of the JKR Competency Model (Refer to JKR Competency Dictionary).

3 UNDERSTANDING COMPETENCY BASED HUMAN RESOURCE MANAGEMENT (CBHRM)

Competency Based Human Resource Management (CBHRM) places competencies as the nucleus of human resource management functions.



The CBHRM promotes identification and fostering of leadership and functional/ operational excellence in delivering the mandate of JKR.

In order to create a high-performing workforce, CBHRM is designed to:

- ☐ Create greater clarity in the roles and responsibilities of the jobs (Standards Positions and Actual Positions);
- ☐ Develop relevant skills amongst JKR personnel (Competency Owners) to ensure operational excellence;
- ☐ Develop relevant skills amongst JKR personnel (Competency Owners) to ensure better workforce planning;
- ☐ Ensure speedy and accurate HR service delivery;
- ☐ Promote competency-based performance management; and
- ☐ Provide greater recognition and career development support.

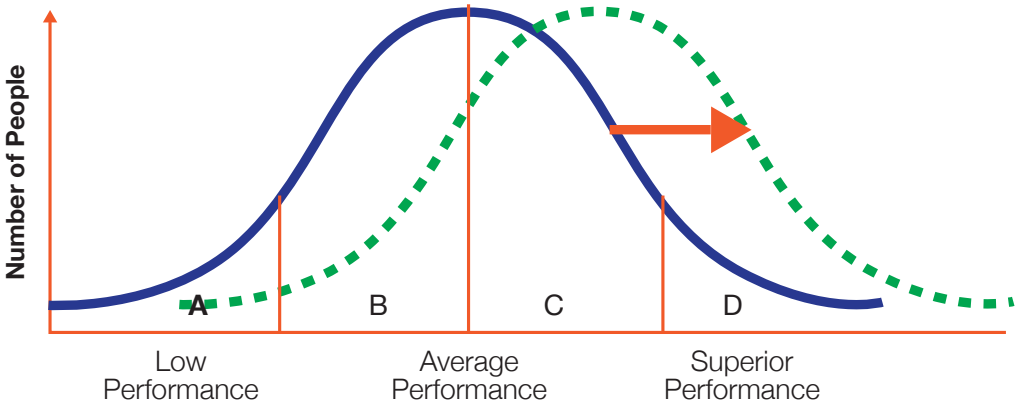
With the above objectives, a competency-based human resource management ethos on providing all the planning and development infrastructures for all human resource applications and practices within JKR is established.

The following table illustrates the benefit of CBHRM (Presented in the form of prose).

HR Function	Context		
	Manager/ Supervisor	**Organisation**	**Individual**
Recruitment	☐ We have defined the competency requirements for jobs	☐ We are clear of the specifics of the job when advertise the job and screen candidates	☐ I know and possess the expected competencies for the job when I submitted my application
Selection	☐ I know the gap between the job expectation and the candidate	☐ The candidate we have selected 'fits' the job expectations	
Career Planning	☐ My subordinates have the right level of competencies for the job and ready for promotion	☐ We have a good talent pipeline and is able to make decisions on promotions/ transfers	☐ Do I have the right competencies for the job?
Succession Planning	☐ I need to create opportunities to develop successors within my unit/team	☐ We know the individuals (successors) fit to assume the mission critical position or new posts	☐
Performance Management	☐ The productivity level (throughput, KPIs) and achievement of my **unit** truly reflects competency profile of my subordinates/team	☐ The productivity level (throughput, KPIs) and achievement of the **organisation** reflects the competency profile of my **workforce**	☐ I know what is expected of me and understand my priorities for professional development
Training & Development	☐ Am I tracking the development progress for the individual?	☐ Are we effective in utilising our training budget to develop our workforce? ☐ Are we developing the right sets of competencies to drive operational and leadership excellence?	☐ What are the competencies that I need to develop
Reward / Recognition	☐ My subordinates/team understands the criteria when we discussing about performance rewards/recognition	☐ We use clearly defined criteria for measuring and recognizing competency profile of individuals in setting up performance rewards/ recognition programs	☐ My subordinates/ team understands the criteria for performance rewards/ recognition

*The crux of CBHRM is on how the organisations manage its workforce in helping the organisation achieve its goals. Research on organisational behaviors indicates strong correlation between **workforce performance effectiveness** and organisational success as illustrated in the following diagram.*

Impact of CBHRM to Organisations



Differences Between Average & Super Performers

	Low-complexity jobs	19%
→	Moderate-complexity jobs	32%
→	High-complexity jobs	48%

*To attain and sustain workforce performance effectiveness, an organisation must first understand the core requirement for its workforce – **COMPETENCIES** – and to manage the requirement by incorporating it into its Human Resource Management function.*

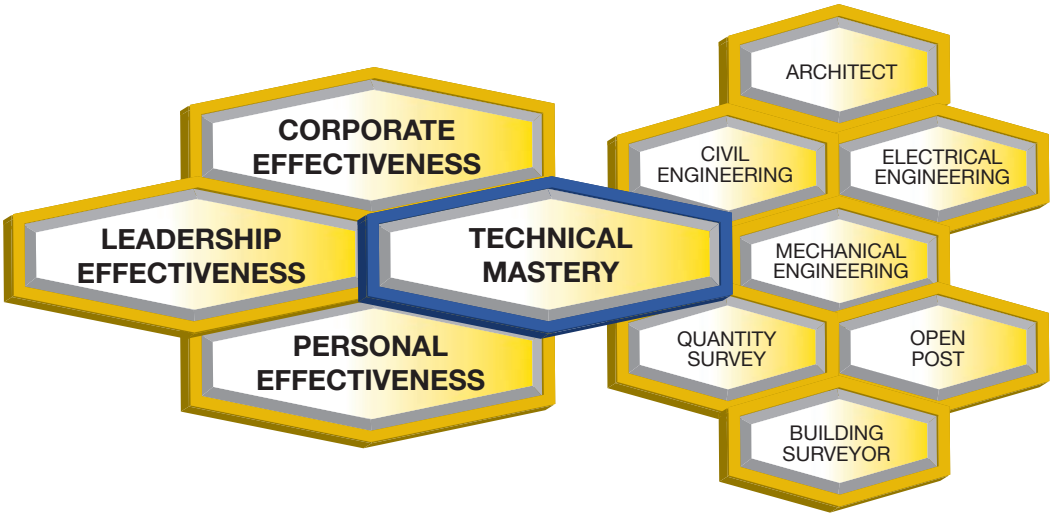
4 A GENERAL PICTURE OF THE COMPETENCY MODEL FOR JABATAN KERJA RAYA MALAYSIA

4.1 The JKR Model

The JKR Competency Model is designed to support the mandate and strategic imperatives of JKR as the lead public service agency entrusted with the upkeep and development of engineering infrastructure in the nation.

The model reflects the ethos of JKR to be the centre of excellence for infrastructure development by harnessing creative and innovative human capital and state-of-the-art technology. Lending to the realisation of JKR's aspiration:

- ☐ *To be the foremost technical department in national infrastructure development*
- ☐ *Possesses multidisciplinary expertise in technical consultancy, project management, and asset/facilities maintenance management*
- ☐ *Matches the 'Strategic Clusters' of JKR transformation blueprint*

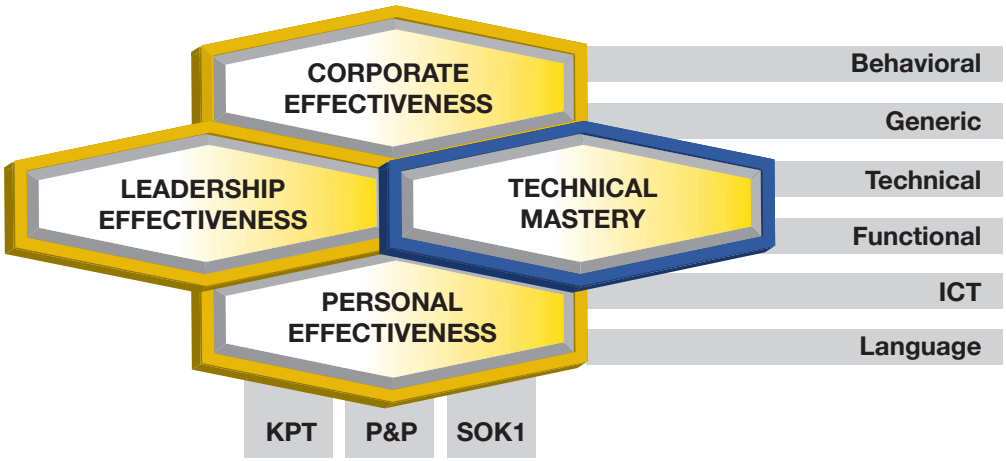


Leadership Effectiveness	These are competencies required to drive leadership excellence. It is about driving the JKR mandate at the stakeholders and workforce levels
Corporate Effectiveness	These are competencies required to drive operational excellence
Personal Effectiveness	These are competencies required for individuals to effectively contribute to the organisation
TECHNICAL MASTERY	These are competencies that support the core function of JKR. The listed competencies lends to the technical credibility of JKR in its service delivery. These are not baseline competencies, but critical proficiency areas that underpins the role and unique value propositions of JKR

4.2 COMPETENCY TYPES

In building the competency framework/model, JKR is guided by; makes reference to; and applies the parameters as defined and applied in the competency framework/model of Jabatan Perkhidmatan Awam Malaysia. This is to ensure uniformity and consistency in the application of competency related information within the Malaysian Civil Service.

In essence, JKR adopts for its application a select list of competencies from the Behavioral, Functional. Generic, ICT and Language clusters listed in JPA Competency Dictionary.



1. Behavioural/Core Competencies	Underlying characteristics (values) that drive outstanding performance in a job within an organisation
2. Functional Skills/ Knowledge Competencies	Skills/Knowledge used by a department/division and also by several departments/divisions that are found in a Service Classification and Job/Jawatan
3. Generic Skills/ Knowledge Competencies	Skills/Knowledge required by the whole service, whether from Service Classification, Service Group, Service Scheme, Job/ Jawatan or Grade
4. Language & ICT Competencies	Baseline/Entry level skills/knowledge required by the whole service, whether from Service Classification, Service Group, Service Scheme, Job/Jawatan or Grade that is intended. Its unique treatment is due to the urgency to develop the basic proficiency levels for the listed competencies (Will eventually be removed)
5. Technical Skills/ Knowledge Competencies	Skills/Knowledge required in the context of the job which are unique to a Job/Jawatan

As **'Service Owner' of the Engineering Service Scheme (Scheme J)**, JKR undertakes the role defining the relevant competencies for the scheme of service under its purview. This means that JKR is responsible to identify, develop and maintain competencies associated to the associated engineering disciplinary areas under its purview.

The selection of competencies for JKR is based on the following.

Competency Type	Relevance to JKR
Behavioural	☐ Critical to achieving JKR's CURRENT mission
	☐ Mandatory to achieving JKR's FUTURE mission
	☐ Achieve overall effectiveness
	☐ Address customer / stakeholder management
Functional	☐ Important to deliver our KPIs
	☐ Promote stewardship
Generic/ICT & Language	☐ Important to provide delivery excellence that is guided by a common delivery framework (policies) and tools
Technical	☐ Important to deliver our services
	☐ Address new & emerging technology
	☐ Meet core business requirement
	☐ Unique authority / Subject Matter Expert

The responsibility/ownership in selecting and maintaining the competency list and target levels belongs to the Head of Discipline of JKR.

4.3 Level/Scale Definition

The Behavioral, Functional, Generic, ICT, Language and Technical competencies have their own measurement scales.

4.3.1 Level/Scale Definition for Behavioral Competencies

A scale of Level 1 to Level 5 is used, with the lowest level indicating basic or simple illustration of the competency.

Because these competencies are behavioural based, the scale uses degree of sophistication in a particular competency, as indicators. Competencies which are complex and sophisticated are placed at the higher end of the scale. A higher-level behaviour does not always mean more of the same behaviour, but rather, more sophisticated level of the behaviour.

Each competency in this cluster has a unique level definition. As illustrated in the following diagrams (**Refer to the JKR Competency Dictionary for detailed explanation on the competency levels**).

LEVEL/SCALE		FUNCTIONAL GENERIC, TECHNICAL COMPETENCIES	ICT COMPETENCIES	LANGUAGE COMPETENCIES
MASTERY	6	Strategies	-	-
	5	Expert	-	-
	4	Proficient	Mastery	Mastery
	3	Competent	Proficient	Proficient
	2	Basic	Basic	Basic
BEGINNER	1	Entry	None	Poor

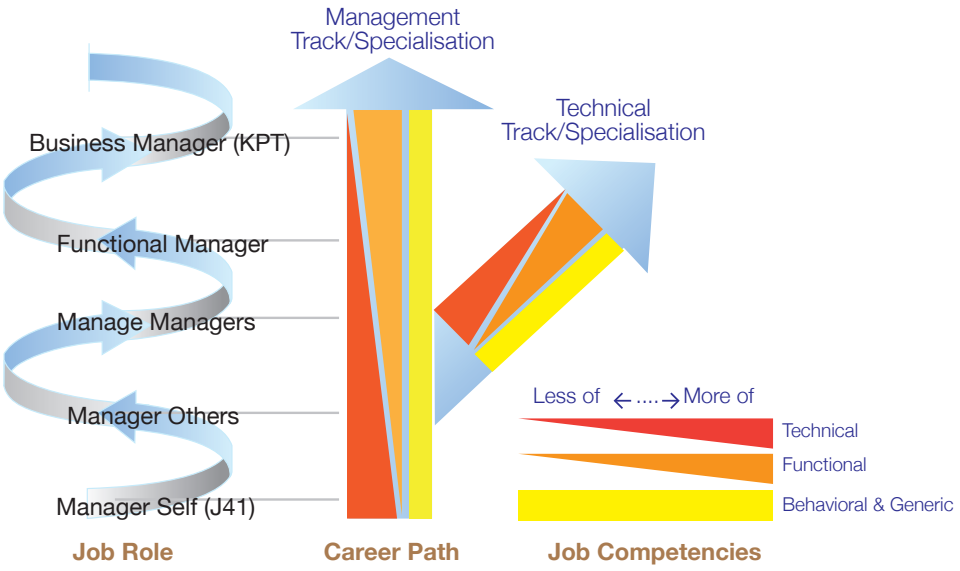
Level/ Scale	Achievement Orientation	Adaptive Thinking	Desire for Knowledge	Holding People Accountable	Impact & Influence	Professional Mastery	Visionary Leadership
SOPHISTICATED 5	Takes calculated entrepreneurial risks	Strategic insights	Foster a learning culture	Hole people accountable & takes effective action to address problems	Uses complex influence strategies	Promote effectiveness use of knowl-edge	Embodies change
4	Sets & work to meet challenging goals	Applies proactive situational dexterity	Uses on-going systems	Maintains visible standards of performance	Uses indirect influence	Demonstrates depth of knowledge	Challenges mindsets
3	Improve performance	Applies reactive situational dexterity	Does research	Demands high performance	Calculates impact of action or words	Provide extra knowledge	Energises the team
2	Creates own measures of excellence	Recognises problem that occurs while doing the job	Investigates or seeks information	Sets limits	Takes multiple action to persuade	Answers questions within own area of exper-tise	Promotes team effectiveness
POOR 1	Want to do job well	Understand situations or problems	Asks question	Tell people what to do	Takes single action to persuade	Knowledge in own area of expertise to complete task	Actively contributes

4.4 Assignment of Competencies & Competency Level to Standard/Actual Positions

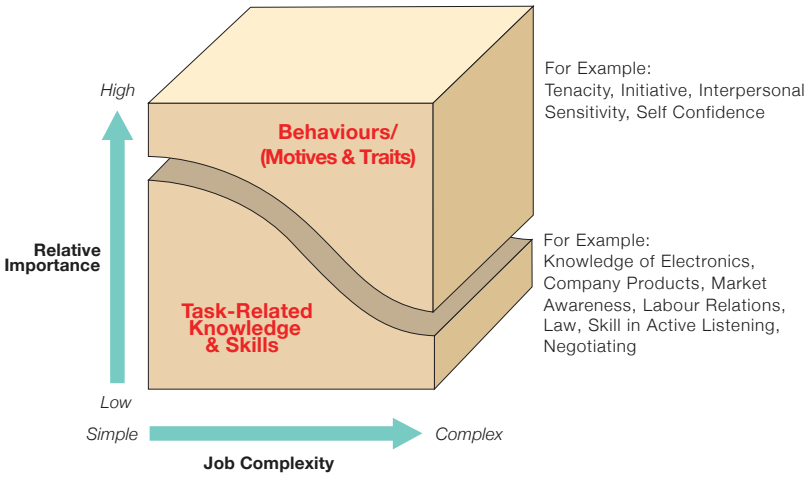
Selecting/assigning competencies and target levels for each job requires an appreciation of the context of the job itself. Many uninformed organisations tend to put into practice a model that assigns more competencies and at higher target levels for senior jobs/positions. This is due to the assumption that there is a build-up of competencies for an individual during tenure in the organisation.

This assumption is corrected once the organisation understands the distinction between competencies for a job versus competencies that an individual possesses. This is illustrated in the following diagram.

Competencies Underpin Development & Succession Planning ...



The following diagram further illustrates the relationship between jobs – its relative importance and complexities and the emphasis on competency types.



Competencies and competency level assignment are done base on the job requirement. However, a unique setup for JKR (and also for the Malaysian Civil Service), is the application of Standard Positions and Actual Positions.

- **Standard Position**: This label is used to recognise and organise jobs (Jawatan) according to the assignment of jobs based on its job scheme and discipline.
    - *For example, a J41 job in a Civil Engineering Branch. Competencies and the competency levels for this job are those relevant to the Civil Engineering competencies.*
- **Actual Position**: This label is used to recognise and organise jobs (Jawatan) according to the assignment (posting) of jobs based on the actual role of the job in the organisation (Job Group).
    - *For example, a J41 job in a Civil Engineering that is assigned to 'Open-Post –Cawangan Pengurusan Projek Kompleks(PROKOM)'. Competencies and the competency levels for this job are those relevant to J41 jobs in PROKOM.*

Competencies and competency level between Standard Positions and Actual Position for the Behavioural, Functional, Generic, ICT and Language are similar except for possible variations for the target level assignment.

Competencies and competency level between Standard Positions and Actual Position for the Technical competencies will vary based on the actual function of the job

Job incumbents (penjawat) are expected to posses and attain the expected competencies and levels assigned to both the Standard and Actual Positions. To ensure that the job is delivered to its expectation, the Actual Position competencies are used to profile the job incumbent. For career management and personal development, the Standard Position competencies are used.

4.5 Methods for Measuring Competencies & Competency Data/Information

The competency definition gives meaning and clarity to each competency item (competency labels). Standardising and clarifying the competency levels eliminates ambiguity in assessing/measuring competencies. As such the organisation can focus

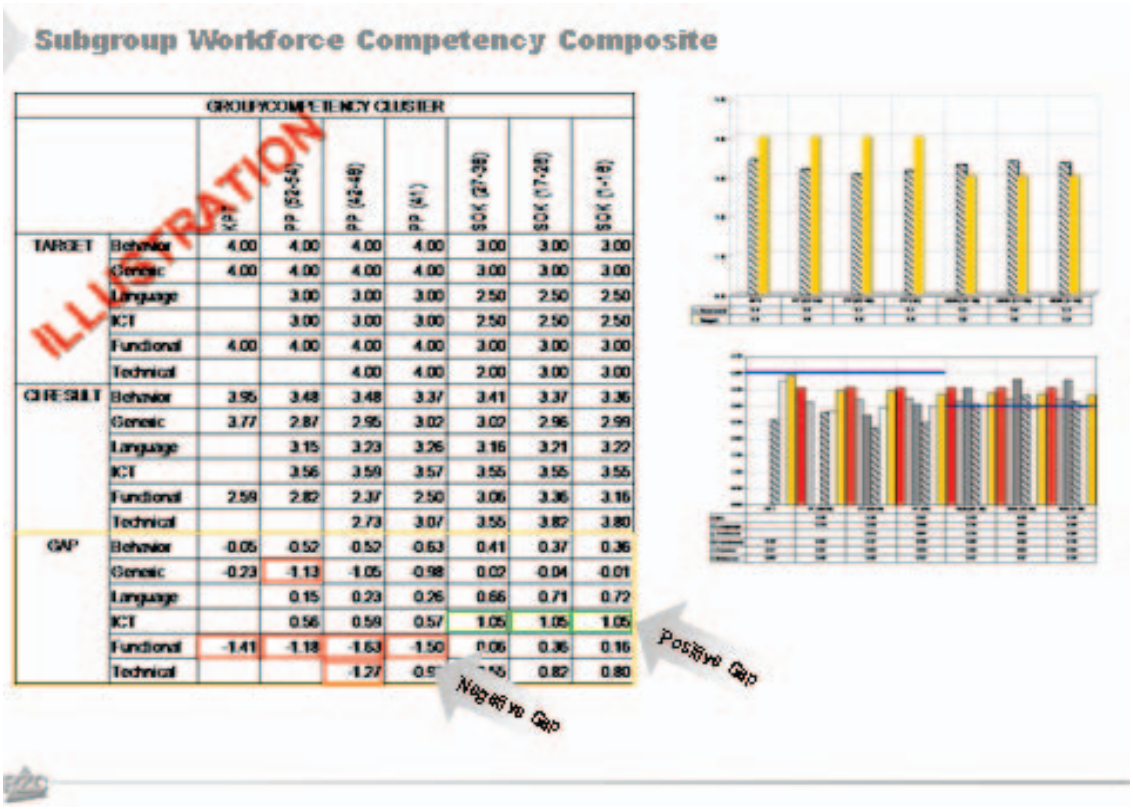
In essence, measuring competency levels and conducting competency data analysis is the basis for Competency-Based Human Resource Management (CBHRM). This is described in the following table.

	Description	Data for Analysis
Job Competencies	☐ Competencies and target levels defined for both Standard Positions and Actual Positions	☐ Competency Target Level for each competency item in the competency types for both Standard Positions[(i)] and Actual Positions[(ii)]
Personal / Individual Competency Profile	☐ The attained competency level of the job incumbent assessed via performance review (*i.e.; Laporan Nilai Prestasi Tahunan, Competency Profiling, and/or other competency assessment methods used in the organisation*) that incorporates the JKR Competency Model ☐ The attained competency level of the job incumbent can be used to differentiate individual performance level. An example would be as follows: • Outstanding: Competency Index of +0.5 or higher (An individual that consistently – past 3 years record -- has this index may be deemed as 'High-Potential'. The High-Potential [Hi-Po] is typically applied in career fast-track or placement for succession jobs.) • Average: Competency Index of -0.5 to +0.5. (An index of 0 means that the person achieves the competency target level for the job) • Non-contributors: Competency Index of -0.5 or lower	☐ Competency Gap Difference between job competency level and assessed competency level for Standard Positions [(iii)] and Actual Positions [(iv)] ☐ Individual Competency Index Average of competency gap value for Standard Positions[(v)] and Actual Positions[(vi)] ☐ Individual Competency Type Competency Index Average of competency gap value for each competency type for Standard Positions [(vii)] and Actual Positions [(viii)]
Organisational Competency Profile	☐ The composite of competency level of workforce that is based the JKR Competency Model	☐ Workforce Competency Index [(ix)] Composite of the average competency gap value. This can be further classified into various data-cuts (Cawangan, Job Group, Job Grade, Competency Type, Standard Positions and Actual Positions, etc.)

An illustration of the data:

Competency Type	Target Level		Assessed			Competency Gap					
						Std Post (iii)			Act Post (iv)		
	Std Post (i)	Act Post (ii)	Zak	Zie	Zul	Zak	Zie	Zul	Zak	Zie	Zul
Behavioral											
Achievement Orientation	2	3	4	5	2	2	3	0	1	2	-1
Desire for Knowledge	3	3	4	2	2	1	-1	-1	1	-1	-1
Functional											
Crisis Management Resolution	3	4	4	3	3	1	0	0	0	-1	-1
Financial Management	3	3	4	4	3	1	1	0	1	1	0
Technical											
Architectural Audit	3	4	4	4	2	1	1	-1	0	0	-2
Architectural Design Production	4	5	5	4	2	1	0	-2	0	-1	-3
Architectural Design Synthesis	3	4	5	4	2	2	1	-1	1	0	-2
Individual Competency Type Index (v) (vi)											
Behavioral						1.50	1.00	-0.50	1.00	0.50	-1.00
Functional						1.00	0.50	0.00	0.50	0.00	-0.50
Technical						1.33	0.67	-1.33	0.33	-0.33	-2.33
Individual Competency Index (vii) (viii)						1.29	0.71	-0.71	0.57	0.00	-1.43
Workforce Competency Index (ix)						0.43			-0.29		

Data facilitates analysis and decision making process!

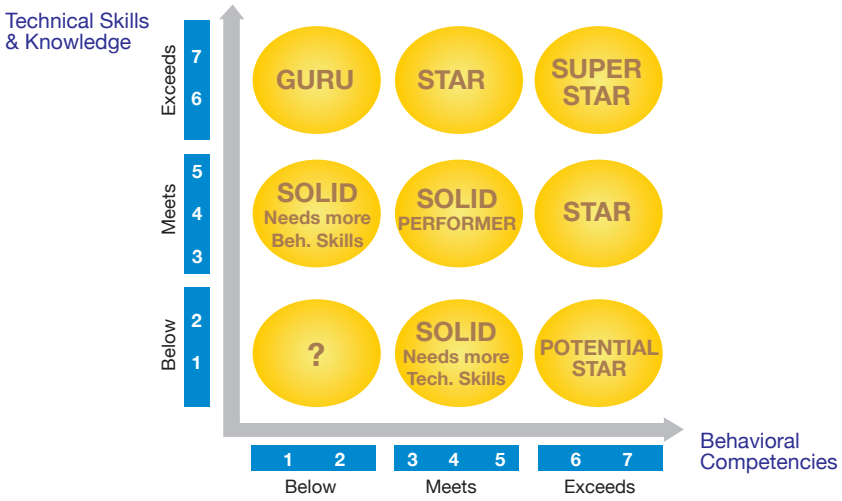


For the above illustration, the outcome of the competency profiling facilitates action planning.

In this case, the Training and Curriculum team can prioritise development programs for the organisation and may draw specific action plan to address the negative gaps at various job grades. Another perspective can be drawn by the Organisational Workforce Planning Team on addressing the positive gap.

An item raised in drawing action plans may involve decisions on priority areas and focus for developing individuals to meet the organisational needs. The following diagram illustrates the concept of competency development priorities that can be applied in making these decisions.

The Relationship Between Knowledge, Skills & Competencies



5 APPLYING CBHRM

5.1 Recruitment & Selection

Competency-based recruiting systems usually focus on screening methods that can be used to select a small number of strong candidates from a large group of applicants quickly and efficiently. Assessing recruits involves special challenges, such as screening many applicants in a short period of time and eliminating those applicants who have just graduated from college and thus have little work experience on which to base judgements.

Competency-based recruiting systems, therefore, stress identification of a few (three to five) core competencies that meet the following criteria:

- ☐ Competencies that applicants have already developed and demonstrated in their working lives (e.g. initiative).
- ☐ Competencies that are likely to predict a candidate's long-term prospects for success and that are hard to develop through employer's training or job experience (e.g. such master competencies as achievement motivation).
- ☐ Competencies that can be reliably assessed using a short, targeted behavioural event interview, for example, if collaborative team leadership is a desired competency, interviewees might be asked to give an example of their being able to get a group to do a particular activity. Their responses would then be coded for consensus- building versus adversarial behaviours.

5.2 Career Planning (Career Development)

The competency requirements for 'career pathing' and development jobs or groups of jobs define a template for development. Employees who are appraised as lacking in a particular competency can be directed to a specific development activity designed to teach them the missing competency in order to improve their performance in their existing jobs or to prepare them to advance to other assignments in the future.

Competency development options include assessment centre experiences (employees' self-knowledge about competencies needing development, account for a significant part of the training's effect), formal training courses, developmental job assignments/career pathing, mentor relationships and the like.

A Competency Acquisition Process (CAP) has been developed for increasing levels of competencies. It includes the following components:

- ☐ **Recognition**: a simulation or case study that leads participants to recognise one or more competencies that predict superior performance in their jobs that they may have to learn;
- ☐ **Understanding**: specific instruction, including behaviour modelling, as to what the competency is and what it looks like in application;
- ☐ **Assessment**: feedback to participants about how much of the competency they have (determined by comparing superior performers' scores to the participants' scores); this is designed to motivate participants to learn the competency by making them aware of any gap between actual and ideal performance;
- ☐ **Practice/feedback**: exercise in which participants practice the competency and get feedback on how they perform against the superior performance level;

5.3 Placement & Succession Planning

Competency-based placement and succession planning systems are best focused on identifying the top candidates for an organisation's most important value-added jobs. Selection and placement systems should, therefore, stress careful identification of the most important competencies required by critical jobs and then use as many sources of information about candidates as possible to determine whether the candidate possesses the required competencies. Assessment of candidates can involve a variety of methods: behavioural event interviews, tests, assessment centre simulations, review of performance appraisal reports, and superior, peer and subordinate ratings. Past job performance and behavioural event interview data are generally the most cost-effective selection tools.

Analysis of assessment data to make selection, placement and succession planning decisions can be done either manually or by computer systems that compare all candidates' ratings on competencies found to be essential or desirable for superior job performance. Employees are recommended in rank order based on their total weighted scores on the competency criteria. Application planning for competency-based placement or succession includes: identification of the necessary competencies, given the pool of candidates and the resources of the selection system; identification of the most cost-effective candidate assessment methods; training of assessors in behavioural event interviews and design of the selection system database, including the candidate pool, administration and tracking systems; and follow-up evaluation of those selected to ensure the effectiveness of the system.

5.4 Performance Management

Performance management it is a holistic process or a set of processes for establishing shared understanding about what is to be achieved (and how it is to be achieved), and of managing people in a way that increases the probability that it will be achieved.

Within this definition organisations can take a broad view of how the performance management process encompasses the way people are managed and what elements are included in it. The process could embrace:

- ☐ Strategy and objectives;
- ☐ Job definition;
- ☐ Objective setting;
- ☐ Coaching and counselling;
- ☐ Performance review;
- ☐ Skills training;
- ☐ Performance related pay;
- ☐ Training and development.

The performance management process, is an integrated cycle of performance planning (definition of job responsibilities, setting performance expectations, goal or objective setting at the beginning of the period); performance coaching (monitoring, feedback coaching, development); and performance review (formal performance appraisal at the end of the period) conducted between managers and employees to track and improve individual and corporate performance and to provide information for one or more personnel functions.

5.5 Training & Development Programmes

The identification of development programs that is congruent to the need of the job competency is an attempt to bridge the gap between current demonstrated competency levels to target levels of job profiles. To provide focus on developing the right sets of competencies, development programmes must go through the rigour of the identification of strengths and priority development needs and the identification of development areas with greatest impact. Furthermore, development plans will be cantered on specific actions.

5.6 Rewards: Pay For Skills/Competencies

Competency-based performance management systems add to traditional job performance standards and results. They measure those job behaviours required to accomplish specific job tasks and meet job responsibilities against competencies demonstrated by both average and superior performers in key jobs. Effective performance appraisal depends on the proper use of each type of data, given the objectives of the system and the degree of control employees have over their performance on the variables assessed. Performance results data are usually used for decisions about rewards (for instance, merit bonus based on sales or production quotas).

If, however, employees have little individual control over the final results, rewards based solely on these results can demotivate superior performers. In these cases, some portion of the reward should be based on job behaviours.

Job behaviour data is usually used for decisions on skill development. For instance, if Manager X's appraisal shows a lack of group leadership skills, he or she might be advised to attend a leadership course to develop this skill. Skill-based compensation systems also explicitly tie rewards to skills developed. This is particularly appropriate when employees have little control over performance results.

HR Function	Context		
	CBHRM Outcome	Competency Information Required	Competency Application
Recruitment	☐ Identify suitable candidates for a job	☐ List of job competencies – primarily Functional, Generic, ICT, Language and Technical	**During Paper Screening:** ☐ Map applicant's credentials against job competency list. This should focus on the documented evidence of the competencies as listed in the application form/resume
	☐ Process/filter the most suitable candidate for the job	☐ List of job competencies and target level – Behavioral, Functional, Generic, ICT, Language and Technical	**During Interview / Assessment Programs:** ☐ Detect/Assess candidate competency level against job competency expectations. This should focus on interview/ assessment results/ evidence
Selection	**For Entry Level:** ☐ Select a candidate that has the minimal requirement to succeed in delivering the job	☐ Candidate's competency profile	☐ The overall competency gap between the incumbent and target job should be negative one (-1). This is to accommodate for developmental programs for the candidate
	For Career Growth: ☐ Select a candidate that has the best chance to succeed in delivering the job	☐ Candidate's competency profile	☐ The overall competency gap between the incumbent and target job should be negative one (-1). This is to accommodate for developmental programs for the candidate
	For Succession Jobs: ☐ Select a candidate (ideally a 'High Potential' candidate that has been groomed/developed to assume the role and expectation of the job	☐ Competency profile of candidate	☐ The specific competency gap (between the incumbent and target job should be zero (0). This is to ensure that the job is delivered to its expectations

HR Function	Context		
	CBHRM Outcome	Competency Information Required	Competency Application
Career Plan / Growth	**Fast Track/ Progression:** ☐ Promoting/Moving individuals to fulfil personal growth/ development ☐	**Technical/Specialist Track:** ☐ LNPT ratings from previous years (at least 3 years) performance review ☐ Competency Profile	☐ The specific technical competency gap between the incumbent and target job should be zero (0). This is to ensure that the job is delivered to its expectations
		Management Track: ☐ LNPT ratings from previous years (at least 3 years) performance review ☐ Competency Profile	☐ The functional competency gap between the incumbent and target job should be zero (0). This is to ensure that the job is delivered to its expectations
	Normal Progression: ☐ Promoting/Moving individuals to fulfil personal growth/ development ☐	**Technical/Specialist Track:** ☐ LNPT ratings from previous years (at least 3 years) performance review ☐ Competency Profile	☐ The specific technical competency gap between the incumbent and target job should be negative one (-1). This is to accommodate for developmental programs for the candidate
		Management Track: ☐ LNPT ratings from previous years (at least 3 years) performance review ☐ Competency Profile	☐ The competency gap between the incumbent and target job should be negative one (-1). This is to accommodate for developmental programs for the candidate
Succession Plan	☐ Promoting/Moving individuals to fulfil both organisational needs – particularly for mission critical positions	☐ Filtering individual competency profile to identify list of 'high-potentials' (would typically be in the outstanding performers pool) that matches the requirement to fill-in the identified succession jobs	☐ The specific technical/ functional competency gap between the incumbent and target job should be zero (0). This is to ensure that the job is delivered to its expectations

HR Function	Context		
	CBHRM Outcome	Competency Information Required	Competency Application
Performance Management	**Fast Track/ Progression:** ☐ Identify individuals who are ready to move to the next level	☐ Review trend of consistent achievement of achieving and exceeding competency requirement for current job with tendency to meet the requirement of the next level job	☐ The specific technical/ functional competency gap between the incumbent and target job should be zero (0). This is to ensure that the job is delivered to its expectations ☐ Consider redeployment of individual if there is a positive competency gap
	Normal Progression: ☐ Identify level of performance based on delivery of job expectations ☐	**Average Worker:** ☐ Identify gaps in competencies for current job	☐ Focus on capability development programs/ interventions to meet requirement to fulfil job expectations – "to get the job done right" ☐ The competency gap between the incumbent and target job should be negative one (-1). This is to accommodate for developmental programs for the candidate
		Non-Contributing Worker: ☐ Identify gaps in competencies for current job	☐ Focus on remedial plan to improve performance or remedy competency gaps ☐ Address options to remedy competency gap of more than negative one (-1). This may include redeployment /coaching/ mentoring

HR Function	Context		
	CBHRM Outcome	Competency Information Required	Competency Application
Training & Development	**Outstanding Worker** ☐ Focus on capability development programs/ interventions to prepare for next level job	☐ List of competencies for next level job and setting of programs to develop the next job level competencies	☐ Prioritise competencies to be developed over a predefined period leading to readiness for incumbent to move to next level job. The development program can be in the form of lateral movement (on-the-job-training) and short-term assignment
	Average Worker ☐ Focus on specific capability development programs/ interventions to meet requirement to fulfil job expectations – "to get the job done right"	☐ List of competencies for current job level and setting of programs to develop the competencies with negative gaps	☐ Prioritise competencies to be developed. The development program can be in the form of lateral movement (on-the-job-training) and short-term assignment
	Non-Contributing Worker ☐ Focus on capability development programs/ interventions to remedy trainable non-performance issues	☐ List of competencies for current job level and setting of programs to develop prioritised competencies	☐ Prioritise competencies to be developed. The tracking of competency development to address the negative gap should be done at least every 3 months

HR Function	Context		
	CBHRM Outcome	Competency Information Required	Competency Application
Reward (Positive & Negative)	☐ Recognize outstanding, average and non-contributing individuals ☐ Note: Understanding that the function of providing financial reward sits with the Treasury Department, JKR should consider other methods for rewarding its workers	**Outstanding Worker** ☐ Review individual competency profile for consistence in meeting/ exceeding current job competency requirement and possibly meeting competency requirement for next level job	☐ Promotion is considered a reward ☐ Arrange/Sign-up for high-end development programs
		Average Worker ☐ Review individual competency profile for meeting most of current job competency requirement	☐ Arrange/Sign-up for high-end development programs
		Non-Contributing Worker ☐ Review individual competency profile for improvements in competency levels	☐ Reprimand /Redeploy / Transfer /Terminate based on concrete evidence of inability to posses expected job competency levels following application of remedial programs