

# PENGURUSAN JADUAL PROJEK



Version 3.0\_Julai2019

PROJECT MANAGEMENT FOR PROJECT MANAGERS



# KANDUNGAN

- @ Definisi
- @ Objektif
- @ Proses
- @ Penerangan Proses
- @ Kesimpulan
- @ Contoh Templat

# DEFINISI

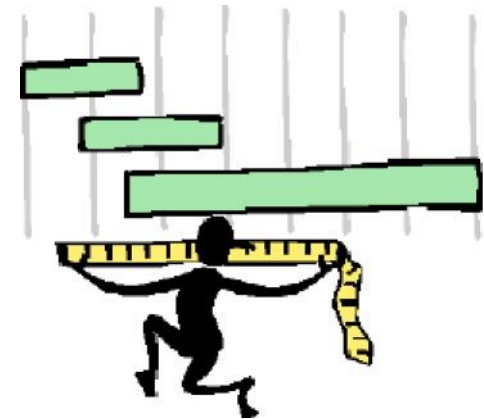
Proses yang diperlukan untuk menyiapkan projek mengikut masa.

Dengan melaksana **PERANCANGAN, ANGGARAN, PENJADUALAN & KAWALAN JADUAL** ke atas pelaksanaan keseluruhan projek di sepanjang kitaran hayat projek.

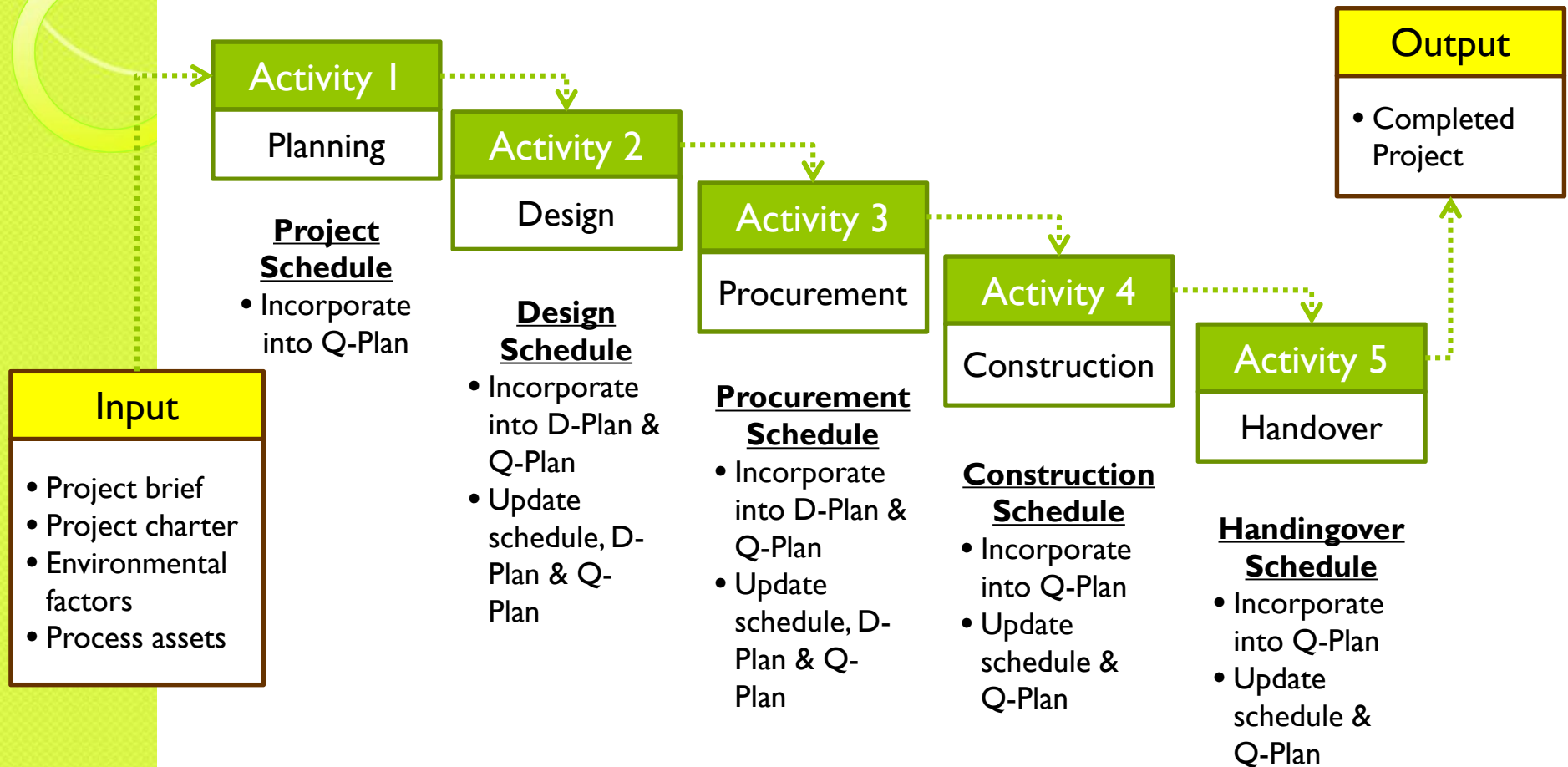


# OBJEKTIF

Penjadualan projek menyediakan pelan terperinci yang menunjukkan bagaimana dan bila projek itu akan menyampaikan perkhidmatan, produk, dan hasil yang ditetapkan dalam skop projek.



# Kitar Hayat Pengurusan Jadual Projek



# Proses Pengurusan Jadual Projek

## KUMPULAN PROSES

PERMULAAN

PERANCANGAN

PELAKSANAAN

PEMANTAUAN  
& KAWALAN

PENUTUP

## PROSES PENGURUSAN PROJEK

- Rancang Pengurusan Jadual
- Tentukan Aktiviti
- Jujukkan Aktiviti
- Anggaran Tempoh Aktiviti
- Bangunkan Jadual

Kawal Jadual

# Proses Pengurusan Jadual Projek

## Rujukan PMBok 6<sup>th</sup> Edition

### Project Schedule Management

#### Plan Schedule Management

- ✓ **Inputs**
  - ✓ Project Charter
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Data Analysis
  - ✓ Meetings
- ✓ **Output**
  - ✓ Schedule Management Plan

#### Define Activities

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Decomposition
  - ✓ Rolling Wave Planning
  - ✓ Meetings
- ✓ **Outputs**
  - ✓ Activity List
  - ✓ Activity Attributes
  - ✓ Milestone List
  - ✓ Change Requests
  - ✓ Project Management Plan Updates

#### Sequence Activities

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Precedence Diagramming and Integration
  - ✓ Dependency Determination and Integration
  - ✓ Leads and Lags
  - ✓ Project Management Information System
- ✓ **Outputs**
  - ✓ Project Schedule Network Diagram
  - ✓ Project Documents Updates

# Proses Pengurusan Jadual Projek

## Rujukan PMBok 6<sup>th</sup> Edition

### Project Schedule Management

#### Estimate Activity Durations

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Analogous Estimating
  - ✓ Parametric Estimating
  - ✓ Bottom-Up Estimating
  - ✓ Three-Point Estimating
  - ✓ Data analysis
  - ✓ Decision making
  - ✓ Meetings
- ✓ **Output**
  - ✓ Duration Estimates
  - ✓ Basis of Estimates
  - ✓ Project Documents Updates

#### Develop Schedule

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Agreements
  - ✓ Work Performance Data
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Schedule Network Analysis
  - ✓ Critical Path Method
  - ✓ Resource Optimization
  - ✓ Data analysis
  - ✓ Leads and Lags
  - ✓ Schedule Compression
  - ✓ Project Management Information System
  - ✓ Agile Release Planning
- ✓ **Outputs**
  - ✓ Schedule Baseline
  - ✓ Project Schedule
  - ✓ Schedule Data
  - ✓ Project Calendars
  - ✓ Change Requests
  - ✓ Project Management Plan Updates
  - ✓ Project Document Updates

#### Control Costs

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Work Performance Data
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Data analysis
  - ✓ Critical Path Method
  - ✓ Project Management Information System
  - ✓ Resource Optimization
  - ✓ Leads and Lags
  - ✓ Schedule Compression
- ✓ **Outputs**
  - ✓ Work Performance Information
  - ✓ Schedule Forecasts
  - ✓ Change Requests
  - ✓ Project Management Plan Updates
  - ✓ Project Document Updates



# Proses I: Rancang Pengurusan Jadual

- Proses untuk menetapkan polisi, prosedur dan dokumentasi untuk merancang, membangun, mengurus, melaksana dan mengawal jadual projek.
- Manfaat utama adalah ia memberi panduan dan haluan bagaimana jadual projek akan diurus di sepanjang tempoh projek.



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# Rancang Pengurusan Jadual

## Amalan JKR

### Input

1. Brif Projek/Definisi Skop: mengandungi ringkasan jadual perbatuan
2. Q-Plan, D-Plan & C-Plan
3. Faktor Persekitaran Jabatan: struktur organisasi projek, kompetensi ahli pasukan, kaedah penyediaan & kelulusan jadual
4. Aset Proses Jabatan: Garis panduan Penjadualan Projek, templat, SAKPKR bil. 9/2018, pangkalan data & *lesson learned*.

### Plan Schedule Management

- ✓ **Inputs**
  - ✓ Project Charter
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Data Analysis
  - ✓ Meetings
- ✓ **Output**
  - ✓ Schedule Management Plan

# Rancang Pengurusan Jadual

## Amalan JKR

### Tools & Techniques

1. Penilaian Pakar: pengetahuan khusus dalam projek yang serupa
2. Analisa Data: cth, jadual permulaan (preliminary), jadual terperinci & tahap perincian
3. Mesyuarat: cth. Mesyuarat menyediakan pelan perancangan jadual

### Outputs

1. Pelan Pengurusan Jadual: mengandungi kriteria dan aktiviti untuk menyediakan, memantau dan mengawal projek

### Plan Schedule Management

- ✓ **Inputs**
  - ✓ Project Charter
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Data Analysis
  - ✓ Meetings
- ✓ **Output**
  - ✓ Schedule Management Plan

## Proses 2: Tentukan Aktiviti

- ❖ Proses mengenalpasti dan mendokumenkan aktiviti khusus yang mesti dilaksanakan untuk menghasilkan produk/penyampaian.
- ❖ Manfaat utama adalah untuk menguraikan/memecahkan pakej kerja kepada aktiviti yang mudah diurus (asas untuk menganggar, menjadual, melaksanakan, memantau dan mengawal kerja).



# Tentukan Aktiviti

## Amalan JKR

### Input

1. Q-Plan, D-Plan & C-Plan & Pelan Pengurusan Jadual
2. Faktor Persekitaran Jabatan: cth. Struktur organisasi pasukan projek, keperluan SKALA, kaedah pelaporan (kemajuan fizikal & kewangan)
3. Aset Proses Jabatan: cth. *Lesson learned*, proses piawai, prosedur SPB, templat aktiviti & Garis Panduan Penjadualan, SAKPKR bil. 9/2018

### Define Activities

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Decomposition
  - ✓ Rolling Wave Planning
  - ✓ Meetings
- ✓ **Outputs**
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  - ✓ Milestone List
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# Tentukan Aktiviti

## Amalan JKR

### Tools & Techniques

1. Penguraian/pemecahan skop & produk/penyampaian (sehingga pakej kerja)
2. Perancangan Alunan Ombak (*Wave Planning*): jadual awalan (dalam tempoh 14 hari), jadual terperinci (dalam tempoh 3 bulan)
3. Mesyuarat: cth. untuk tetapkan WBS & *interfacing* antara disiplin

### Define Activities

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental Factor
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- ✓ **Tools and Techniques**
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  - ✓ Decomposition
  - ✓ Rolling Wave Planning
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  - ✓ Activity Attributes
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# Tentukan Aktiviti

## Amalan JKR

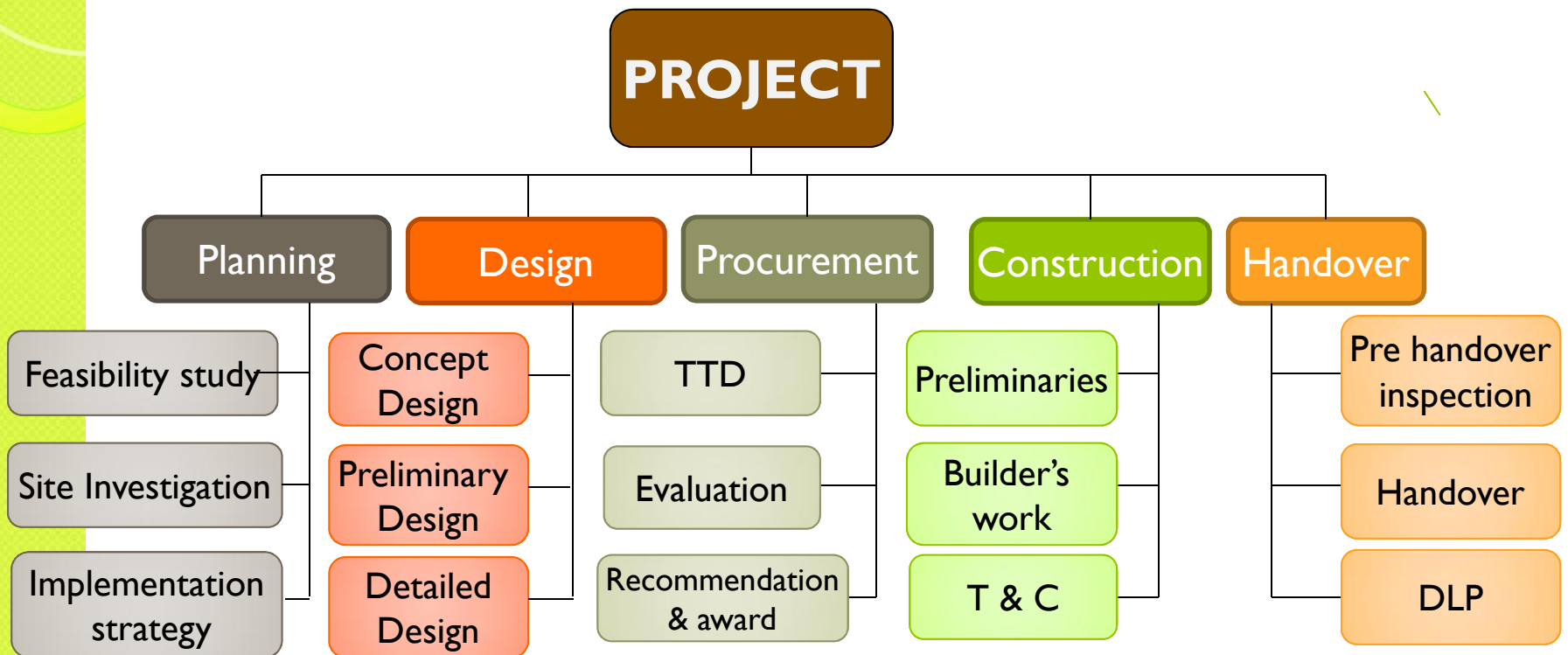
### Outputs

1. Senarai Aktiviti
2. Atribut Aktiviti: cth. *duration, predecessor, successor, lead, lag, total slack*
3. Senarai perbatuan: cth. Start & finish date, kelulusan kebenaran merancang, sambungan utility
4. Permohonan perubahan (perubahan kepada baseline)
5. *Schedule baseline, resource baseline*

### Define Activities

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Decomposition
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# Example of Decomposition





## Proses 3: Junjukkan Aktiviti



- ❖ Proses mengenal pasti dan mendokumenkan pertalian antara aktiviti projek.
- ❖ Manfaat utama adalah ia menentukan hubungan logikal bagi mendapatkan keberkesanan paling tinggi di tengah kekangan projek.



# Junjukkan Aktiviti

## Amalan JKR

### Input

1. Q-Plan, D-Plan & C-Plan & Pelan Pengurusan Jadual
2. Dokumen projek: cth. senarai aktiviti, atribut aktiviti, log andaian, *milestone*
3. Faktor Persekitaran Jabatan: cth. Organisasi matrik, ketersediaan sumber
4. Aset Proses Jabatan: cth. Templat CPM, proses kerja, carta alir, method statements

### Sequence Activities

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Precedence Diagramming and Integration
  - ✓ Dependency Determination and Integration
  - ✓ Leads and Lags
  - ✓ Project Management Information System (PMIS)
- ✓ **Outputs**
  - ✓ Project Schedule Network Diagram
  - ✓ Project Documents Updates

# Junjukkan Aktiviti

## Amalan JKR

### Tools & Techniques

1. *Precedence Diagram Method*
2. Penentuan pergantungan & integrasi: kebergantungan mandatory, budi bicara, luaran & dalaman
3. *Leads dan lags*
4. PMIS: cth. SKALA

### Outputs

1. Rajah Rangkaian Jadual Projek
2. Dokumen projek dikemas kini: cth. senarai & atribut aktiviti, milestone, log andaian, dll)

### Sequence Activities

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Precedence Diagramming and Integration
  - ✓ Dependency Determination and Integration
  - ✓ Leads and Lags
  - ✓ Project Management Information System (PMIS)
- ✓ **Outputs**
  - ✓ Project Schedule Network Diagram
  - ✓ Project Documents Updates

## Proses 4: Anggaran Tempoh Aktiviti

- ❖ Proses menganggarkan tempoh yang diperlukan untuk menyiapkan sesuatu aktiviti berkenaan dengan sumber yang diperuntukkan.
- ❖ Manfaat utama adalah ia menentukan tempoh yang diperlukan untuk menyiapkan sesuatu aktiviti.



# Anggar Tempoh Aktiviti

## Amalan JKR

### Input

1. Q-Plan, D-Plan & C-Plan & Pelan Pengurusan Jadual
2. Dokumen projek: cth. senarai & atribut aktiviti, log andaian, senarai *milestone*, daftar *lesson learned*, penugasan sumber, calendar, norma/kadar produktiviti dan daftar risiko
3. Faktor Persekitaran Jabatan: cth. Organisasi matrik, ketersediaan sumber
4. Aset Proses Jabatan: cth. Pangkalan data

### Estimate Activity Durations

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Analogous Estimating
  - ✓ Parametric Estimating
  - ✓ Bottom-Up Estimating
  - ✓ Three-Point Estimating
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  - ✓ Decision making
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- ✓ **Output**
  - ✓ Duration Estimates
  - ✓ Basis of Estimates
  - ✓ Project Documents Updates

# Anggar Tempoh Aktiviti

## Amalan JKR

### Tools & Techniques

1. Penilaian pakar – berdasarkan projek lepas
2. Anggaran Analog (data historical)
3. Anggaran Parametrik ( $D=Q/PR$ )
4. Anggaran Titik-Tiga [  $tE=(tO+4tM+tP)/6$  ]
5. Anggaran *Bottom-up*: anggaran keseluruhan tempoh sub-aktiviti dalam WBS
6. Analisis Data: cth. Analisis rizab
7. Membuat keputusan: cth. secara berkumpulan
8. Mesyuarat

### Estimate Activity Durations

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Analogous Estimating
  - ✓ Parametric Estimating
  - ✓ Bottom-Up Estimating
  - ✓ Three-Point Estimating
  - ✓ Data analysis
  - ✓ Decision making
  - ✓ Meetings
- ✓ **Output**
  - ✓ Duration Estimates
  - ✓ Basis of Estimates
  - ✓ Project Documents Updates

# Anggar Tempoh Aktiviti

## Amalan JKR

### Outputs

1. Anggaran Tempoh Aktiviti
2. Asas anggaran
3. Dokumen Projek Dikemaskini: cth. Atribut aktiviti, andaian dalam pengiraan tempoh, daftar *lesson learned*, dll.)

### Estimate Activity Durations

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Enterprise Environmental Factor
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Expert Judgement
  - ✓ Analogous Estimating
  - ✓ Parametric Estimating
  - ✓ Bottom-Up Estimating
  - ✓ Three-Point Estimating
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  - ✓ Meetings
- ✓ **Output**
  - ✓ Duration Estimates
  - ✓ Basis of Estimates
  - ✓ Project Documents Updates

## Proses 5: Bangunkan Jadual

- ❖ Adalah proses menganalisis jujukan aktiviti, tempoh, keperluan sumber, dan kekangan jadual untuk membangunkan model jadual projek.
- ❖ Manfaat utama adalah model jadual dapat disediakan dengan memasukkan aktiviti, tempoh, sumber, ketersediaan, dan jujukan di dalam alat penjadualan.
- ❖ Kajian semula ke atas anggaran tempoh dan anggaran sumber diperlukan bagi menyediakan jadual projek untuk tujuan kelulusan dan pemakaian.



# Bangunkan Jadual

## Amalan JKR

### Input

1. Q-Plan, D-Plan & C-Plan & Pelan Pengurusan Jadual
2. Dokumen projek: cth. senarai & atribut aktiviti, log andaian, rajah rangkaian, keperluan sumber, senarai *milestone*, penugasan ahli pasukan, kalendar, daftar risiko
3. Faktor Persekitaran Jabatan: cth. Organisasi matrik, ketersediaan sumber
4. Aset Proses Jabatan: cth. Garis Panduan Penjadualan, SAKPKR bil. 9/2018

### Develop Schedule

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Agreements
  - ✓ Work Performance Data
  - ✓ Organizational Process Asset

# Bangunkan Jadual

## Amalan JKR

### Tools & Techniques

1. Analisis Rajah Rangkaian
2. *Critical Path Method*
3. *Critical Chain Method*
4. *Resource Optimization* (tidak dipraktikkan di fasa pembinaan, sumber perlu ditambah jika tidak mencukupi)
5. *What-if scenarios Analysis*: untuk ambil kira impak risiko dan ketidakpastian ke atas penyiapan projek (*belum dilaksanakan secara meluas*)
6. *Leads and Lags*
7. Mampatan Jadual
8. Perisian MS Project, Primavera, etc.
9. *Agile Release Planning. High Level Summary Timeline* (untuk projek tertentu sahaja-*high profile*)

### Develop Schedule

- ✓ **Tools and Techniques**
  - ✓ Schedule Network Analysis
  - ✓ Critical Path Method
  - ✓ Resource Optimization
  - ✓ Data analysis
  - ✓ Leads and Lags
  - ✓ Schedule Compression
  - ✓ Project Management Information System
  - ✓ Agile Release Planning

# Bangunkan Jadual

## Amalan JKR

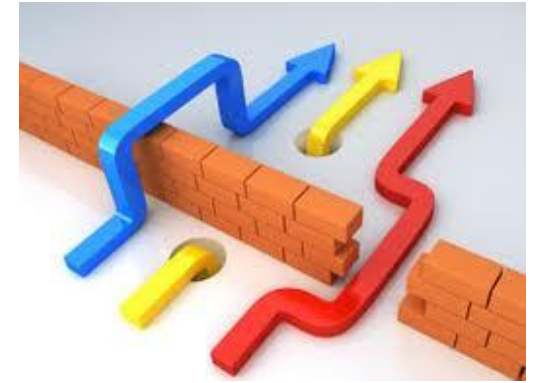
### Outputs

1. Jadual Projek
2. Jadual *Baseline*
3. Data Jadual (Aktiviti, Batu Tanda, Atribur Aktiviti, Sumber, dll)
4. Kalendar Projek
5. Permohonan Perubahan (jika terdapat perubahan skop atau jadual)
6. Dokumen Projek kemaskini: cth. keperluan sumber, atribut aktiviti, kalendar, daftar risiko, dll.
7. Pelan Pengurusan Jadual dan Jadual *Baseline* dikemaskini

### Develop Schedule

- ✓ **Outputs**
  - ✓ Schedule Baseline
  - ✓ Project Schedule
  - ✓ Schedule Data
  - ✓ Project Calendars
  - ✓ Change Requests
  - ✓ Project Management Plan Updates
  - ✓ Project Document Updates

## Proses 6: Kawal Jadual



- ❖ Proses memantau status aktiviti projek untuk mengemaskini jadual projek dan mengurus perubahan kepada jadual *baseline*.
- ❖ Manfaat utama adalah untuk memastikan pencapaian kerja mengikut jadual *baseline*.

# Kawal Jadual

## Amalan JKR

### Input

1. Q-Plan, D-Plan & C-Plan & Jadual *Baseline*
2. Dokumen Projek: cth. daftar *lesson learned*, jadual projek & jadual kadar produktiviti, dll.
3. Data Pencapaian Kerja: cth. Aktiviti yang sudah mula & siap, *% Complete, Actual Start Date & Actual Finish Date*
4. Aset Proses Jabatan: cth. Garis Panduan Penjadualan, SAKPKR bil. 9/2018, nota kursus

### Control Costs

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Work Performance Data
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Data analysis
  - ✓ Critical Path Method
  - ✓ Project Management Information System
  - ✓ Resource Optimization
  - ✓ Leads and Lags
  - ✓ Schedule Compression
- ✓ **Outputs**
  - ✓ Work Performance Information
  - ✓ Schedule Forecasts
  - ✓ Change Requests
  - ✓ Project Management Plan Updates
  - ✓ Project Document Updates

# Kawal Jadual

## Amalan JKR

### Tools & Techniques

1. Analisis Data: cth. *Earned Value Analysis*, analisa pencapaian & varian, *hit ratio* & *probability of completion on time*
2. CPM: cth. Pemilihan aktiviti kritikal yang hendak dipulihkan (*recovery plan*)
3. PMIS: cth. SKALA
4. Pengoptimuman sumber
5. *Leads, lags & schedule compression* (mampatan jadual)

### Control Costs

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Work Performance Data
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Data analysis
  - ✓ Critical Path Method
  - ✓ Project Management Information System
  - ✓ Resource Optimization
  - ✓ Leads and Lags
  - ✓ Schedule Compression
- ✓ **Outputs**
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  - ✓ Project Management Plan Updates
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# Kawal Jadual

## Amalan JKR

### Outputs

1. Maklumat Pencapaian Kerja: cth. Lampiran B, SAKPKR bil. 9/2018 (kemajuan kerja sebenar vs jadual), Laporan Kontrak, Laporan Kemajuan Bulanan
2. Anggaran Kemajuan: cth jangkaan pencapaian bulan berikutnya
3. Permohonan pindaan: cth. Pindaan kepada baseline dan/atau komponen lain jadual
4. Q-Plan, D-Plan & C-Plan dikemaskini
5. Pelan Pengurusan Projek dikemaskini: cth. Pelan perancangan jadual, jadual *baseline* & kos *baseline*

### Control Costs

- ✓ **Inputs**
  - ✓ Project Management Plan
  - ✓ Project Documents
  - ✓ Work Performance Data
  - ✓ Organizational Process Asset
- ✓ **Tools and Techniques**
  - ✓ Data analysis
  - ✓ Critical Path Method
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# KESIMPULAN

Penjadualan projek menyediakan pelan terperinci yang menunjukkan bagaimana dan bila produk/perkhidmatan akan disiapkan. Ia juga berfungsi sebagai alat untuk komunikasi, mengurus harapan pemegang taruh dan sebagai asas untuk pelaporan kemajuan.






# Contoh Pelan Pengurusan Jadual



# Perancangan Jadual

	<b>PENGURUSAN PROJEK</b>					Rujukan : JKR.PMMM.38
	<b>Perancangan Jadual</b>					Mukasurat No : 1 Isu No : 1 Semakan No : 5 Tarikh : 28.02.2019
<b>PROJEK :</b>						
<b>NAMA &amp; JAWATAN PENGURUS PROJEK :</b>						
<b>TARIKH DISEDIAKAN :</b>						
WBS No.	Fasa/Aktiviti/Tugas	Sumber Diperuntukkan	Tempoh (Hari)	Sandaran (Dependency)	Tarikh Mula	Tarikh Siap
1	<b>PERANCANGAN</b>					
1.1	cth: Lawatan Tapak Verifikasi harta pelanggan	HOPT/Pelanggan/ HODT Ark/HODT Elek/...	2		2-Feb-19	3-Feb-19
1.2	Rekabentuk konsep yang diluluskan pelanggan	<div style="background-color: #cccccc; padding: 10px;">                     RUJUK PROGRAM KERJA                 </div>				
2	<b>REKABENTUK</b>					
3	<b>PEROLEHAN</b>					
4	<b>PEMBINAAN</b>					
5	<b>SERAHAN</b>					
<b>DISEDIAKAN OLEH :</b>						
<b>DISEMAK OLEH :</b>						

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# Contoh: Program Kerja

Task Name	Duration	Start	Finish	Predecessors	Successors	Resource Names	12	Half 1, 2013			Half 2, 2013		
							N	J	M	M	J	S	N
1 PROGRAM PELAKSANAAN PROJEK	255 days	Wed Jan 2	Tue Dec 24										
2 Mula	0 days	Wed Jan 2	Wed Jan 2		6								
3 PRA-PEMBINAAN OLEH JKR (KONVENSIONAL)	255 days	Wed Jan 2	Tue Dec 24										
4 PENERIMAAN & STRATEGI PELAKSANAAN PROJEK	18 days	Wed Jan 2	Fri Jan 25										
5 PENENTUAN STRATEGI PELAKSANAAN	5 days	Wed Jan 2	Tue Jan 8										
6 Senarai Projek yang Dilaksanakan oleh JKR	0 days	Wed Jan 2	Wed Jan 2	2	7								
7 Klasifikasi Projek Mengikut Lokasi, Kos, Agensi / Kementerian & ACAT	1 day	Wed Jan 2	Wed Jan 2	6	8								
8 Penetapan Strategi Pelaksanaan	2 days	Thu Jan 3	Fri Jan 4	7	9								
9 Cadangan Pengagihan Projek Mengikut SBU	2 days	Mon Jan 7	Tue Jan 8	8	11								
10 EDARAN SENARAI PROJEK KEPADA SBU/PAKAR	7 days	Wed Jan 9	Thu Jan 17										
11 Edaran Senarai Projek Ke Semua SBU / Pakar	1 day	Wed Jan 9	Wed Jan 9	9	12FS+5 days								
12 Mesyuarat Pengesahan Projek Bersama Pengarah SBU	1 day	Thu Jan 17	Thu Jan 17	11FS+5 days	14								
13 PENDAFTARAN PROJEK KE SKALA	6 days	Fri Jan 18	Fri Jan 25										
18 PERANCANGAN	39 days	Mon Jan 21	Thu Mar 14			HOPT & HOD							
28 REKABENTUK	133 days	Fri Mar 15	Tue Sep 17										
29 REKA BENTUK KONSEP	50 days	Fri Mar 15	Thu May 23			Arkitek							
35 REKA BENTUK AWALAN SKALA 100	35 days	Fri May 24	Thu Jul 11			Arkitek							
39 REKA BENTUK TERPERINCI	73 days	Fri Jun 7	Tue Sep 17			All HODTs							
47 PEROLEHAN	70 days	Wed Sep 18	Tue Dec 24			CKUB							
48 Sedia Dokumen Tawaran / GN3	15 days	Wed Sep 18	Tue Oct 8	41,45	49								
49 Tawaran / Iklan	20 days	Wed Oct 9	Tue Nov 5	48	50								
50 Penilaian Tawaran	15 days	Wed Nov 6	Tue Nov 26	49	51								
51 Lembaga Tender	10 days	Wed Nov 27	Tue Dec 10	50	52								
52 ATDA & Sah Peruntukan	10 days	Wed Dec 11	Tue Dec 24	51	53FS-5 days								
53 Surat Setujuterima Tender	5 days	Wed Dec 18	Tue Dec 24	52FS-5 days	54								
54 Tamat	0 days	Tue Dec 24	Tue Dec 24	53,46,17									

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# TERIMA KASIH

*“The Key is Not to Prioritize What’s On Your Schedule, But to Schedule Your Priorities”- Stephen Covey*

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