

# **GARIS PANDUAN KKP INDUSTRI PEMBINAAN (PENGURUSAN)**

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8 Disember 2016

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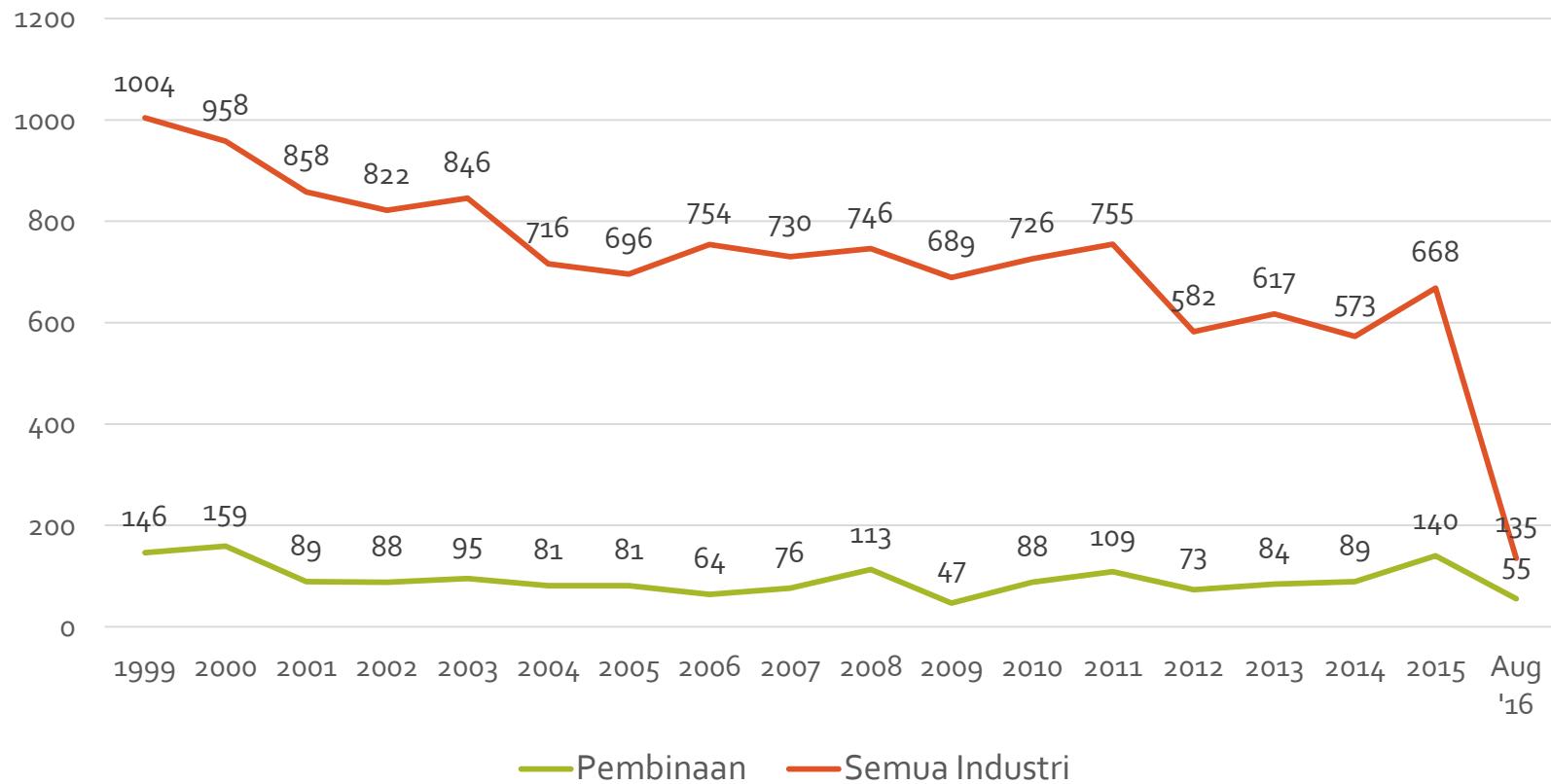
Bahagian Keselamatan Kerja Bina

Jabatan Keselamatan dan Kesihatan Pekerjaan

# **PRESTASI KKP INDUSTRI PEMBINAAN**

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# Kecederaan maut kepada pekerja *Fatal injuries to workers 1999-2016<sup>p</sup>*

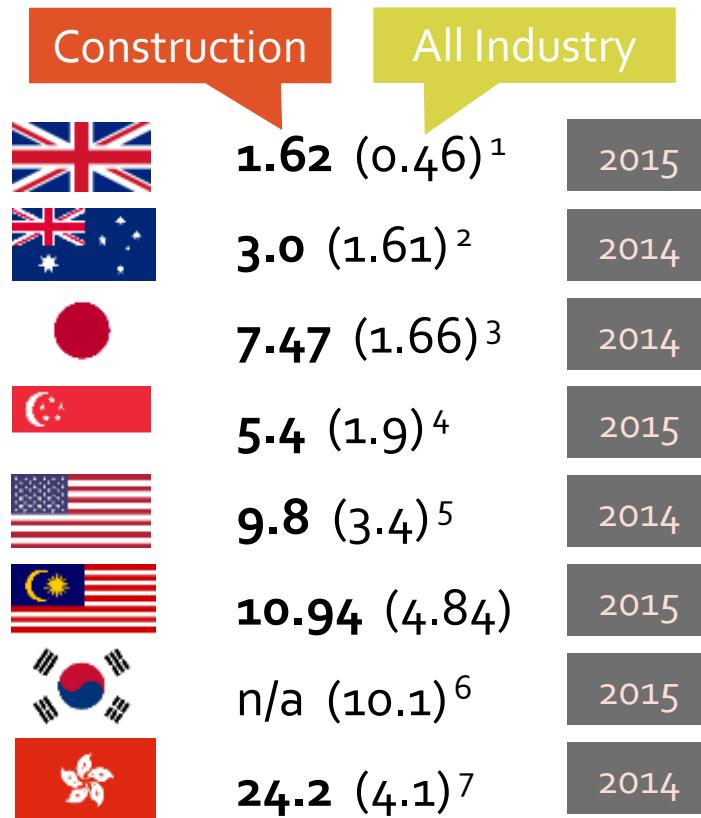


Sumber: JKKP, PERKESO, JTK, CIDB

Source: DOSH, SOCSO, DoL, CIDB

# Kadar kecederaan maut pekerja pembinaan

## *Rate of fatal injuries to construction workers*



<sup>1</sup>Health and safety in construction sector in Great Britain, 2014/15 (<http://www.hse.gov.uk/statistics/industry/construction/construction.pdf>)

<sup>2</sup><http://www.safeworkaustralia.gov.au/sites/swa/statistics/pages/statistics>

<sup>3</sup>[http://www.kensaibou.or.jp/data/statistics\\_graph.html](http://www.kensaibou.or.jp/data/statistics_graph.html)

<sup>4</sup>Workplace Safety and Health Report 2015 ([https://www.wsh-institute.sg/files/wshi/upload/cms/file/WSHI%20National%20Statistics%20Report%202015\\_Pages\\_160309.pdf](https://www.wsh-institute.sg/files/wshi/upload/cms/file/WSHI%20National%20Statistics%20Report%202015_Pages_160309.pdf))

<sup>5</sup><http://www.bls.gov/iif/oshwc/cfoi/cfcho013.pdf>

<sup>6</sup><http://www.moel.go.kr/english/pas/pasMajor.jsp>

<sup>7</sup><http://www.labour.gov.hk/eng/osh/pdf/Bulletin2014.pdf>

Rate of fatal injuries to construction workers are more than  
**TWICE** the all-industry average in all countries

# Kesan kecederaan maut *Effect of fatal injuries* Kesan Ekonomi *Economic Impact 2015*

**RM14.16 juta**  
**Jumlah kos  
kematian  
pekerja asing**



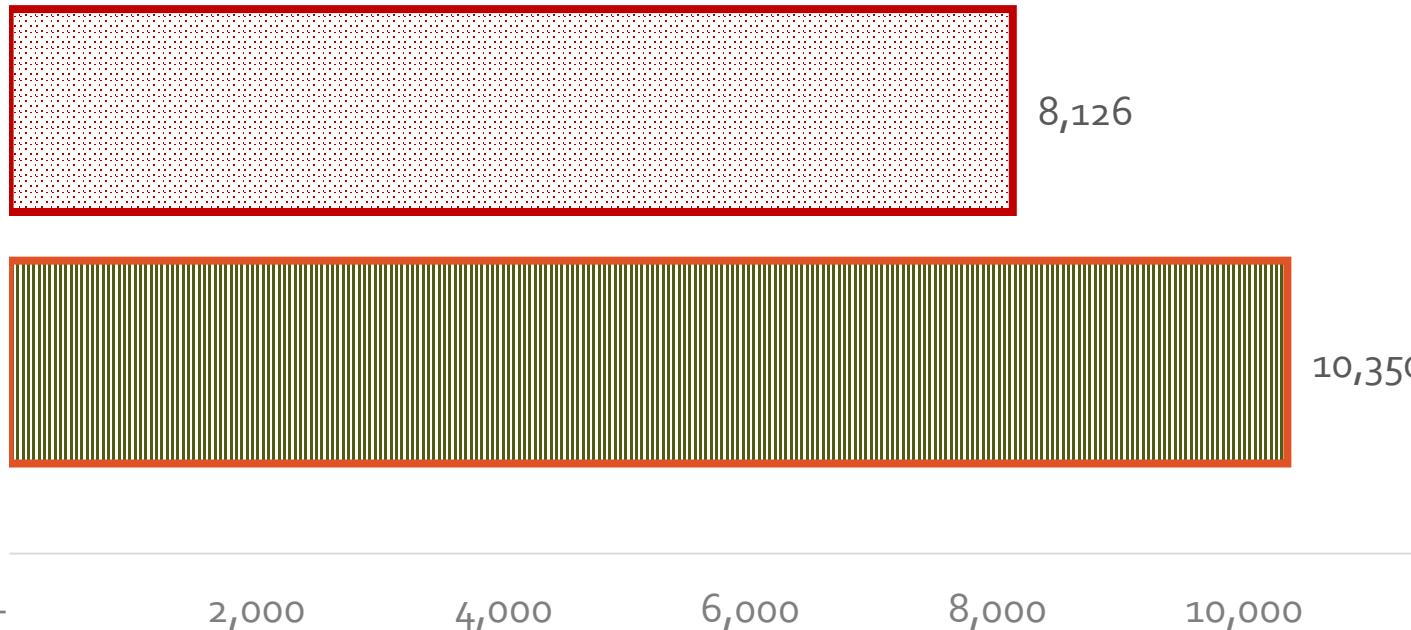
**RM16.77 juta**  
**Jumlah kos  
kematian  
pekerja  
tempatan**

Sumber: Kalkulator kos kemalangan JKJP,  
<http://oshacc.dosh.gov.my/> (berdasarkan harga 2013)

# Kesan kecederaan maut *Effect of fatal injuries* Penguatkuasaan *Enforcement 2016*

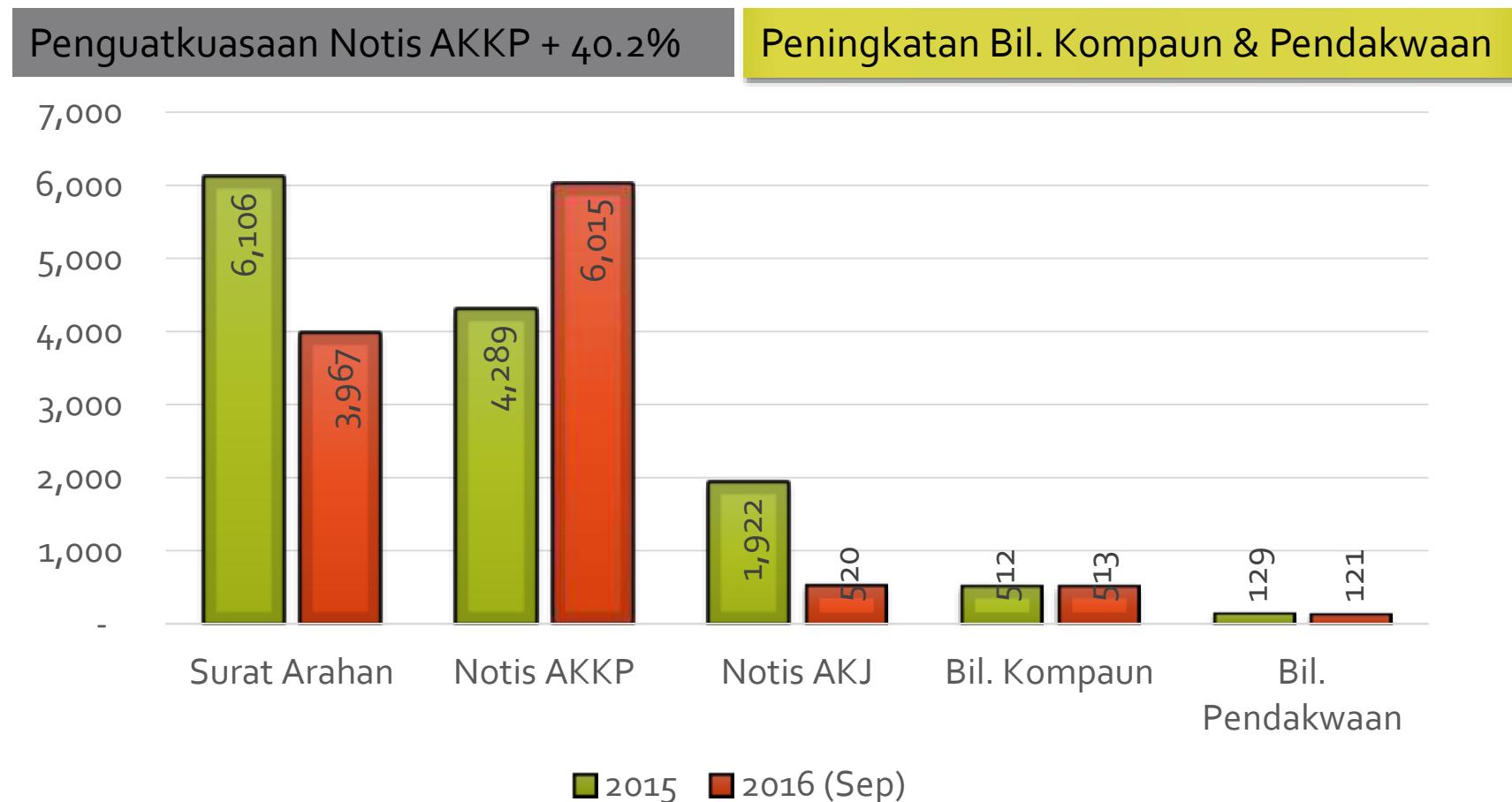
Perbezaan Bil. Tapak Aktif (Anggaran) dan Bil. Pemeriksaan (Sebenar) + 27.4%

■ Bil. Pemeriksaan 2016 (Sep) ■ Bil. Tapak Aktif 2016 (Ogos)



Sumber: JKKP

# Kesan kecederaan maut *Effect of fatal injuries* Penguatkuasaan *Enforcement 2015 & 2016*

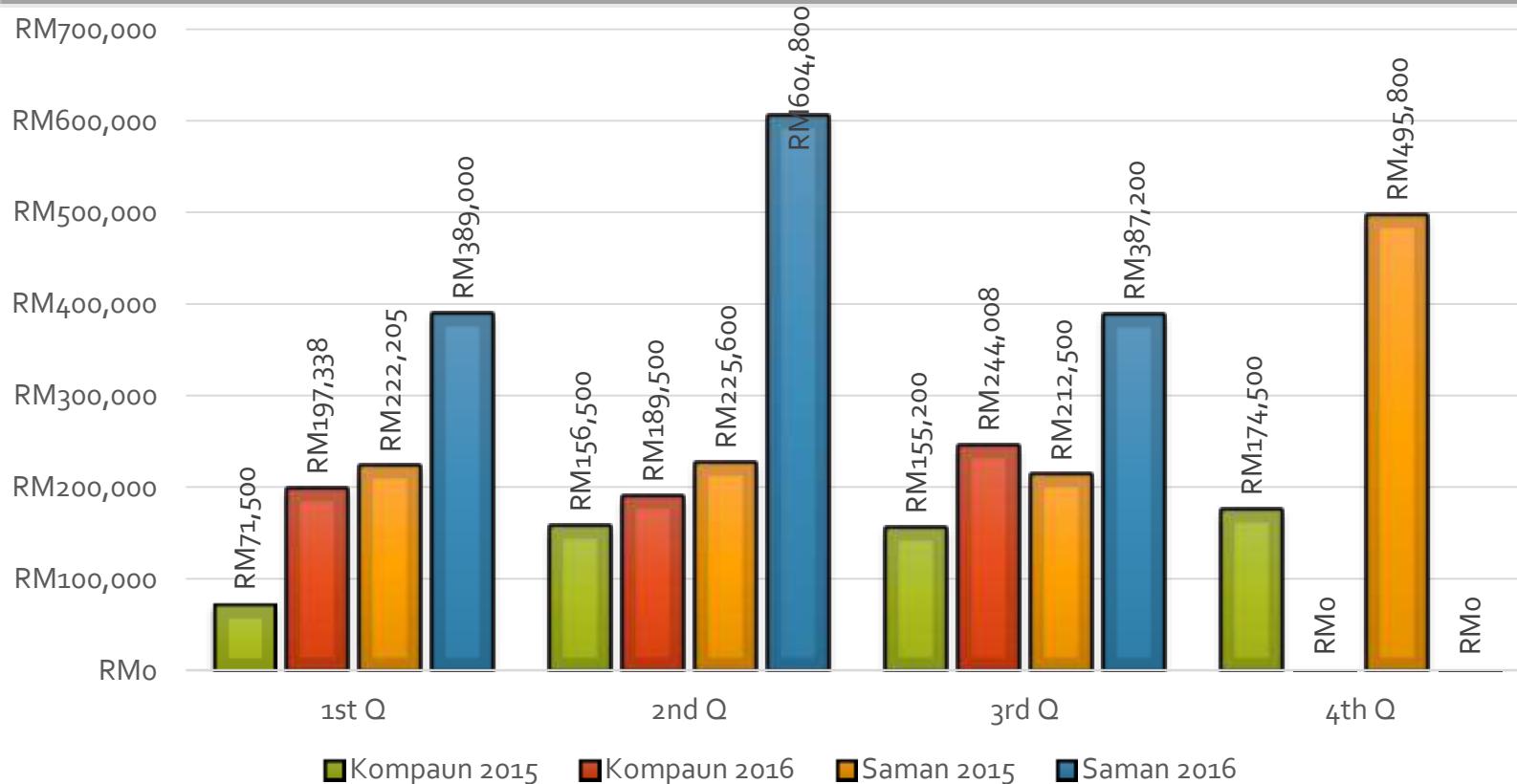


Sumber: JKPK

# Kesan kecederaan maut *Effect of fatal injuries* Penguatkuasaan *Enforcement 2015 & 2016*

Jumlah Kompaun 2015, 2016 (sehingga Sep) = RM557,700, RM630,846 (+13.1%)

Jumlah Saman 2015, 2016 (sehingga Sep) = RM1,156,105, RM1,381,000 (+19.5%)



Sumber: JKKP

# **GARIS PANDUAN KKP INDUSTRI PEMBINAAN (PENGURUSAN)**

# References



- Construction (Design & Management) Regulations 2015
- Managing health & safety in construction: Guidance on Construction (Design & Management) Regulations 2015
- *ICE Manual of Health & Safety in Construction* oleh McAleenan, Ciaran & Oloke, David. 2010. Thomas Telford, UK.
- *Introduction to Health & Safety in Construction* oleh Hughes, Phil & Ferret, Ed. 2008. Elsevier, Netherlands.
- *CDM Regulations 2015 Explained* oleh Joyce, Raymond. 2015. Thomas Telford, UK.



- The Workplace Safety & Health (Design for Safety) Regulations 2015
- Workplace Safety & Health Guidelines (Design for Safety) 2016

# Peraturan utama pembinaan BOWECS

- terpakai kepada semua **kerja** pembinaan (hampir keseluruhan)
- menentukan (*prescribes*) **langkah kawalan** bagi kerja-kerja bahaya
- tidak terpakai kepada semua **pihak** yang terlibat di tapak
- tidak menentukan keperluan untuk **mengurus** kerja-kerja bahaya
- tidak **fleksibel**

# Perundangan utama pembinaan Ideal

- terpakai kepada semua **kerja & fasa** pembinaan
- menentukan kehendak untuk **mengurus** keselamatan dan kesihatan di projek pembinaan
- menentukan **standards/objektif** untuk dicapai, bukan langkah/ cara untuk mencapainya
- kerangka yang **fleksibel**
- tahap pematuhan haruslah **berkadaran** dengan tahap risiko kerja

**Sesuatu projek tidak terhad kepada tapak pembinaan**

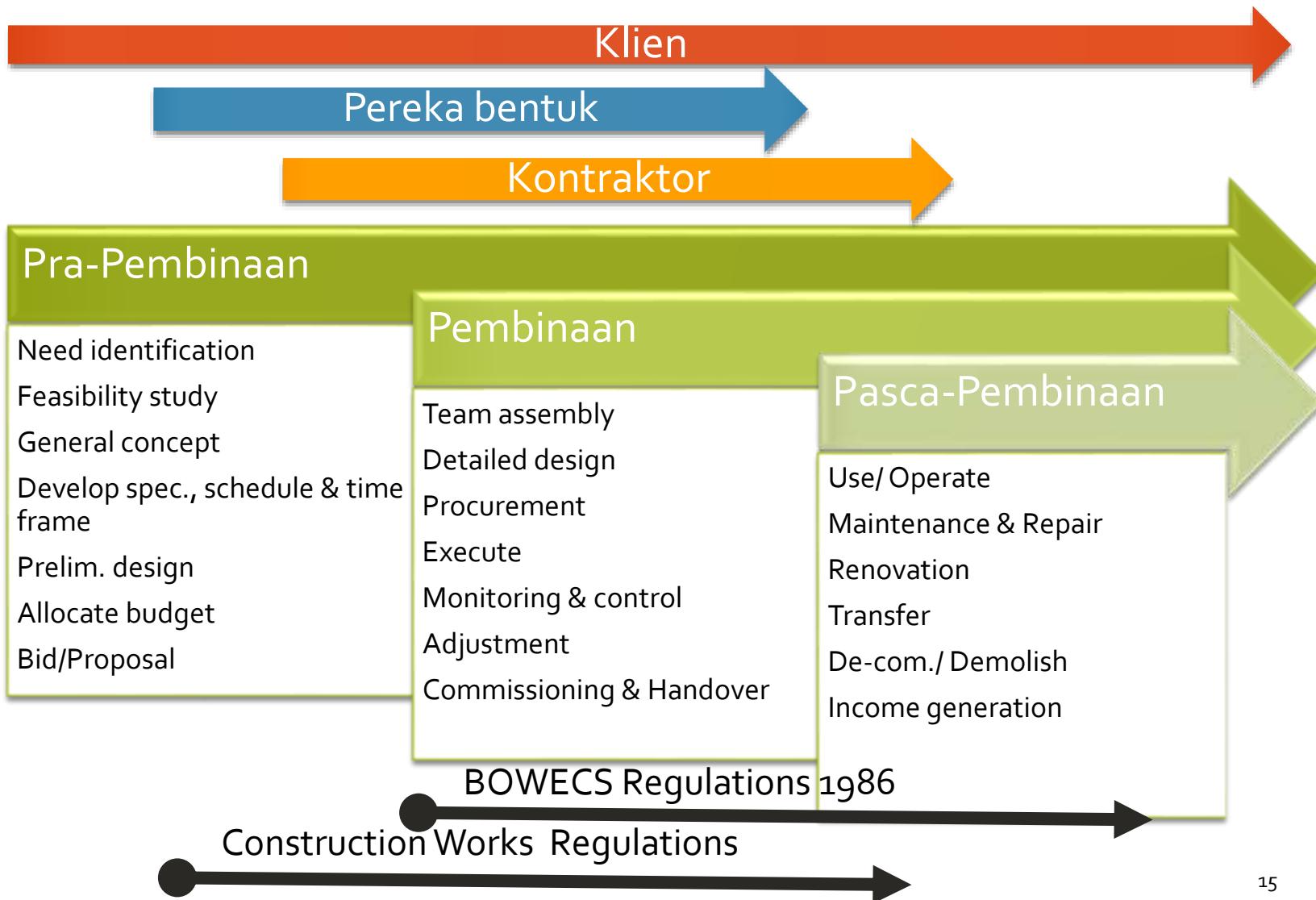
# Facts to note

- During the years 2000-2002, **22%** of injuries in Oregon, Washington and California were **linked to design**
- Across US, **42%** of construction fatalities were **related to design issues** between the years 1990 and 2003
- A **1991** study done in Europe found that **60%** of fatalities were **the result of decisions made before the site work even began**

# Facts to note

- During the years 2000-2002, **22%** of injuries in Oregon, Washington and California were linked to design
- Across US, **42%** of construction fatalities were related to design issues between the years 1990 and 2003
- A **1991** study done in Europe found that **60%** of fatalities were the result of decisions made before the site work even began
- **Decisions made in the planning and design stages can have safety and health implications in the later stages of construction**
- Design professionals can have a significant impact on construction injuries and fatalities by considering hazards in their designs – **Hazard prevention through design (PtD)**

# Kitar Hayat Projek Pembinaan



# Garis panduan pengurusan pembinaan – falsafah dan objektif

Perkara yang paling utama adalah menyediakan

- **maklumat yang betul, kepada orang yang betul, pada masa yang betul, dan bertindak berdasarkan maklumat tersebut**
- ***kerjasama menyeluruh* semua ‘majikan dan orang yang ada kawalan’ di sesebuah projek pembinaan**

# Garis panduan pengurusan pembinaan – falsafah dan objektif

Tujuan utama

- untuk **integrasikan pengurusan KKP ke dalam sistem pengurusan projek**; dan
- menggalakkan semua yang terlibat **bekerjasama** untuk
  - memperbaiki perancangan dan pengurusan dari **insepsi**
  - mengenalpasti bahaya **seawal mungkin**
  - usaha yang **fokus** ke arah yang paling berkesan
  - mengelakkan **birokrasi**

# Garis panduan pengurusan pembinaan – falsafah dan objektif

- GP dibuat dengan memfokuskan perhatian kepada **perancangan dan pengurusan di seluruh fasa projek** – dari konsep reka bentuk dan seterusnya
- KKP **dianggap sebagai mustahak**, dan menjadi **sebatik** dengan komponen pembangunan projek yang lain dari reka bentuk ke pembinaan
- KKP **bukan bidan terjun atau *ad hoc***

# Garis panduan pengurusan pembinaan – falsafah dan objektif

- Usaha yang perlu digembleng ke arah perancangan dan pengurusan haruslah **berkadaran** dengan risiko dan kompleksiti sesebuah projek
- Dokumentasi yang diperlukan haruslah **membantu komunikasi dan pengurusan risiko**
- Dokumentasi yang tidak menepati kriteria di atas adalah membazirkan usaha dan mengalihkan perhatian yang patut diberikan kepada aktiviti pengurusan risiko

# Garis panduan pengurusan pembinaan – falsafah dan objektif

- **Masa dan fikir** yang diluangkan pada **peringkat permulaan projek dan pra-pembinaan** akan membantu
  - mengurangkan **kelewatan/penangguhan**
  - memperbaiki **kebolehpercayaan** target kos dan tarikh siap
  - memperbaiki **komunikasi dan penyelarasan** antara pihak yang terlibat
  - memperbaiki **kualiti** hasil pembinaan

# Garis panduan pengurusan pembinaan – perubahan yang dibuat

- Struktur yang **ringkas**
- Memperkenalkan *duty holder* baru – Klien dan Perek Bentuk, di samping **mengekalkan** kewajipan Kontraktor di dalam Peraturan BOWECS
- Klien diberi kewajipan/ tanggungjawab yang **besar**
- Penekanan diberikan kepada **fasa pra-pembinaan**
  - Tanggungjawab Perek Bentuk diperkenalkan
- Kelayakan berdasarkan **pengetahuan, pengalaman dan kemahiran**

# Garis panduan pengurusan pembinaan – perubahan yang dibuat

- **Maklumat pra-pembinaan** (*pre-construction information*) diperkenalkan
- **Fail Keselamatan dan Kesihatan** (*safety and health file*) diperkenalkan
- **Perancangan Fasa Pembinaan** (*construction phase plan*) diperkenalkan
- Kehendak berkaitan **kebajikan** digabungkan
- Organisasi atau individu boleh menjalankan fungsi lebih dari satu orang berkewajipan, dengan syarat mereka ada kemahiran, ilmu dan pengalaman dan jika organisasi keupayaan organisasi

# Garis Panduan KKP Industri Pembinaan (Pengurusan) - Elemen Penting

1

Managing the risks by applying the **general principles of prevention**;

2

**Appointing** the right people and organisations at the right time;

3

Making sure everyone has the **information, instruction, training and supervision** they need to carry out their jobs in a way that secures safety and health;

4

Dutyholders **cooperating and communicating** with each other and **coordinating** their work; and

5

**Consulting workers and engaging** with them to promote and develop effective measures to secure safety, health and welfare

# 1. Managing the risk by applying the general principles of prevention

Avoid risk where possible;

evaluate those risks that cannot be avoided; and

put in place proportionate measures that control them at source.

## 2. Appointing the right people and organisations at the right time

### Individual competency

- Those appointed must have the skills, knowledge, training and experience to carry out the work they will be employed

### Organisational capability

- Appointed organisation must have the policies and systems in place to set acceptable safety and health standards which comply with the law, & resources and people to ensure the standards are delivered

### Right time

- Appointing consultant or contractor at the right time, so that they have enough time to plan and manage for safety and health

### 3. Making sure everyone has the information, instruction, training and supervision

Information

Instruction

Training

Supervision

Required level will depend on the risks involved in the project, complexity and scale of the project and the level of skills, knowledge, training and experience of the workforce

## 4. Everyone cooperating and communicating with each other and coordinating their work

### Cooperating

- to ensure safety and health
- to ensure everyone complies with the law

### Communicating

- to make sure everyone understands the risks and the measures to control those risk
- between main cocontractors of different sites

### Coordinating

- among sub-contractors who start at different stages
- flow of information and instruction

# Consultation and engagement

## 5. Consulting workers and engaging with them to promote and develop effective measures

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It is required under the law!

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Helping spot workplace risks and knowing what to do about them

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Making sure safety and health controls are appropriate

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Increasing level of commitment to working in a safe and healthy way

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**EVERYONE HAS A  
ROLE**

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# Client/ Developer/ Owner

1

Make suitable arrangements for managing a project, including making sure:

- designer & contractor are appointed
- sufficient time and resources are allocated

2

Make sure:

- relevant information is prepared and provided to designer & contractor
- designer & contractor carry out work safely
- welfare facilities are provided

# Designer/ Consultant

1

Plan, manage, monitor and coordinate safety and health in pre-construction phase of a project, including:

- identify, eliminate or controlling foreseeable risks, either during construction and maintenance and use of a building once it is built

2

Prepare and provide relevant information to main contractor, to help them plan, manage, monitor and coordinate safety and health in construction phase

# Main Contractor

1

Plan, manage, monitor and coordinate safety and health in construction phase of a project, including:

- liaising with client and designer
- preparing safe system of work for construction phase
- organizing cooperation between sub-contractor and coordinating their work

2

Ensure:

- suitable site inductions are provided
- workers are consulted and engaged
- welfare facilities are provided

# Sub-contractor

1

Plan, manage and monitor construction work under his control

2

Comply with directions given by the main contractor

# Workers

1

They must:

- be consulted about matters which affect their safety , health and welfare;
- take care of their own safety and health and others who may be affected by their actions;
- report anything likely to endanger either their own or others' safety and health
- cooperate with their employer, fellow workers

TERIMA KASIH

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SOAL JAWAB

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