

## HKIUS Seminar

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### Road Opening and Excavation Permit Management System (XPMS)

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## Agenda

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- Introduction
  - Road Opening Management and Legislations
  - XPMS Demonstration
  - Q&A
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## Introduction

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- HK has 2,067 km of roads
  - Compared with other countries:
  - HK's road length to population ratio is:
    - 1/85 of USA    1/24 of UK
    - 1/32 of Japan    1/3.5 of Singapore
  - But most of the utilities in HK are laid under the roads
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- 70,000+ km utility services under 2,067 km of roads

- 3,100 km gas pipe
- 7,000 km sewer
- 3,000 km street lighting cable
- 7,200 km watermains
- 25,000 km electric cables
- 26,000 km telecom cables

- Therefore on average there are 37 km underground services laid in each km of road and are much more in the urban areas
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A congested trench at Tsun Yip Street, Kwun Tong

## Problems of Utility Works and their Management

- ❑ Cause traffic congestion
- ❑ Footway width reduced
- ❑ Cause nuisance to public: dust, noise and cleanliness
- ❑ Lack of records of old installations
- ❑ Damage existing utility services

## Utility Related Ordinances

- ❑ Cap. 28 Land (Miscellaneous Provisions) Ordinance
  - ❑ Issue of Licenses to Utility Undertakers
  - ❑ Control of Excavations by Lands D and HyD
- ❑ Cap. 51 Gas Safety Ordinance
- ❑ Cap. 102 Waterworks Ordinance
- ❑ Cap. 107 Tramway Ordinance
- ❑ Cap. 406 Electricity Ordinance
- ❑ Cap. 446 Land Drainage Ordinance

## Land (Miscellaneous Provisions) Ordinance Amendment Effective from 1.4.2004

- ❑ Clear demarcation of responsibility between Lands D and HyD on XPs
  - ❑ HyD responsible for streets maintained by HyD
  - ❑ Lands D responsible for other unleased land
- ❑ Fee Charging
- ❑ Economic Cost for extensions if vehicular traffic is affected

Land (Miscellaneous Provisions) Ordinance  
Amendment Effective from 1.4.2004

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- Deeming Effect
  - Permittee and Nominated Permittee
  - Enforcement actions
  - Binding Effect on Government  
Departments
  - Reporting to SDev for Government  
works and contravention by Permittee
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Section: 10A  
Issue of excavation permit

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- (1) The Authority may, on payment of the appropriate prescribed fee and subject to such conditions as he thinks fit, issue an excavation permit, authorizing the making and maintaining of excavations in unleased land.
  - (2) An excavation permit shall be valid for the period specified therein as that for which it is valid unless it is terminated under section 10K.
  - (3) The Authority may, on payment of the appropriate prescribed fee, extend the period for which an excavation permit is valid.
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Section: 10C  
Issue of emergency excavation permit

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- (1) The Authority may, subject to such conditions as he thinks fit, issue an emergency excavation permit, authorizing the making and maintaining of emergency excavations.
  - (2) An emergency excavation permit shall be valid for 6 months unless it is terminated under section 10K.
  - (3) During the period for which an emergency excavation permit is valid, the permittee of the permit may, subject to the conditions specified in the permit, make and maintain an emergency excavation for each emergency incident during a period ( "initial period" ) of 7 days from the date of the report of the incident to the Authority.
  - (4) The Authority may require a permittee to pay the appropriate prescribed fee for an emergency excavation made or maintained during the initial period either before or after the expiration of the initial period.
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Section: 10D  
Emergency excavation which lasts for more than 7 days

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- (1) If the permittee of an emergency excavation permit anticipates that he has to make or maintain an emergency excavation for more than 7 days, the permittee shall apply to the Authority for the issue of an excavation permit before the expiry of the initial period of the excavation.
  - (2) Upon receipt of an application mentioned in subsection (1)–
    - (a) an excavation permit is deemed to be issued to the permittee of an emergency excavation permit–
      - (i) on the same terms and conditions as an emergency excavation permit;
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# Topic: "Role of Data Management for Road Opening Control & Safety in Hong Kong

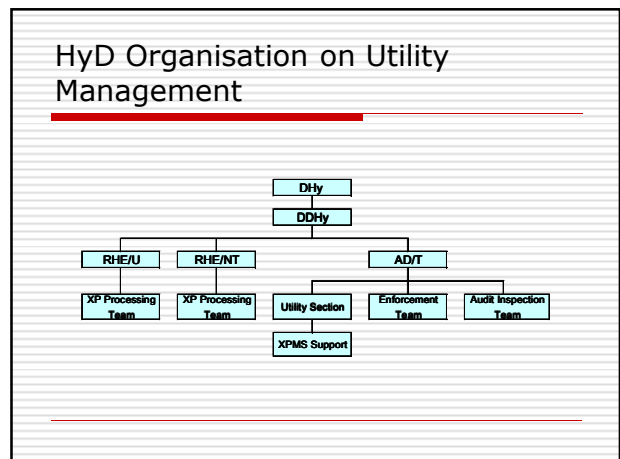
Section: 10F **Late application for extension** of excavation permit  
 Section: 10G **Nominated permittee**  
 For the purposes of this Ordinance, a contractor is regarded as a nominated permittee in relation to an excavation permit or emergency excavation permit if—  
 (a) he is nominated by a permittee of the permit as a nominated permittee under section 10H;  
 (b) he consents to the nomination and agrees to comply with the conditions in the permit under section 10I; and  
 (c) the Authority approves the nomination under section 10J.  
 Section: 10K **Termination** of excavation permit or emergency excavation Permit  
 Section: 10L **Refund** of daily fee and economic costs paid for extension of excavation permit

The screenshot shows the Highways Department website with a navigation menu on the left and a 'Publications' section. The 'Excavation Permit Processing Manual' is highlighted, with a table listing its chapters and download links.

Chapter	Contents	Download
	FOREWORD	Foreword Ver 1.0
	CONTENTS	Content Ver 3.0
1	INTRODUCTION	CH1 Introduction Ver 1.0
2	HIGHWAYS DEPARTMENT STREAMLINED EXCAVATION PERMIT APPLICATION PROCEDURE NOTES AND PROGRAMME	
	Streamlined Excavation Permit Application Process	CH2 Streamlined Process Ver 1.0
	Appendix 2.1.1 - Flowchart for Streamlined XP Application Process through UMS	CH2 Appendix 2.1.1 Flowchart Ver 2.0
	Appendix 2.1.2 - Notes to the Streamlined XP Application Process	CH2 Appendix 2.1.2 Notes Ver 2.0
	Appendix 2.1.3 - Streamlined Excavation Permit Application Processing Programme	CH2 Appendix 2.1.3 Streamlined Programme Ver 2.0
3	UTILITY MANAGEMENT SYSTEM	CH3 UMS Ver 1.0

## Coordination with UU

- Policy Management Level
  - Joint Utilities Policy Group (JUPG) established in 1989
- Technical Management Level
  - Utilities Technical Liaison Committee (UTLC) established in 1989
- Regional Operational Level
  - Road Opening Coordinating Committee (ROCC) established some 40 years ago



## Types of Permits

- Normal / Urgent Excavation Permits (XP)
- Emergency XP
- Small Scale Works XP
- Landscape Softworks XP
- Capital Works XP
  
- Expressway Works Permits
- Road Works Permits (TMCA & TSCA)
- Dig Permits

## Expressway Works Permit

- Road Traffic Ordinance – Road Traffic (Expressway) Regulations (1.10.1991)
- Highways Department Technical Circular No. 3/2005 Expressway Legislation
  - 3.1 "Expressway works" means any type of works and includes inspection, investigation and survey on expressways.
  - 3.2 Contractors carrying out works on expressways (including those working for HyD) need to have an EWP for the works. An EWP is also required for the site supervisory staff of the responsible government department (excluding HyD)/private company /consultant (including consultants working for HyD).
  - 4.1 ... If excavation works are involved, a separate application for an Excavation Permit (XP) is required in accordance with the Land (Miscellaneous Provisions) Ordinance.
  - 4.3 Extension of EWP is not allowed.

## Road Works Permit

- Tsing Ma Control Area (General) Regulation
- 'How to Apply for Road Works Permit for Carrying Out Works within Tsing Ma Control Area' promulgated by Bridges and Structures Division, HyD
- A person must obtain a road works permit before carrying out any Road Works within TMCA
- With RWP, an excavation permit or expressway works permit is not required
- Later be extended to Tsing Sha Control Area

## Excavation Permits

- Land (Miscellaneous Provisions) Ordinance
- Amendment Effective from 1.4.2004
- Deeming Effect
- Permittee and Nominated Permittee
- Enforcement actions
- Binding Effect on Government Departments
- Reporting to SETW for Government works and contravention by Permittee

### Prescribed Fees for XP

	HyD	Lands D
<b>XP</b>		
• Processing fee	\$1,860	\$3,060
• Daily fee	\$32	-
<b>XP extension</b>		
• Processing fee	\$590	\$400
• Daily fee	\$32	-
<b>Economic cost per day if vehicular traffic is affected</b>		
• Strategic street	\$18,000	-
• Sensitive street	\$7,000	-
• Remaining street	\$1,500	-

### Emergency Excavation Permits

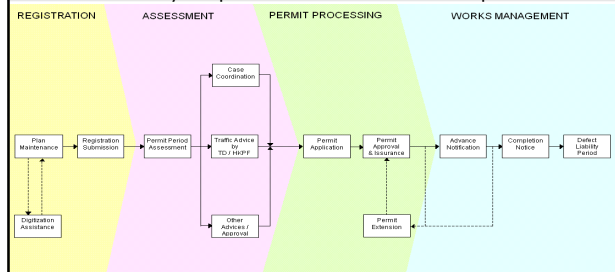
- ❑ An emergency XP will be applied via XPMS without the need for coordination or seek traffic advice.
- ❑ Holders of emergency XP can register the emergency incidents and obtain an emergency serial number either from IIUMS or from Integrated Call Center by phone.
- ❑ Maximum 7 days

### Landscape Softworks, Small Scale Works and Capital Works XPs

- ❑ Also block type in nature
- ❑ using a simpler workflow
- ❑ without the need for coordination or seek traffic advice
- ❑ Small Scale Works – 4 sq.m maximum
- ❑ Capital Works Sections

### Normal and Urgent XPs

- ❑ For excavation works with extent not exceed a 450m diameter circle
- ❑ Essentially XP processes divide into FOUR phases



### Processing of XPs

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#### □ Phase 1: Registration

- Plan Registration
- Programme Input

#### □ Phase 2: Assessment

- Waiver Processing
  - Permit Period Assessment
  - Case Coordination
  - Traffic Advice
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### Processing of XPs

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#### □ Phase 3: Permit Processing

- Permit Application and Approval
- Nominated Permittee processing
- Permit Fee Payment
- Permit Issuance
- Permit Extension

#### □ Phase 4: Works Management

- Advance Notice
  - Completion Notice
  - Defect Liability Period
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### Permit Period Assessment

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□ To grant permittees the **most stringent period** but still practical and achievable

- Programme templates for standard excavation works
  - Informative works programme to facilitate assessment
  - Provide Critical Path Analysis function
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### Case Coordination

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□ Coordinate conflicting excavation plans:

- Disallow repeated openings
  - Disallow time gaps between works under successive plans
  - Encourage overlapping as far as possible
  - Avoid excessive total opening up length
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### Case Coordination

- Complicate and difficult process
  - Diversified technical, geographical and programming requirements of works
  - Highly dynamic: insertion of new plans, changes of programme, extensions
- HyD cannot much direct/influence the utility works programme
- Need high participation and cooperation of Permittee

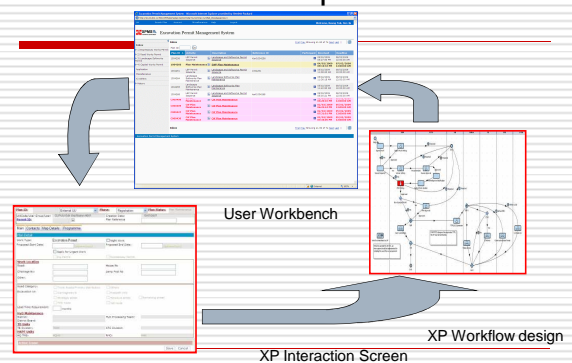
### Case Coordination

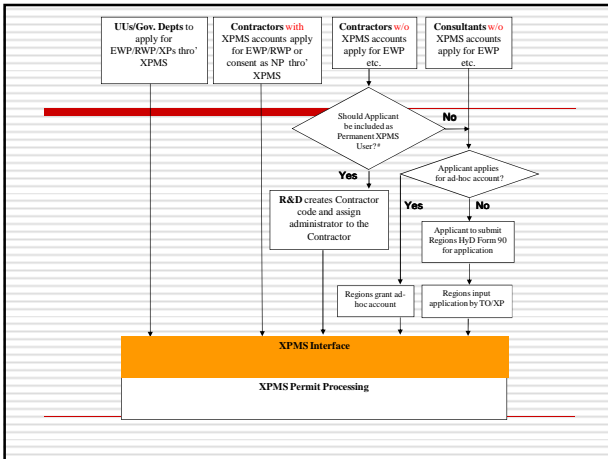
- Set up of Site Liaison Committee
- XPMS serve as a platform which will provide accurate and real time programme records for facilitation of coordination
- XPMS will enforce full compliance of permits with the coordinated programme

### XPMS Schedule

- First Phase – Expressway Works Permit and Road Works Permit (TMCA): **5 Jan 2009**
- Second Phase – All Excavation Permits under LMPO (Emergency, SSW, Capital Works etc.): **24 August 2009**
- Enhancement – Road Works Permit (TSCA): **12 May 2010**

### XPMS workflow implementation





## XPMS User Groups and Roles

- ❑ **Organization groups** – XPPT, TD, HKPF, UU, Government Depts, Contractor etc.
- ❑ **Groups and Sub-groups** – multi-level
- ❑ **User roles** – UU working, UU management, Contractor Management, E/CTO, IOW, etc. for task assignment in the workflow. No more edit group, contractor group etc.
- ❑ **UU working and management roles** – for permit applications. Contractors can only apply for EWP and RWP
- ❑ **Contractor Management role** – for consent of nomination as nominated permittee

## Registration of Contractors as XPMS Users

- Remind your major contractors to register their own administrators if they need to consent nomination thro' XPMS
- The contractors must be first included in the acceptable nominated permittee list
- Please brief the contractors the background before referring them to HyD
  - ❑ Contractor accounts are not for XP applications
- Contractors also need to register for application for EWP or RWP thro' XPMS for themselves

## Registration of infrequent XPMS Users

- Applicant contacts the HyD Regional Office w.r.t. the location of his/her proposed excavation works.
- If the respective HyD Regional Office agrees that the applicant is the promoter of the excavation works, a guest user account and the hyperlink to XPMS user registration homepage will be given to the applicant via e-mail.
- The applicant should fill in the company particulars in the registration homepage and upload a scan copy of the Business Registration Certificate for registration.
- If the application is accepted, XPMS will generate a "User ID" and send it to the applicant via e-mail automatically.
- The "Password" of the ad hoc user account will be sent to the applicant's official address by post separately by the respective Regional Office.

## Summary

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- ❑ Utility Management in the HKSAR is a complicate and difficult task
  - ❑ Only through concerted efforts of parties concerned can impacts to the general public be reduced
  - ❑ Close coordinations between the Industry and Government as well as collaboration with University have been established to look for improvements
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**Thank You !**

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