

Facilitating More Effective Use of XML for E-government



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Agenda

- ⌘ **Joined-up Government**
- ⌘ **Overview of the Interoperability Framework (IF)**
- ⌘ **Adoption of XML in HKSAR Government**
- ⌘ **Facilitation for the more effective use of XML**

Joined-up Government

- ⌘ **It is a Worldwide trend (UK, NZ, AU, US,)**
- ⌘ **Provides client-centric government services (G2B, G2C, G2G, B2B,)**
- ⌘ **Creates standardised & flexible basis to implement business solutions**
- ⌘ **Enables responsive government services**
- ⌘ **Facilitates business process improvements**

Overview of the IF

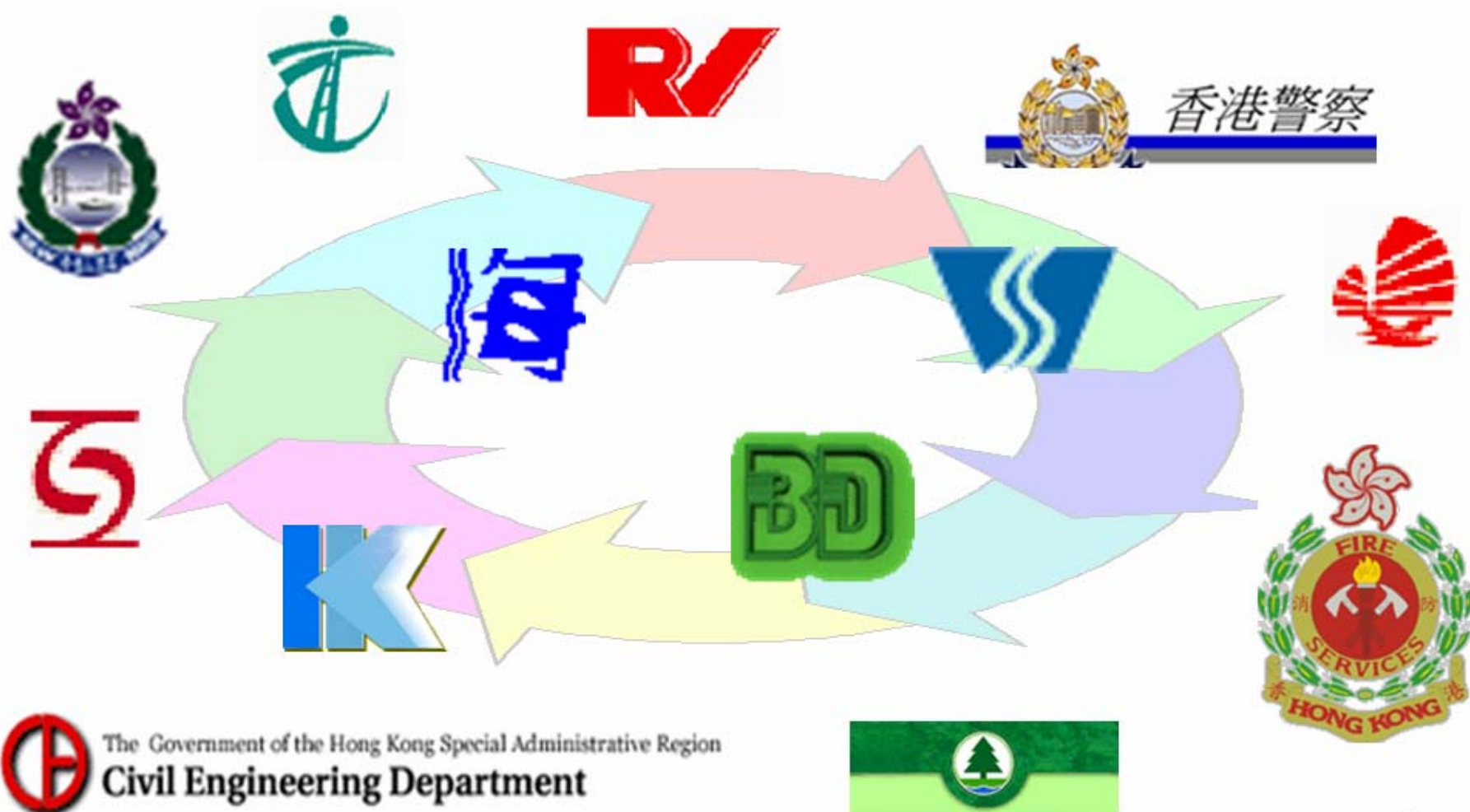
What is the IF ?

- ⌘ **Is a collection of technical and data specifications that define the interface between interacting applications**
- ⌘ **Reflects the open and *de facto* standards we have adopted**
- ⌘ **Defines data specifications in XML**
- ⌘ **Defines the interfaces and formats across different systems for information interchange**

Key Dates

- ⌘ **Initiation (12/2001)**
- ⌘ **Public Consultation on coverage (1/2002)**
- ⌘ **Briefing to IIAC (4/2002)**
- ⌘ **Public Consultation on draft IF (8/2002)**
- ⌘ **Finalised IF (10/2002)**
- ⌘ **IF promulgation (11/2002)**
- ⌘ **Implementation (1/2003)**

How can the IF help them join up?



What does the IF do?

- ⌘ Provides client-centric and join-up services
- ⌘ Defines the way B/Ds should do e-business
- ⌘ But, has no binding on interactions among members of the public
- ⌘ Passes information among systems & services efficiently
- ⌘ Encourages re-use to speed up projects and in the long run lower the implementation cost
- ⌘ Allows greater flexibility in the selection of hardware and software

The IF is a pragmatic framework

- ⌘ The IF will work only if the stakeholders use it (i.e. B/Ds and the IT industry)
- ⌘ IT professionals implementing e-government applications are required to know the IF well and apply appropriately
- ⌘ Is pragmatic and addresses (and balances) the long term and strategic needs of the stakeholders
- ⌘ Allows stakeholders to have easy access to the IF documents

The IF is a pragmatic framework

- ⌘ **Some technical specifications in the IF are relevant for electronic submission under the ETO (some are set out as Format & Manner requirements)**
- ⌘ **Allows stakeholders to request changes at any time**
- ⌘ **Will be reviewed every 6 to 12 months to take into account new business requirements and technology advancement**

Five Broad Domains of Needs

- ⌘ Business process interaction: model, vocabulary, message formats and semantics
- ⌘ Application: technical specifications for application-to-application integration
- ⌘ Information flow: technical specifications for file exchange, character sets and encoding and content publishing
- ⌘ Security: technical specifications for the secure exchange of information
- ⌘ Interconnection: technical specifications for communicating among systems

(The following diagram shows their relationships)

Conceptual Application Architecture

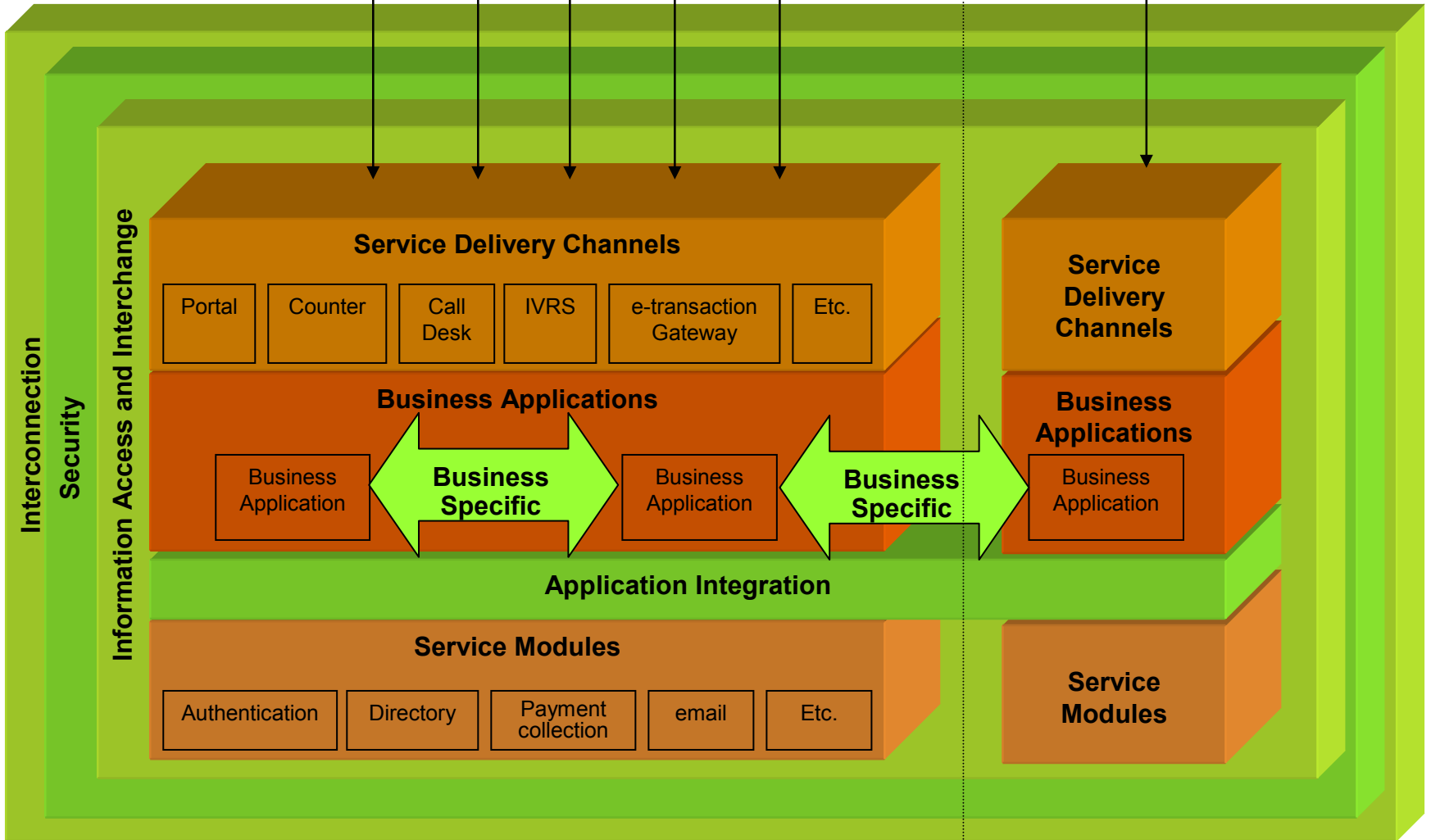
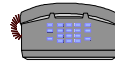
Internet Browser

Mobile Devices

In Person

Tel

User Interfaces provided by other Organisations



Applications in Government Systems

Applications in other Organisations

Adoption of XML

On 15 October, Singapore Government & Microsoft launch a new style Web Portal named .NET MySingapore to support XML.

Microsoft's CEO Steve Ballmer said, "Web services and the technology, XML, that are underneath it are really all about having a standard language for computers to speak across the world and across the Internet."

Singapore's NTUC Income has already launched an XML-based portal for 1 million policyholders.

Adoption of XML in HKSARG

Electronic Services Delivery

Health Department

Hong Kong Observatory

Hospital Authority

Immigration Department

Information Services Department

Marine Department

Interoperability Problems Today

- ⌘ **Business partners have to go through tedious data alignment before they can connect their applications**
- ⌘ **Reasons : they have**
 - ☑ **different business vocabulary**
 - ☑ **different data attributes**

Observations from a recent survey

- ⌘ XML is being used in a number of initiatives. More projects are also planning to adopt XML. This is helpful in improving the efficiency of the economy.
- ⌘ Industry XML standards are generally adopted
- ⌘ However, many of the XML schemas are developed for project internal use only. This is also an area for improvement.

**Measures to facilitate more
effective adoption of XML**

Pursue Standardization

In which areas?

- ☒ **Business process interaction and collaboration**
- ☒ **Information sharing**
- ☒ **Data alignment of vocabulary and attributes**

Pursue Standardization

Some of the Industry Standards

- ☒ **ebXML's Core Component initiative**
- ☒ **OASIS's Universal Business Language (UBL)**
- ☒ **eXtensible Business Reporting Language (XBRL)**
- ☒ **LegalXML**
- ☒ **NewsML, etc.**

Formation of IFCG & XMLCG

IFCG

- ☑ chaired by ITSD
- ☑ comprises senior officers from B/Ds

XMLCG

- ☑ chaired by ITSD
- ☑ comprises experienced XML adopters from B/Ds (members) and private sectors (advisors)

Recommendation of the XMLCG

- ⌘ Follow pre-agreed XML schema design guidelines
- ⌘ Re-use available schemas for data items commonly used across B/Ds
- ⌘ Put in place a mechanism for schema maintenance
- ⌘ Design project schemas with re-use in mind and publish them to encourage re-use by others
- ⌘ Share schemas through an XML Registry
- ⌘ Observe the agreed policy in using the XML Registry

Work plan of the XMLCG

- ☒ Will produce an XML schema design and management guidelines
- ☒ Will progressively define core schemas for general adoption
- ☒ Will establish an XML Registry to facilitate the efficient sharing of schemas



Thank You

Please refer to the IF documents at

<http://www.itsd.gov.hk/itsd/english/infra/eif.htm>

Comments and suggestions are welcome

Please send to :

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