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Presentation Overview

□ China

- Generation of Electronic Records (ERs)
- Legal Environment
 - Archives Law of China
 - Other Laws/Regulations regarding Preservation of ERs

□ Singapore

交流

- Generation of ERs
- Legal Environment
 - National Heritage Board Act
 - Other Laws regarding Preservation of ERs

□ InterPARES 2 (IP2) Legislation Study

- Preservation Enablers
- Preservation Barriers



China: Generation of ER

□ E-Government (G2G, G2B, G2C)

- 3 Phases
 - Office Automation: 1980s
 - Government Departmental Services Projects: 1993
 - Government online: 1997
- Up to 2003
 - 15 departmental Services Projects being undertaken
 - 80% governments had launched websites
- **B**y 2010
 - Unified E-government network across the country
 - 50% government services online
 - Mechanism for information openness and sharing

China: Generation of ER

E-Commerce

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- 1987: First Email sent
- 1990-1993: EDI used in commerce
- 1995: Internet Services opened to the public
- 1996: ISP, .com companies started
- 1998: First e-commerce transaction completed
- 2004: 4,000 e-commerce sites; 70 CAs; 440 billion RMB
- 2005: Total trade amount 620 billion RMB



China: Legal Environment

□ Archives Law of China (1987, revised 1996)

Defines archives

- Historic recordings of archival value
- By-products of actions
- Regardless of formats

Establishes the Chinese archival system

- Archives administrations
- Archival institutions
- Archival offices

Regulates archival work

- Archival institution
- Archival office

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Centralized administration

Semi- & non-current

records

Focus on long-term

preservation

Interim Measures for Archiving Electronic Official Records (2003)

- **E**-Official Records (EORs)
 - Records generated by the state administrative units
 - Standardized format
 - Capable of reaching legal effect
 - Processed through the *Electronic Official Records Transmission System* equipped by the State Council
- **E**-Records

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- Not defined by any laws
- Defined by one national professional standard

Interim Measures for Archiving Electronic Official Records (2003)

□ Creating-agency

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- Managing EOR as part of job duties
- Offices with specifically assigned responsibilities
- Standard-compliant EOR management system
- Check data accuracy before transferring
- Paper equivalents for permanent or long-term EORs
- Responsible for authenticity & integrity after transferring



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China: Other Laws/Regulations

Interim Measures for Archiving Electronic Official Records (2003)

- □ Archival office
 - Participate in and guide RM activities
 - Implement regulation-compliant system to receive and manage EORs
 - Store EORs on offline media qualifying preservation requirements
 - Preserve associated metadata: registration, index, software specifications
 - Responsible for authenticity & integrity after transferring

Interim Measures for Archiving Electronic Official Records (2003)

Transfer and Disposition

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- Transfer can be done either offline or online
- Create 3 copies onto durable media: one for preservation, one for global back-up, and one for use
- Authorized destruction can be done through either logic deletion or physical deletion

Shanghai Regulations on Preservation (2006)
Archival office

 Annual hardware and software maintenance (with IT department)

- Upgrading
- Migration

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- Regular media refreshing
 - Magnetic media 2 yrs
 - Optic media 4 yrs

Electronic Signature Law (2004)

Data Electronic Message

Used in

- Contract Law (1999)
- Law on the Administration of Tax Collection (2001)
- Administrative Permission Law (2003)

Definition

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 "Information generated, sent, received or stored by electronic, optical, magnetic or other similar means."

Electronic Signature Law (2004)

□ Compliance

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- Preservation Conditions
 - Visible presentation of content at any given time
 - Format remains the same, or
 - Content can be accurately re-presented if the format is different
 - Ensured integrity and fixity after creation
 - Sender, recipient and the time of sending or receiving can be identified

Singapore: Generation of ERs

E-Government

- Started in the early 1980s
- Online services in late 1990s
- Action Plan I (2000 2003)
- Action Plan II (2003 2006)
- □ iGov (Integrated Government)
 - iGov2010 (2006-2010)
 - Goal: From Integrating Services to Integrating Government
- □ iN (Intelligent Nation)
 - iN2015
 - An Intelligent Nation, a Global City



Singapore: Legal Environment

National Heritage Board Act

- **Enabling Act of the NAS**
- Public Records
 - Machine readable records
 - Electronic records
- Public Archives
 - Public records over 25 years with archival value
- **NAS** as Repository of Archives
- **NHB** makes decisions about archival work



Singapore: Legal Environment

- NHB's responsibility for instituting a government RM program
 - Creation
 - Utilisation
 - Maintenance
 - Retention
 - Preservation
 - Disposal

Singapore: Other Laws

Electronic Transactions Act (1998)

Electronic Record

"A record generated, communicated, received or stored by electronic, magnetic, optical or other means in an information system or for transmission from one information system to another"

Applies to both business and legal documents (e.g., wills, indentures)



Singapore: Other Laws

Electronic Transactions Act 1998

□ Compliance

- Written Format
 - Information contained in the electronic record is accessible and usable for subsequent reference
- Preservation Conditions
 - Information contained remains accessible so as to be useable for subsequent reference
 - Original format is retained or the changed format is able to represent accurately the information originally generated, sent or received
 - Date and time of sending or receiving is retained
 - Consent for the retention of such records obtained



Singapore: Other Laws

Electronic Transactions Act 1998

- □ Acceptance of Electronic Filing
 - Manner and format in which electronic records shall be filed, created, retained or issued
 - Manner and format in which the electronic signature shall be affixed to the electronic record
 - Appropriate control processes and procedures to ensure adequate integrity, security and confidentiality

InterPARES 2 Legislation Study

- Part of the study conducted by the IP2 Policy Cross-Domain Team
- Examines legislation with respect to the preservation of e-records
- Study includes archives enabling laws, ER related laws and other relevant laws (copyright, intellectual property, and privacy law)
- China & Singapore is selected because of its rapid development in e-government and e-commerce



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InterPARES 2 Project

IP2 - Enablers for Preservation China

Preservation

The whole of the principles, policies, and strategies that controls the activities designed to ensure records' physical and technological stabilization as well as protection of intellectual content.

Archives Law of China

Principally

- Shared obligation to protect archives
- Archival work is part of government work

Strategically

- Highly centralized administration
- Clearly defined acquisition scopes and preservation responsibilities
- Strict rules for transfer





IP2 - Enablers for Preservation China

Archives Law of China

At the policy level

- Government budget for archival institutions
- Human resource building
 - Professionals
 - Continuing education
- Physical care
 - Research
 - Facilities
 - Equipments
- Rewards and penalties





IP2 - Enablers for Preservation China

Regulations on EOR

- Strict control over creation and transfer
 - Specialized personnel and clearly defined job duties
 - Archival office participates in and guides the creation
 - Unified EOR management system
 - Processing system
 - Transmission system

Regulations on Functional Requirements of Archival Management Software

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IP2 - Enablers for Preservation Singapore

National Heritage Board Act
Public records explicitly include ER
25 years transfer rule
Prohibition of unauthorized destruction
Institution of government RM program





IP2 - Enablers for Preservation

- Electronic Signature Law (China)
- Electronic Transaction Law (Singapore)
 - Preservation conditions
 - Requirements on
 - Original; Formal written format; Authenticity verification
- Worksright Law (China)
- Copyright Law (Singapore)
 - Reproduction for preservation purpose





IP2 - Barriers for Preservation

- □ Lack of clearly defined terminology
 - China
 - Legal terms (e.g., data electronic message) vs professionally standardized terms (e.g., electronic records)
 - Official records: only government records? Or include the Party's records?

InterPARES 2 Project

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- **Both countries**
- Authenticity ? Integrity ? Accuracy?



IP2 - Barriers for Preservation

□ Lack of a Holistic Approach

China

- Focusing more on e-government records, less on ecommerce records
- Loose link in the chain of preservation
 - Strong in transferring from current to semi-current; weak in transferring from semi-current to non-current

Both Countries

- Addresses intellectual components but not technical components
 - How to preserve ER with e-signature?
- Privacy issue is not addressed in RM regulations or the Archival legislation
 - Relationship b/w preservation and use



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