



# Standards & Interoperability for E-Governance

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# Vision

- Faster, improved and more efficient services
- Shared Resources & Services
- Productivity Increase
- Standardised Systems Processes

# Existing Scenario of E-Governance Applications

- Developed independently as stand-alone
- Too much data and not enough information
- No common data architecture
- Isolated domains of information
- Too expensive to bridge

# Need of the hour

- Increased Adaptability & Flexibility
- Interoperability between systems sourced from different vendors.
- “Platform-Independent Modelling” approach.
- Emphasis on interoperability and integration in a non-proprietary form.

# Interoperability & Standards

“Ability to exchange information and mutually use the information which has been exchanged.”

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“Standards was the response to the concerns to interoperability”

## Interoperability

- Application Integration
- Information Access and Interchange
- Security
- Interconnection

# Policy Intentions: National Considerations

- To ensure interoperability of National ICT applications and facilitates data interchange.
- To enable Electronic National records and Data to be stored in open file format.
- To reduce over-reliance on proprietary technologies /products
- To enable smaller local vendors to participate in National Projects

# Open Standards

“Open Standards are publicly available specification for achieving a specific task. By allowing anyone to use the standard, they increase compatibility between various hardware and software components since anyone with the technical know-how and the necessary equipment to implement solutions and build something that works together with those of other vendors.”

# Open Standards: Objectives

## Interoperability

Allow products and services from different producers interoperable by agreeing on Standards for basic technology components;

## Reduction of Vendor Lock-in

Allow users to have a choice of vendors, while at the same time preserving compatibility with existing products and data.

## Data Preservation

Dangerous to tie data to a proprietary program or vendor

- When the program becomes obsolete or the vendor goes out of business, the data is lost;
- Important Data has a lifetime much longer than any program;

## Cost and risk reductions

Since Open Standards are freely accessible, knowledge of the standards is more widely available. The expertise is therefore less specialised and hence cheaper too.

## Enhance Quality of Govt. Information Systems

Greater accessibility of information: Open Standards enable everyone to obtain access to information (eg WAI guidelines for Web Accessibility)

# Open Standards: Principles commonly accepted

- Standards that are publicly available for implementation -Easy accessibility for all to read and use/implement;
- All Interested parties should be able to participate in development -Developed by a process that is open and relatively easy for anyone to participate in;
- No control or tie-in by any specific group /person / entity

# Open Standards :Different Perspectives

	Perspective on the term “Open”
Standard Setting Organisation	Creation of Standard follows Open meeting, Consensus and due Process
Implementor	Serves the market they wish, without cost to them, does not preclude further innovation (by them), does not obsolete their prior implementation, and does not favour a competitor.
User	Multiple implementations of the Standard from different sources are available Implementation functions in all locations Implementation is supported over the user-planned service life New implementations are backward compatible to previous implementations

# Open Standards : Requirements

<b>Criteria</b>	<b>Description</b>
Open Interface	Each Interface is not hidden or controlled (implementation); each interface of the implementation supports migration (use)
Open Access	Objective Conformance mechanisms for implementation testing and user evaluation
On-going Support	Standards are supported until user interest ceases rather than when the implementation interest declines

# Open Standards : Requirements

Criteria	Description
Open Meeting	No Discrimination
Consensus	
Due Process	
IPR	No Royalty/ RAND
One World	
Open Change	Ability to prevent predatory practices
Open Documents	Availability
Open Interface	Ability to create extension or subset
Open Access	Maximum end-user choice
On-going Support	

# Open Standards : Requirements

	Stakeholders		
	Creator	Implementer	User
Requirements			
Open Meeting	x		
Consensus	x		
Due Process	x		
One World	x	x	x
IPR	x	x	x
Open Change	x	x	x
Open Documents		x	x
Open Interface		x	x
Open Access		x	x
On-going support			x

# Open Standards : Challenges

- Open Standards not available or not mature enough for a required technology
  - Use de facto standard that is publicly published and freely available for implementation
  - Encourage owner of de facto standard to submit to open standards body for adoption/adaption as a standard
- Entrenched usage of a Proprietary Standard-not practical to ignore it
  - Phase it out slowly,in the interim,work towards interoperability with open standards installations and/or use file format conversion tools

# Evaluating Open Standards

- Adoption
- Documentation
- Technical Quality
- Patents
- Control

# E-Governance Standards: Open Standards & Patents

- Most Standards Bodies eg: IETF,OASIS,W3C,ISO prefer no patents
- But they do allow the inclusion of patents that can be licensed under Reasonable and Non-Discriminatory Terms (RAND) terms in their Standards
- Patent Policies revolve around RAND policy,either with some form of royalty payment or royalty free or a mixture of both
- Some Organisations do not consider a RAND encumbered standard as an Open Standard eg:European Union's E-Governance Interoperability Framework project

# Open Standards in Government Policies

- More and more public sector agencies all over the world have policies that require open standards;
- Most e-Government projects have the Interoperability Framework that specifies open standards;

<http://egovstandards.gov.in>