

# THE DRAFT NATIONAL POLICY ON DIGITISATION AND INSTITUTIONAL CAPACITY BUILDING

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# QUESTIONS ON CAPACITY DEVELOPMENT

WHAT WAS **RECOMMENDED** IN 2011 WITH THE DRAFT NATIONAL POLICY ON DIGITISATION?

ARE THE 2011 RECOMMENDATIONS **RELEVANT TODAY**?

WHAT ARE THE **EMERGING NEEDS** OF THIS GENERATION?

WHAT ARE THE **DIMENSIONS AND SCOPE** OF “CAPACITY”?

**WHO** SHOULD BE DEVELOPING WHAT **TYPE OF CAPACITY**?

**How** SHOULD CAPACITY BE DEVELOPED?

# WHERE WE FIT

## Data Models

Universal Semantic Data Models  
Meta-metadata  
Layered Metadata Models

## National Projects

SA Heritage Resource Info Sys  
National Policy on Digitisation  
National Art Bank  
Heritage Building Guidelines  
Guidelines for Built IKS

## The ETHER Initiative – ETERNAL HERITAGE

Collection management  
Education  
Governance  
User Experience  
Conservation  
Digitisation

## Contributions to Standards

SPECTRUM 5 – Collections Trust  
Open Data in a Big Data World – Science  
International  
Europeana Inside – Rapid Ingestion

# BUSINESS CASE FOR A NATIONAL POLICY?

## NEEDS

preservation

access

foreign-funded  
projects

## BENEFICIARIES

the entire country

the national memory

universities/research institutions

secondary/primary educations

interested parties/tourists

future generations

# SCOPE OF POLICY

## Original Scope = Heritage

National Museums  
National Archives  
National Library

## Proposed Scope = Inclusive

Research Data / Outputs  
Scientific/Environmental/etc.  
Arts/Culture  
Government Data Sets  
Non-government Data Sets

ANYTHING with ENDURING VALUE  
Archives / National Library

## National Custodians?

DAC? DST? DOC?

Who should be the government body responsible for  
digital heritage?

Or should this be located outside of government?

# STRUCTURE OF THE DRAFT NATIONAL POLICY

## WHAT / WHY

### Policy

27 policy statements

Governance

Strategy

Repository

Contracts

Access

Preservation

Metadata

Capacity



## HOW

### Mechanisms

Implementation recommendations  
and interventions

## HOW TO

### Digital Heritage

### Body of Knowledge

(DHBOOK) : Best-practice framework to create  
a Digital Institution in line with policy



Policy 22 : Creating a **Community of Practice** - the **Institution of Digital Heritage (IDH)**

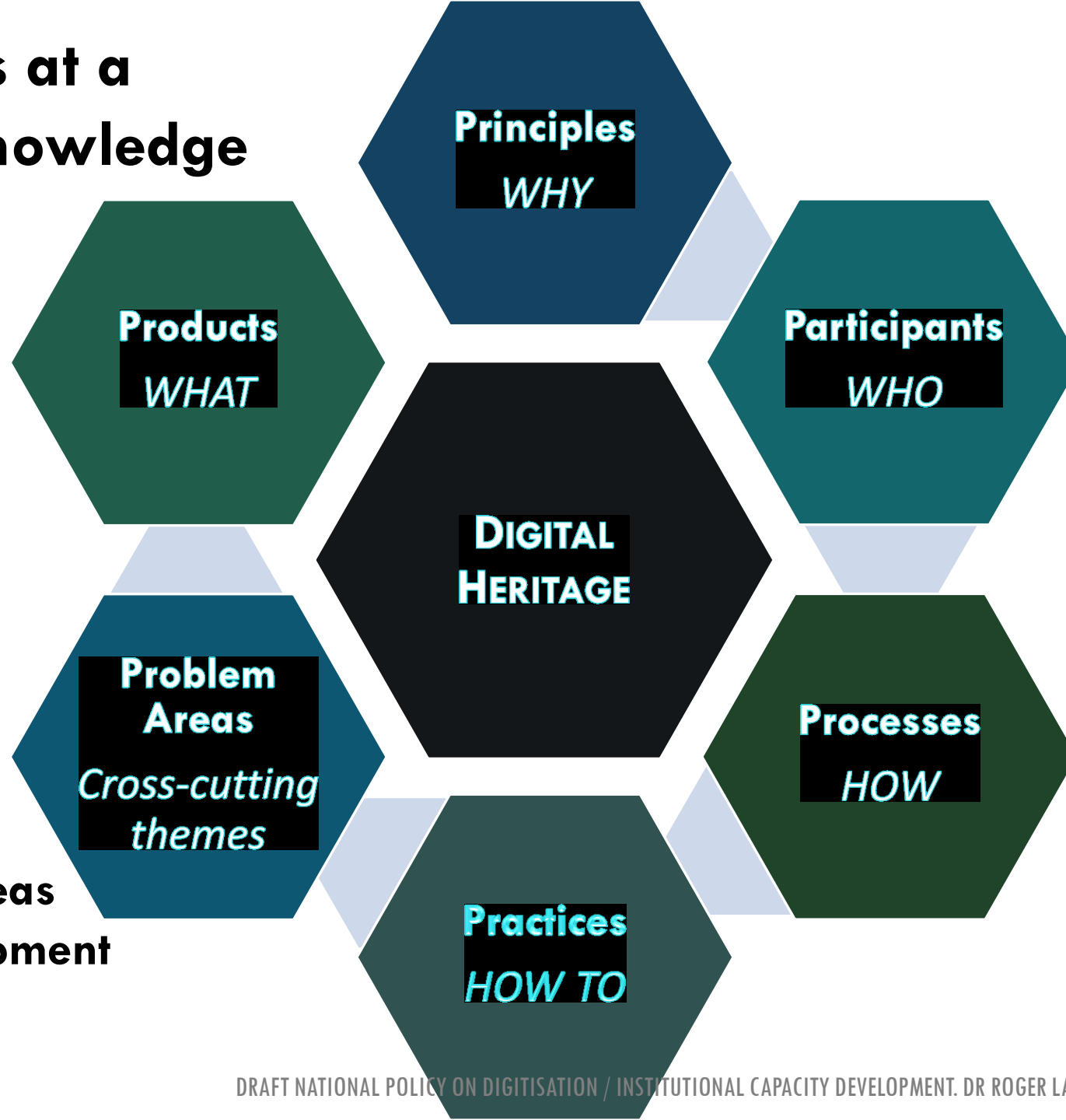
Policy 23 : Developing and implementing a **Skills Framework for the Digital Heritage.**

Policy 24 : **Develop and Measure Institutional Capacity**

Policy 25 : NARS to take lead for **capacity development in Electronic Records Management**

Policy 26 : Promote **Research and Development**

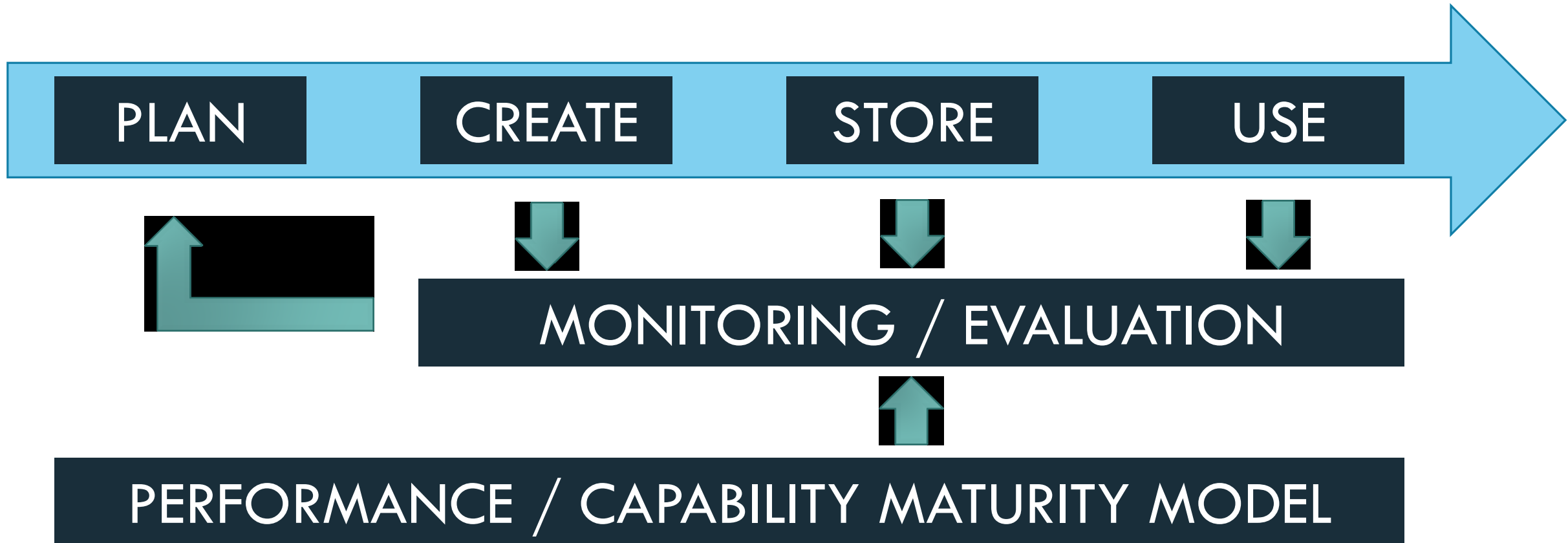
# A first pass at a Body of Knowledge



**Helps to identify areas  
for capacity development**



# HIGH-LEVEL PROCESS MODEL



# PARTICIPANTS, PROCESSES, PRODUCTS

	<i>participants</i>	<i>processes</i>	<i>products / practices</i>
PLAN	Custodian	Scoping Strategising Planning	<b>Audit</b> , Status Quo, Digital vision, Gap analysis <b>Digitisation strategy</b> : Programmes/Projects/Plans <b>Project management</b> : Deliverables, Resources, Schedules
CREATE	Producer	Preparing Capturing Describing	<b>Project start-up</b> : facilities, resources, in-process <b>Digital objects</b> : reproductions, born digital, migration <b>Metadata</b> : context, creation, preservation, ...
STORE	Repository	Loading Storing	<b>Digital masters</b> , digital preservation/provenance, identity/naming <b>Digital repositories</b> : long-term preservation, reformatting
USE	Consumer	Accessing Using	APIs / Search requests / results / <b>user interfaces</b> User content, fair use, licensing, <b>repackaged products</b>

# MECHANISM 1

## THE INSTITUTE FOR DIGITAL HERITAGE

- ❖ Community of practice as the professional body for digitisation practitioners
- ❖ Develop and publish the Body of Knowledge
- ❖ Develop and promote national standards and vocabularies
- ❖ Mentoring, monitoring, guidance
- ❖ Specialist unit for near-obsolete technologies
- ❖ Annual skills audit
- ❖ Support institutional capacity measurement
- ❖ Certify the National Digital Repositories
- ❖ Financially self-sufficient after a given period

To define jobs and associated skill requirements  
 For: training, professional development, recruitment

# MECHANISM 2

## SKILLS FRAMEWORK FOR THE DIGITAL HERITAGE

### Generic skills

- IT
- Research
- Governance,
- Human Resource management
- Project management
- ...

### Digital skills:

- Digital preservation, metadata/documentation
- Capture from all media + quality management + packaging
- Migration of media, formats, metadata
- Repository management
- ...

### DEFINE A JOB

Senior ingestion engineer  
 Format migration specialist  
 Format compliance manager  
 Integrity manager  
 Digital rights compliance officer  
 Redundancy engineer

### Seven levels of authority and responsibility (Ref: SFIA):

- Level 1: follow
- Level 2: assist
- Level 3: apply
- Level 4: enable
- Level 5: ensure, advise
- Level 6: initiative, influence
- Level 7: set strategy, inspire, mobilise

# MECHANISM 5

## INSTITUTIONAL DIGITISATION CAPACITY SCORECARD

A Capability Maturity Model (CMM) for the digital heritage.

Dimension	Practice Level					Cost	Time
	None	Minimal	Acceptable	Best	Leadership		
<b>Governance</b>		CURRENT		TARGET			
<b>Strategy</b>	CURRENT		TARGET				
<b>Collection Management</b>		CURRENT		TARGET			
<b>Equipment / Facilities</b>							
<b>Skills</b>							
<b>Repository</b>							
<b>Access...</b>							

# MECHANISM 7

## INSTITUTIONAL TRANSFORMATION PROGRAMME

Providing assistance to all institutions for how to transform from physical collections, to digital repositories.

Improving Institutional Readiness.

Deciding – develop, share, or buy capacity

- ❖ What capacity to develop
- ❖ When to develop shared-services
- ❖ When to use centres of excellence / outsourcers

Develop a strategy - from AS-IS to TO-BE

# SPECIFIC INSTITUTIONAL CAPACITIES

- ❖ COLLECTION MANAGEMENT: processes for best practice
- ❖ INVENTORYING / CATALOGUING: what is where
- ❖ REPOSITORY MANAGEMENT – DIGITAL PRESERVATION
- ❖ DIGITAL CAPTURE / BORN-DIGITAL
- ❖ MEDIA-SPECIFIC KNOWLEDGE: newspapers, photographs, museum objects, audio-visual, old data formats
- ❖ FORMAT-SPECIFIC KNOWLEDGE: text, sound, still image, moving image...
- ❖ METADATA: specific standards
- ❖ DATABASE / PROGRAMMING / DIGITAL INFRASTRUCTURE

# THE FUTURE IMPACT OF AI

Little doubt that AI will continue to expand its sphere of operation.

AI will continue to outpace humans in many areas.

Multiple application areas in digitisation / digital heritage / digital preservation

- auto-ingestors
- auto-documentors
- auto-format migrators
- auto-organisers
- search – already well-developed through AI search engines / semantic searching / bot interfaces
- support for users with disabilities / an agenda of inclusion



# A NEW APPROACH TO CAPACITY DEVELOPMENT

- ❖ Distributing capacity : National centres of excellence / major regional institutions / community institutions.
- ❖ Equipment and capacity available as shared resources.
- ❖ Commonly agreed curricula for courses.
- ❖ Future-proofing the jobs in digital heritage.
- ❖ First steps for every institution:
  - apply the institutional capacity scorecard
  - assess the AS-IS and envision the TO-BE positions
  - quantify the GAPS – use these to develop institution-specific strategy
  - implement capacity development programme in each institution based on strategy

# CALL TO ACTION – NATIONAL PRIORITIES

Institution for Digital Heritage	Revive, formalise, extend, and promote SADI.
Skills Framework for Digital Heritage	Assess current and future needs, clarify jobs and skills standards, develop curriculum frameworks.
Institutional Capacity Scorecard	
Digitisation Capacity Audit	Covering all sectors, institutions, and
Body of Knowledge	Shared knowledge base: standards, experience, case studies, risks, technologies
National Digital Repositories	Set the standards for compliance. Establish one or more. Interlink these for backup.

# HOW WE CAN HELP

**CAPACITY:** training in many areas of digitisation

**PLAN :** Strategy development / governance of institutions / collections management / systems

**CREATE:** capacity development for facilities / equipment / skills, quality anagement / project management

**STORE:** repository development / trusted digital repositories

**USE:** online access to collections / exhibition / research / education

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