



Digital**Preservation**Coalition



# Shared Service and Common Purpose: Digital Preservation as Infrastructure

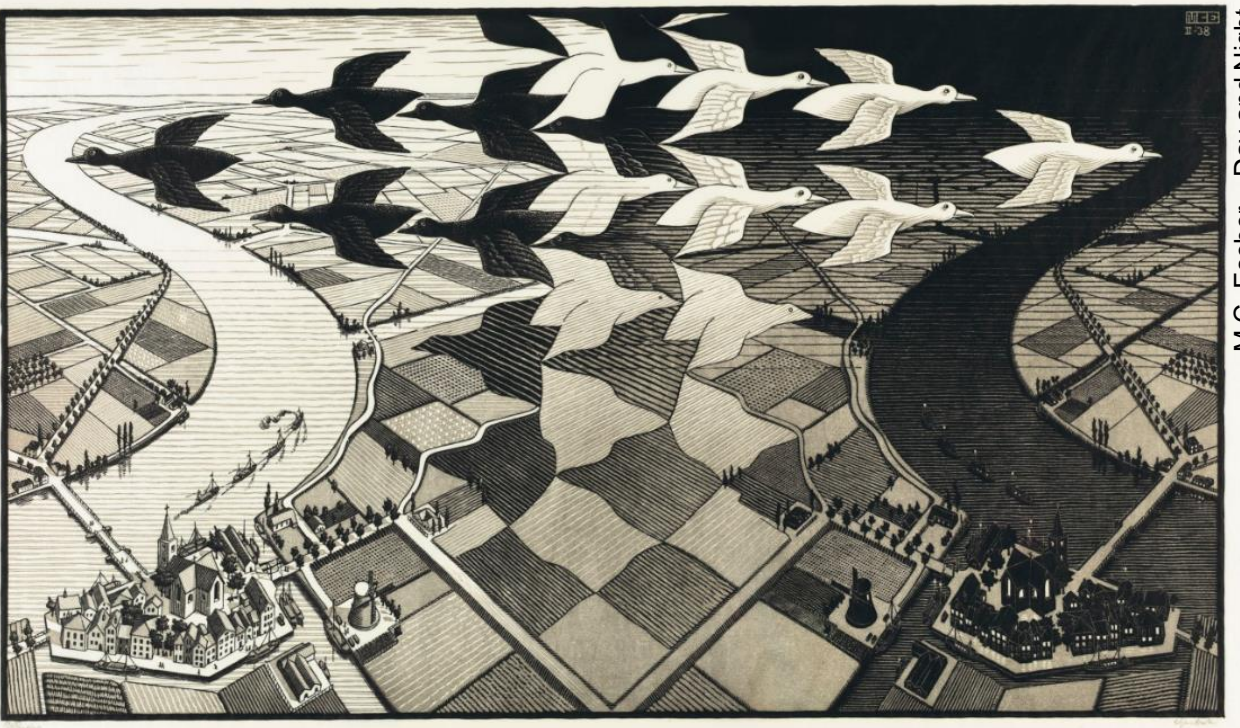
## THE IMPORTANCE OF BEING COMPREHENSIVE:

- (1) a network of facilities for Digital Preservation
- (2) Research Data Management

20<sup>th</sup> March 2018 | London | Bloomsbury House

Joost van der Nat, Netherlands Digital Heritage Network

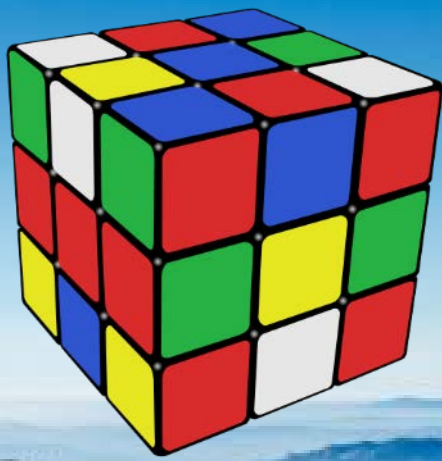
# 1. Introduction



M.C. Escher – Day and Night



National  
Coordination Point  
Research Data  
Management



# Agenda



1. Introduction
2. DHN Building Blocks model for digital preservation
3. National Coordination Point Research Data Management
4. Synergy



1. Introduction

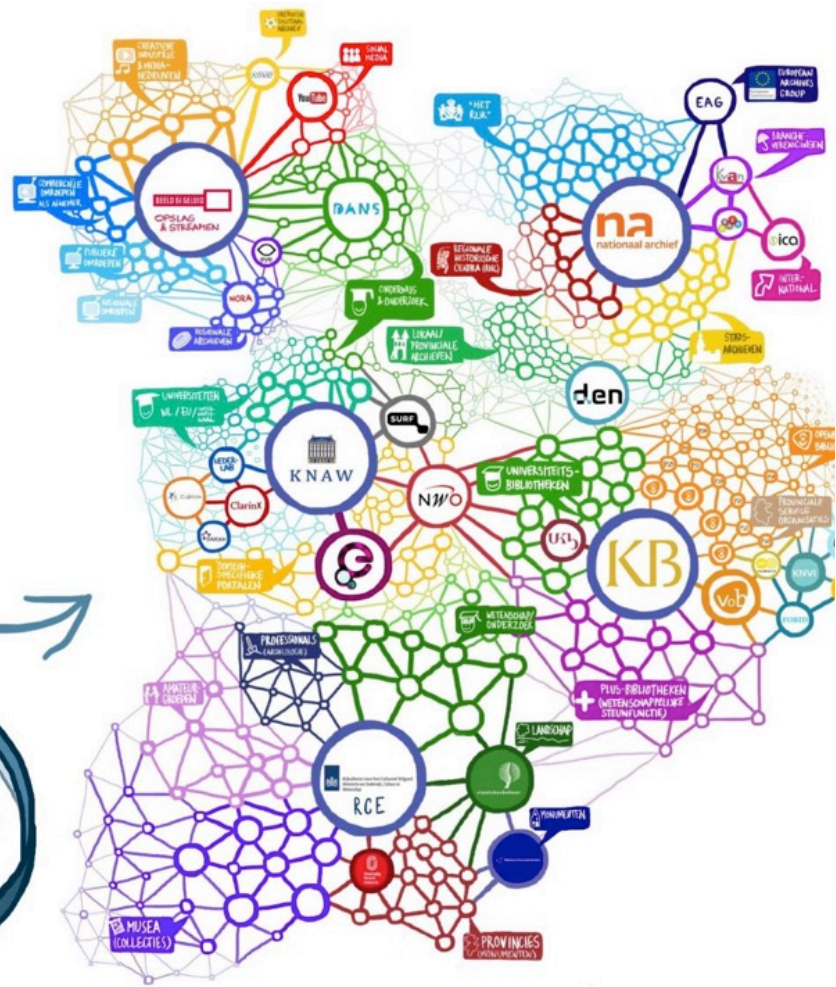
# The Dutch Digital Heritage Network



Ministerie van Onderwijs, Cultuur en Wetenschap

National Digital Heritage Strategy

Digital Heritage Network





# The Digital Heritage Network at work

- to increase the **public value**
- establishing ***standardised, cross-sector facilities***
- several ***network principles*** will be determined:
  - use open standards and facilities;
  - reinforce hubs;
  - use ‘the most suitable party for the job’;
  - provide transparency regarding actions and intentions.
- public value of heritage collections is ultimately determined by their use, ***users must be the focus***
- a ***three-layer model*** (and three work packages)
- structural reinforcement of the ***cooperation between heritage sectors*** and the ***interaction*** between heritage institutions, users, and suppliers.

allocated yearly budget ca. € 1.2 million + in kind from partners / hubs

# Results of the Sustainable work package

so far (end 2017)



**NCDD**  
NETHERLANDS  
COALITION FOR  
DIGITAL  
PRESERVATION




**DIGITAL HERITAGE NETWORK**

**NEW TOOLS & TRICKS FOR SUSTAINED  
ACCESS TO YOUR COLLECTIONS**

Results of the Sustainable Digital Heritage work package

Between 2015 and 2017, the Dutch Heritage Network has delivered a series of digital preservation tools and expertise for digital heritage professionals. Some of them are also available in English.


**New online tools**



**Wegwijzer Certificering voor Digitale Archieven**

The Certification Guide is a compilation of all existing knowledge and resources (step-by-step plan, real-life examples, translations) concerning the certification process. As such, it supports organisations in professionalising and certifying their digital archives.


[wegwijzercertificering.nl](http://wegwijzercertificering.nl) (Dutch language)



**Preservation Basics course**

With the Preservation Basics course, heritage professionals take their first steps towards the sustainable storage, management and accessibility of digital heritage. You can take classes or choose the free online tutorial. The learning environment is accessible to all.


[lerenpreserveren.nl](http://lerenpreserveren.nl) (Dutch language)



**Preservation Policy Catalogue**

The Preservation Policy Catalogue helps your organisation draft and implement policies for digital preservation. It provides and explains all the essential policy elements, from a global vision to concrete workflow details.


[wiki.ncdd.nl](http://wiki.ncdd.nl) (Dutch language)



**Digital Preservation Facilities Finder**

The Digital Preservation Facilities Finder shows you which facilities for digital preservation - offered by heritage law institutions - your organisation can deploy (e-depot services, tools, assistance, etc.). Thus, we share wherever possible.

[voorzieningen.ncdd.nl](http://voorzieningen.ncdd.nl) (Dutch language)



**PID Guide: Help with persistent identifiers**

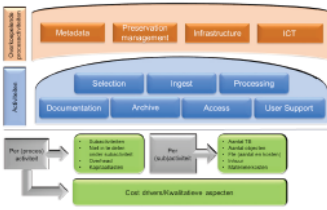
Linking a persistent identifier (PID) to a digital object ensures that the object can be found online and prevents link rot. The PID Guide is a web tool that assists organisations in the selection process. It is available in English and also offers FAQs and videos about PIDs.

[www.ncdd.nl/en/pid](http://www.ncdd.nl/en/pid)

Reports, models and other initiatives | [ncdd.nl/en/knowledge-and-advice/ncdd-publications](http://ncdd.nl/en/knowledge-and-advice/ncdd-publications)

**Cost pricing model**

This summary of the **cost pricing model** provides an initial insight into the cost and cost factors of sustainable access within your organisation.



**Cost drivers for digital preservation**

**Digital art**

How do we preserve works of art created on CD-ROM? Emulation as a Service is one solution, according to this report.

**Software sustainability**

This report shows the need for sustainable archiving of software when we aim for sustainable access to digital data.

**Web archiving**

Thanks to **broad collaboration** in the field of web archiving, there is now a national register of web archives in place, currently intended for administrators only.

**Digital film objects**

This report outlines a new workflow for registering and preserving digital film objects (Dutch language).

**Web archaeology**

A 'Do It Yourself Handbook for Web Archaeology' will be available soon in Dutch. It allows you to 'excavate' and secure digital content by yourself.

The Digital Heritage Network

All tools and knowledge products result from nationwide collaboration by many heritage institutions in the Netherlands. In the Sustainable Digital Heritage work package, coordinated by the NCDD from September 2015, they aimed to jointly share and develop expertise and facilities concerning sustainable access to the digital heritage of the Netherlands. The ultimate goal is for everyone to be able to use these results and participate in the Network's projects.

For more information, see [ncdd.nl/en/ncdd-projects/digital-heritage-network](http://ncdd.nl/en/ncdd-projects/digital-heritage-network)

The Digital Heritage Network will continue to increase the visibility, usability and sustainability of the Dutch digital heritage. Keep an eye on the DEN and NCDD websites to stay connected and keep up to date with the latest news, or sign up for the Digital Preservation Newsletter (Dutch language).

# Agenda



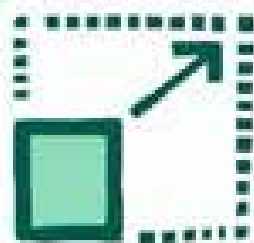
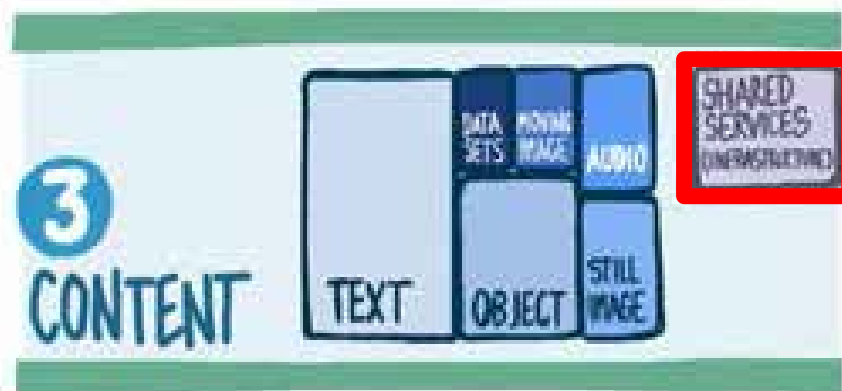
1. Introduction
2. DHN Building Blocks model for digital preservation
3. National Coordination Point Research Data Management
4. Synergy



# SUSTAINABLE DIGITAL HERITAGE



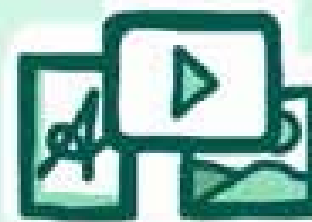
sustainable →



SCALABILITY OF  
FACILITIES AND  
INFRASTRUCTURE



COST  
MANAGEMENT



ROLES &  
RESPONSIBILITIES IN  
COLLECTION FORMATION



# Overall objective of the project

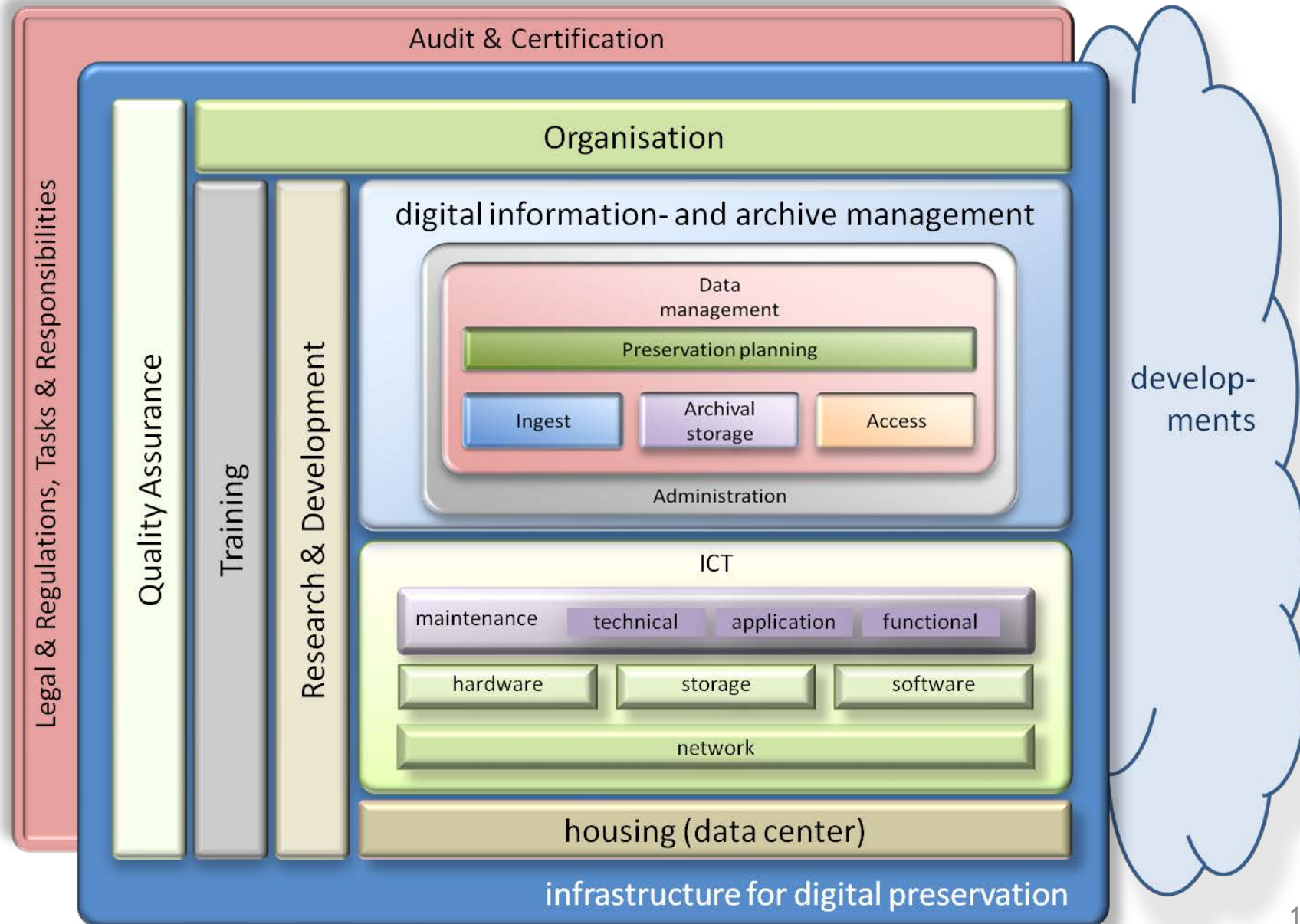
To increase **Effectiveness** and **Efficiency**



The motto is:

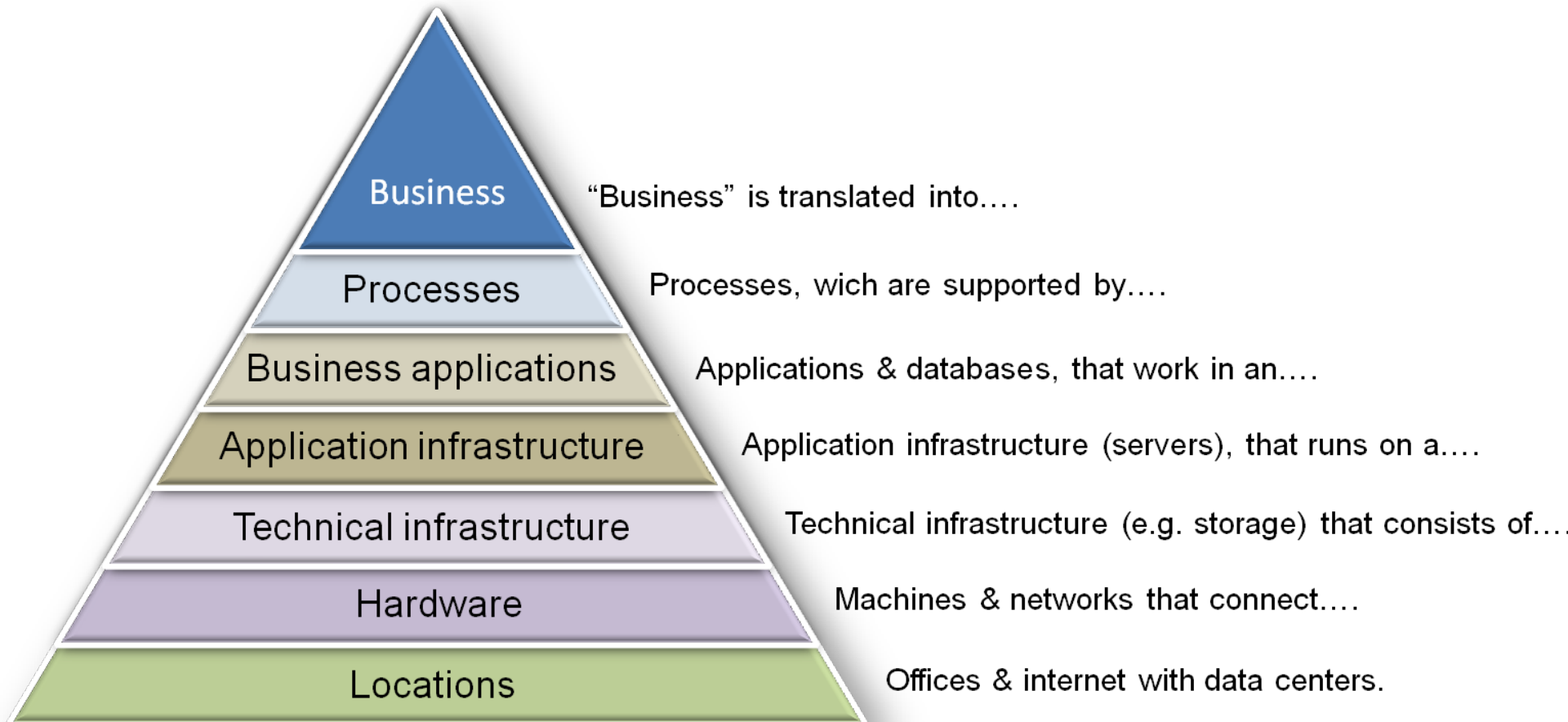
***Share what is possible, keep separate what must be separate.***

# Analytical framework, “infrastructure”

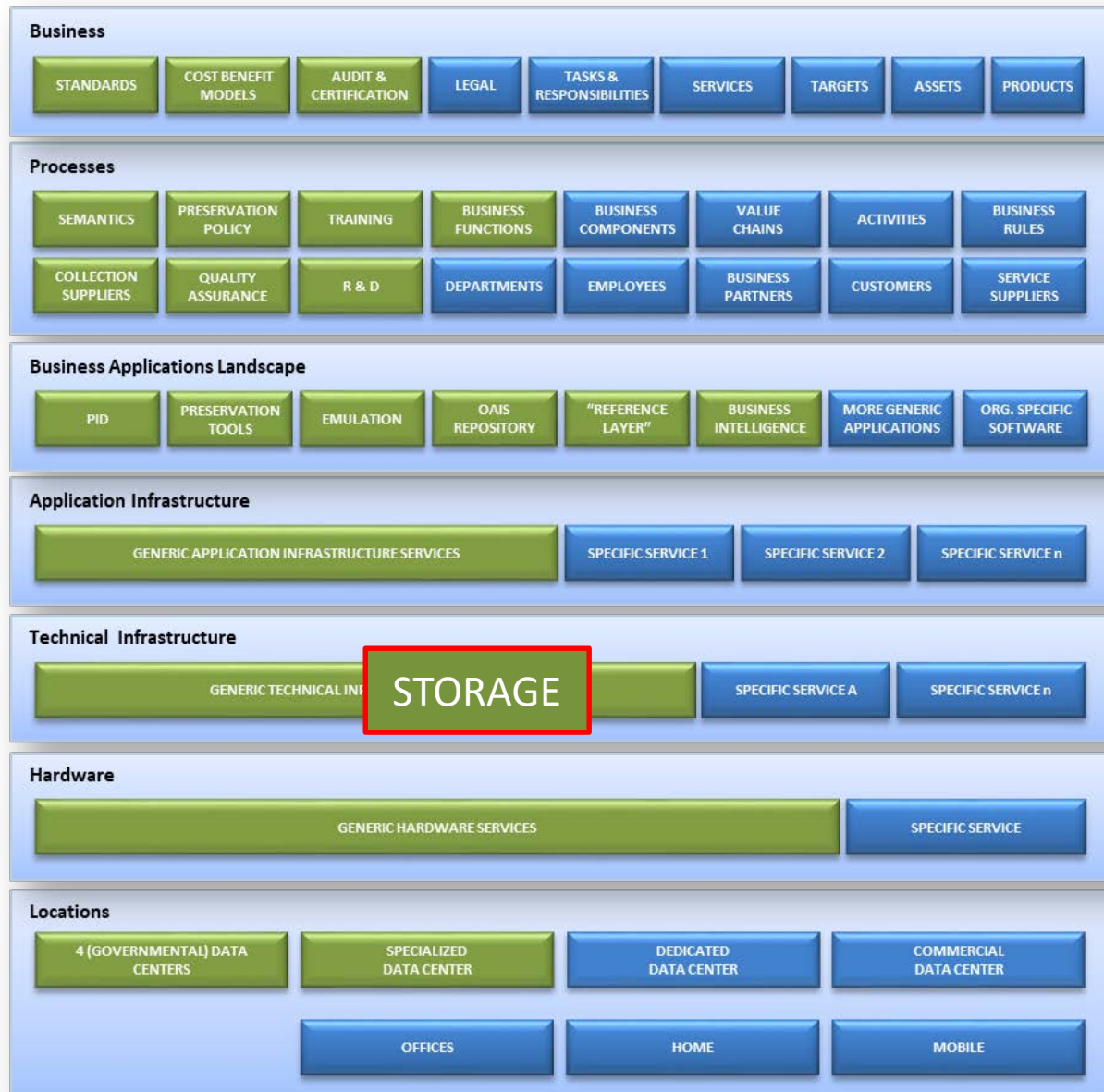


# Framework, “Business – IT stack”

Jack van Hoof's 7 layer IT Services Stack



# The Building Block Model





# Demand and Supply



# Proceedings of the Dutch Parliament



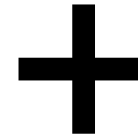
**Tweede Kamer**  
DER STATEN-GENERAAL



# Audio-visual proceedings



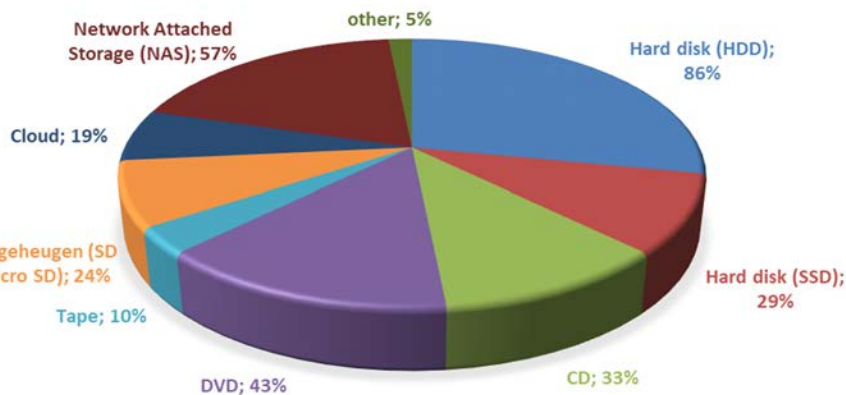
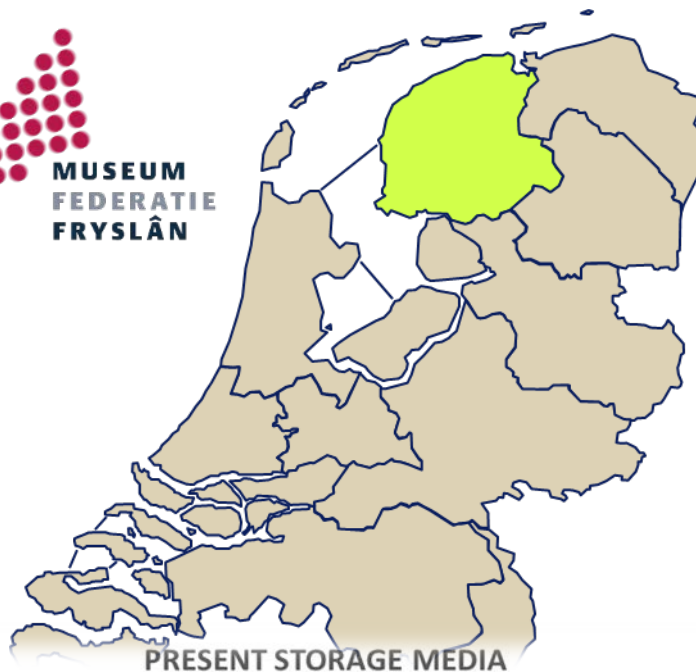
Dutch Parliament also makes audio-visual proceedings of plenary sessions and committees



1. National Archive (NA) has the legal duty to store the audio-visual proceedings
2. NA does not have the infrastructure or the expertise for AV material
3. The long term Digital Preservation of the audio-visual proceedings is outsourced to the Dutch Institute of Sound & Vision
4. NA keeps Appraisal & Selection and Access



# Storage and Frysian museums: inventory of the present situation

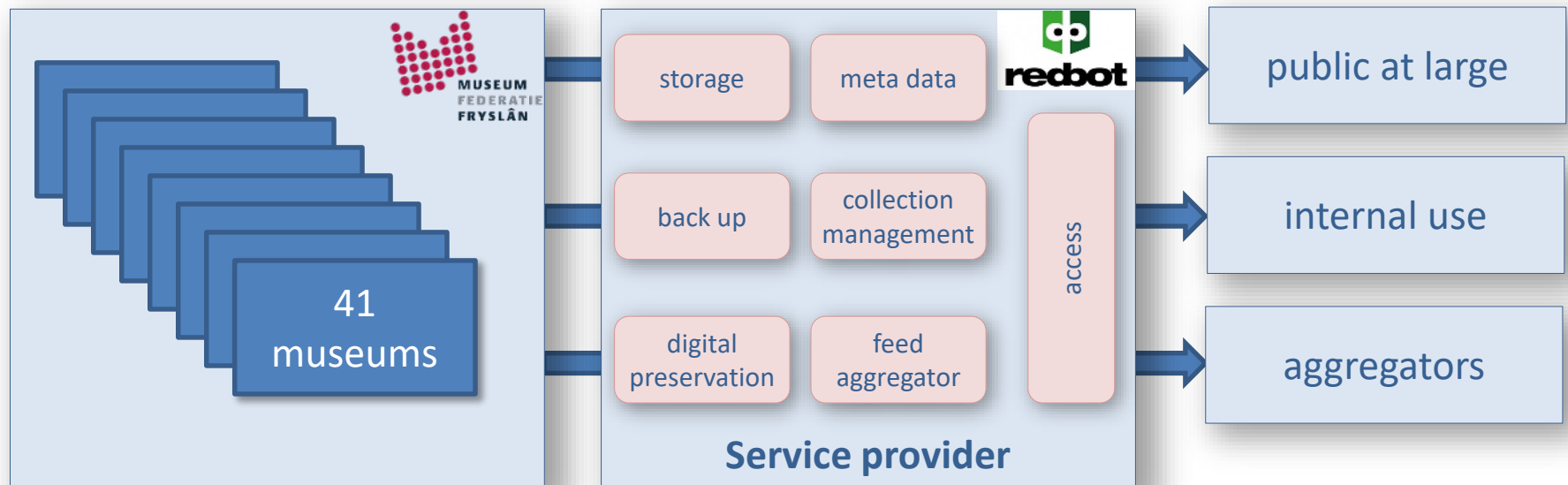


- 41 museums
- 433.606 objects in collections
- 54 % of collection is digitised  
another 34 % to go
- 1,25 Terabyte in size  
expected growth: double in 20 years
- 81 % make back-ups  
1/3 of these back ups in-house
- 33 % take no digital preservation actions
- average spending on Digital Preservation  
per year: € 1.637
- meta data: not normalised
- feeding to aggregators: only 3 % of objects



# Storage and Frysian museums

## Near future ?



# Agenda



1. Introduction
2. DHN Building Blocks model for digital preservation
3. National Coordination Point Research Data Management
4. Synergy

# Introduction



**VSNU:** Association of Universities  
in the Netherlands



**National  
Coordination Point  
Research Data  
Management**

for the benefit of:

- research
- researcher and research community
- research institution
- research funder
- in the end: policy makers



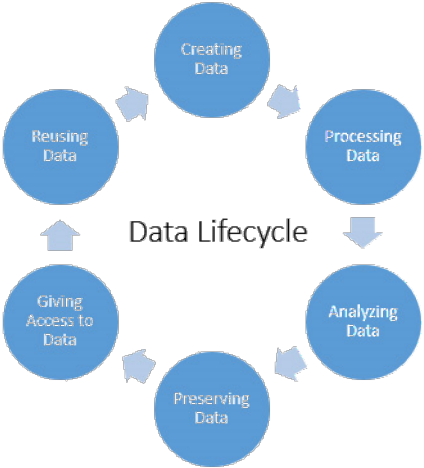
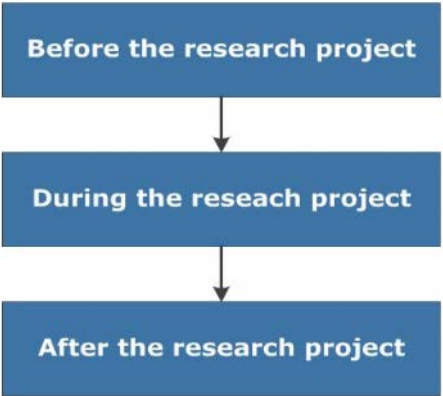
Cooperation



Coordination



Knowledge sharing



# National & International Developments

- Essentials 4 Data Support Training (RDNL)
- EU Presidency 2016 (Amsterdam Call for Action)
- EU General Data Protection Regulation
- National Plan Open Science
- European Science Cloud
- FAIR principle



open data  
is about  
MORE  
THAN  
DISCLOSURE  
it must be  
Fair

- Findable
- Accessible
- Interoperable
- Reusable

## Essentials 4 Data Support



**EU**  
**2016**





# National Coordination RDM approach

- **Quick scan** (2015-2016): 80+ interviews with RDM experts and stakeholders => **Roadmap** (Dec. 2015) => **5 focal points**
- Each focal point → **working group (2016 – 2017)**



40 products:

inventories, advices,  
tools, models,  
reference cards etc.  
delivered in 2016-  
2017

# Agenda



1. Introduction
2. DHN Building Blocks model for digital preservation
3. National Coordination Point Research Data Management
4. Synergy

# Service Catalogue for DHN (in beta)



The screenshot shows the NCDD Voorzieningen website. At the top is a navigation bar with links: HOME, ACHTERGROND, **VOORZIENINGENVINDER** (highlighted), NAAR DE SITE VAN NCDD, and CONTACT. Below the navigation bar is a header section with the NCDD logo on the left and a blue abstract image on the right. A dropdown menu is open under 'VOORZIENINGENVINDER', listing: Bekijk per categorie, Bekijk per domein, Bekijk per blokje, Bekijk per verschijningsvorm, and Bekijk per levenscyclus. Below the header, a breadcrumb trail reads: NCDD Voorzieningen > Voorzieningenfinder > Bekijk per categorie. The main content area is titled 'Voorzieningenfinder' and contains a paragraph explaining the filter functionality. Below this is a section 'Filter op categorie' with a list of filter options: dienst, handreiking, oriëntatie, and overig. The page is divided into two columns. The left column has a heading 'Naam' followed by a link 'NDE PID informatie' and another link 'NDE PID wijzer' further down. The right column has a heading 'Korte beschrijving' followed by two paragraphs of text explaining persistent identifiers (PID's) and their role in preventing link rot.

**NCDD**

HOME ACHTERGROND **VOORZIENINGENVINDER** NAAR DE SITE VAN NCDD CONTACT

Bekijk per categorie  
Bekijk per domein  
Bekijk per blokje  
Bekijk per verschijningsvorm  
Bekijk per levenscyclus

NCDD Voorzieningen > Voorzieningenfinder > Bekijk per categorie

### Voorzieningenfinder

Hieronder ziet u de lijst van nu beschreven voorzieningen, met een filter.  
Met een klik op één van de waarden filtert u de totale lijst op die waarde.  
Met een klik op de link van de voorziening komt u uit in het bijbehorende 'infosheet'.

*Filter op categorie*

- [dienst](#)
- [handreiking](#)
- [oriëntatie](#)
- [overig](#)

**Naam**

[NDE PID informatie](#)

[NDE PID wijzer](#)


**Korte beschrijving**

Een persistent identifier is een unieke en permanente verwijzing naar een digitaal object (een scan, audiovisueel bestand, metadata record, etc.). Persistent identifiers (PID's) vormen de oplossing tegen linkrot: het verschijnsel dat webpagina's niet meer bereikbaar zijn omdat het webadres is veranderd.



Een persistent identifier is een unieke en permanente verwijzing naar een digitaal object (een scan, audiovisueel bestand, metadata record, etc.). Persistent identifiers (PID's) vormen de oplossing tegen linkrot: het verschijnsel dat webpagina's niet meer bereikbaar zijn omdat het webadres is veranderd.

# Service Catalogue for DHN (info sheet)





- HOME
- ACHTERGROND
- VOORZIENINGENVINDER**
  - Bekijk per categorie
  - Bekijk per domein
  - Bekijk per blokje
  - Bekijk per verschijningsvorm
  - Bekijk per levenscyclus
- NAAR DE SITE VAN NCDD
- CONTACT

NCDD Voorzieningen > Voorzieningenvinder > Bekijk per categorie > NCDD.A2.1

### Algemene informatie

*naam:*  
NDE PID informatie

*korte beschrijving:*  
Een persistent identifier is een unieke en permanente verwijzing naar een digitaal object (een scan, audiovisueel bestand, metadata record, etc.). Persistent identifiers (PID's) vormen de oplossing tegen linkrot: het verschijnsel dat webpagina's niet meer bereikbaar zijn omdat het webadres is veranderd.

*beschikbaar sinds / per:*  
2016

*voorziening is een:*  
dienst

*corresponderend "blokje":*  
Persistent Identifier

*leverende organisatie:*  
NCDD / NDE

*adres organisatie:*  
Prins Willem Alexanderhof 5, 2595 BE Den Haag

*URL:*  
<http://www.ncdd.nl/projecten/netwerk-digitaal-erfgoed/project-persistent-identifiers/>

*taal van de voorziening:*  
Nederlands



# LCRDM Services Catalogue (in beta)



Landelijk Coördinatiepunt  
Research Data Management

Home RDM begrippenlijst **Blog** Forum LCRDM.nl Besloten

## Diensten bij databehoud (preservation)

Home

**Diensten**

Verwerkingfases

Data life cycle

Onderzoeksfases

Alle gemelde diensten

RDM per instelling

RDM begrippenlijst

Documents

DCCD		Integration with EASY (DSA) is under investigation.	1. Dendrochronology 2. Archaeology, Biology	4. Preservation, 5. Access, 6. Re-use	2. Data collections and structured databases, 3. Processed data and data representations, 4. Publications with data
DDMoRe - Drug Disease Model Resources		-	industry, regulatory agencies, health care providers and academic teaching and research programmes	4. Preservation, 5. Access, 6. Re-use	3. Processed data and data representations
De Digitale Koepel (Meertens Instituut)		DSA certified	1. Linguistics; History 2. Literary Studies; Psychology	4. Preservation, 5. Access, 6. Re-use	2. Data collections and structured databases
EASY		DSA certified	1. Humanities and social sciences 2. Researchers of all kinds of scientific disciplines	4. Preservation, 5. Access, 6. Re-use	1. Raw data and data sets, 2. Data collections and structured databases, 3. Processed data and data representations
EDNA		DSA certified	Archaeology	4. Preservation, 5. Access, 6. Re-use	1. Raw data and data sets, 2. Data collections and structured databases, 3. Processed data and data representations, 4. Publications with data
Figshare				4. Preservation, 5. Access, 6. Re-use	1. Raw data and data sets, 2. Data collections and structured databases, 3. Processed data and data representations, 4. Publications with data
ICPSR		DSA certified	Political and Social Research	4. Preservation, 5. Access, 6. Re-use	1. Raw data and data sets, 2. Data collections and structured databases, 3. Processed data and data representations, 4. Publications

[https://www.edugroepen.nl/sites/RDM\\_platform/Dienstencatalogus/layouts/15/start.aspx#/SitePages/Dienstencatalogus.aspx](https://www.edugroepen.nl/sites/RDM_platform/Dienstencatalogus/layouts/15/start.aspx#/SitePages/Dienstencatalogus.aspx)

# LCRDM Services Catalogue (info sheet)



edugroepen
  
BROWSE PAGE PUBLISH

Landelijk Coördinatiepunt  
Research Data Management

Home RDM be

Dienste

DCCD

DDMoRe - Drug  
Disease Model  
Resources

De Digitale Koep  
(Meertens Institu

EASY

EDNA

Figshare

ICPSR

Home

Diensten

Verwerkingfases

Data life cycle

Onderzoeksfases

Alle gemelde diensten

RDM per instelling

RDM begrippenlijst

Documents

Information Sheets - EASY

VIEW

Edit Item

Version History

Shared With

Delete Item

Manage

URL

https://easy.dans.knaw.nl/ui/home

Stage in the research process

After

Position within the research process

4. Preservation; 5. Access; 6. Re-use

sort field for Position within research process

456

Type of data

1. Raw data and data sets; 2. Data collections and structured databases; 3. Processed data and data representations

Domain

3. Shared Research Domain; 4. Publication curation boundary

Building block (Ref architecture LCRDM)

Funding

KNAW and NWO

Intellectueel eigendom

The license agreement is 'non-exclusive'; the owner of the data is at liberty to deposit and/or make available these data in other places as well. Copyright is not waived when data are deposited: it continues to rest with the researcher. The license entitles DANS to include the dataset in the archive and to make it available under the conditions stipulated by the project leader when it is deposited.

Gebruikersovereenkomst

The DANS General Conditions of Use are in place.

# Wrap up



- Be comprehensive in your approach
  - there are more building blocks than “Storage” alone as far as Infrastructure is concerned
  - there is more than Infrastructure to be shared (i.e. the 5 aspects of LCRDM)
- Making Demand meet Supply is the goal
- Community building is KEY
- Articulate Demand, articulate Supply to a required (matchable !) level of detail
- DPC, Jisc, DHN, LCRDM et cetera are the **brokers** that facilitate sharing & cooperation

# More information



This presentation contains slides and elements of LCRDM presentations by Ingeborg Verheul

Digital Heritage Network website (in English)	<a href="http://www.netwerkdigitaalerfgoed.nl/en/">http://www.netwerkdigitaalerfgoed.nl/en/</a>
Digital Heritage Network, the movie	<a href="https://www.youtube.com/watch?v=8XrsVqr2e6w">https://www.youtube.com/watch?v=8XrsVqr2e6w</a>
Digital Heritage Network Strategy (in English, PDF)	<a href="http://www.den.nl/art/uploads/files/Publicaties/20150608_Nationale_strategie_digitaal_erfgoed_Engels.pdf">http://www.den.nl/art/uploads/files/Publicaties/20150608_Nationale_strategie_digitaal_erfgoed_Engels.pdf</a>
Results DHN Work Package Sustainable 2016 – 2017	<a href="http://www.netwerkdigitaalerfgoed.nl/en/knowledge-services/">http://www.netwerkdigitaalerfgoed.nl/en/knowledge-services/</a> 4 <sup>th</sup> entry <a href="#">Tools and tricks for sustained access to your collections</a>
English summary of Building Blocks report	<a href="http://www.netwerkdigitaalerfgoed.nl/en/knowledge-services/">http://www.netwerkdigitaalerfgoed.nl/en/knowledge-services/</a> 5 <sup>th</sup> entry <a href="#">Together where possible, individually where necessary.</a>
LCRDM website (in English)	<a href="https://www.surf.nl/en/lcrdm">https://www.surf.nl/en/lcrdm</a>
Digital Heritage Network: • <i>Programme Manager Sustainable</i> <b>Marcel Ras</b> <a href="mailto:marcel.ras(at)kb.nl">marcel.ras(at)kb.nl</a> +316 1477 7671 • <i>Researcher:</i> <b>Joost van der Nat</b> <a href="mailto:jvdnat(at)snpbv.nl">jvdnat(at)snpbv.nl</a> +316 5204 8788	National Coordination Point Research Data Management: • <i>National Coordinator RDM</i> <b>Ingeborg Verheul</b> <a href="mailto:Ingeborg.Verheul(at)surfsara.nl">Ingeborg.Verheul(at)surfsara.nl</a>



# Questions ?

