

**SIO ICA**

Section of International Organisations

Section des Organisations Internationales

# 45th SIO annual meeting, Brussels

## **DIGITAL ARCHIVING STRATEGY**

*For Your Emails Only # 22.05.2019*



**Sébastien SOYEZ**

Head of works < Digital Archiving Unit >

**STATE ARCHIVES BELGIUM**

# OVERVIEW

## I. THE STATE ARCHIVES BELGIUM

## II. DIGITAL STRATEGY

## III. E-MAILS

- a. *Extern: Supervision of Federal Public Institutions*
- b. *Intern: Records Management Policy + Digital Archiving*

## IV. CHALLENGES

- a. *Organisational / Technical*
- b. *Legal*

## V. SOLUTIONS

- a. *Intern : State Archives*
- b. *Extern: Belgian Foreign Office, FelixArchief, Capstone*

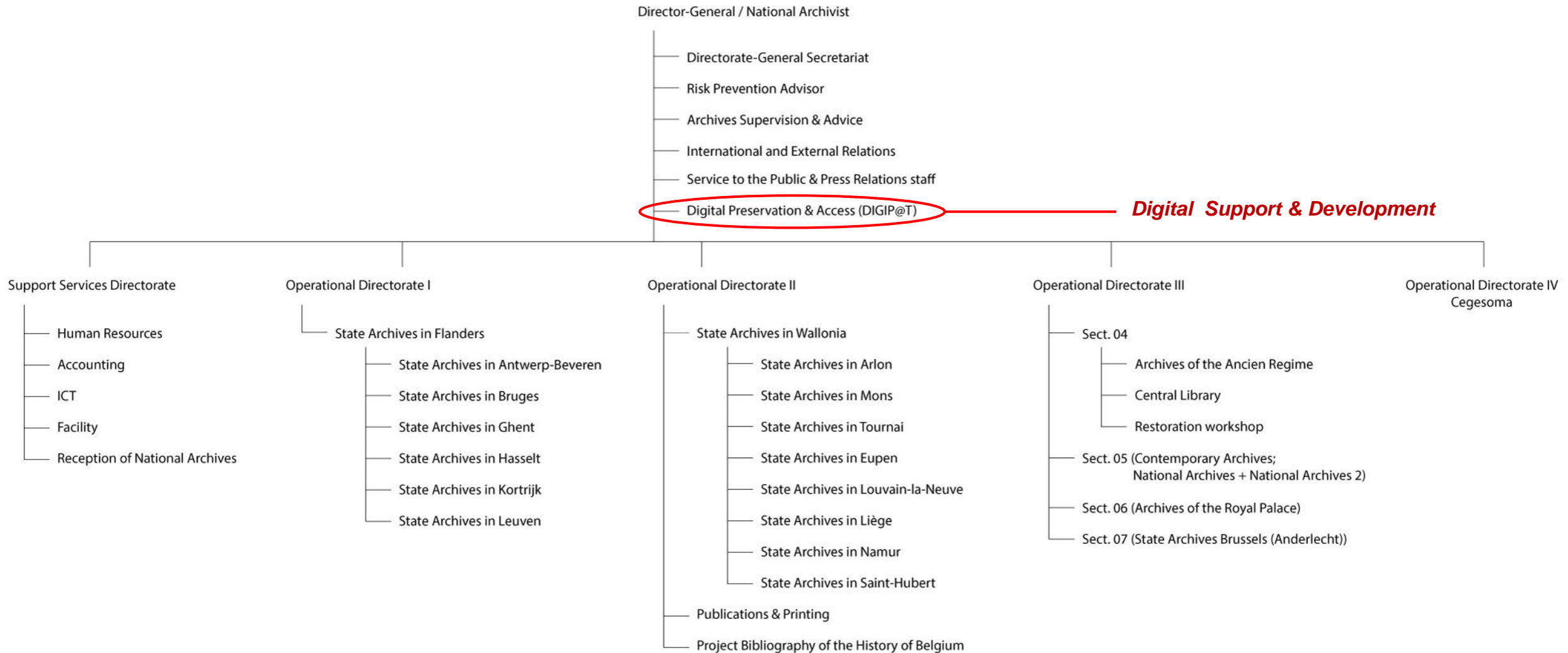
## VI. WRAP UP

# I. STATE ARCHIVES BELGIUM

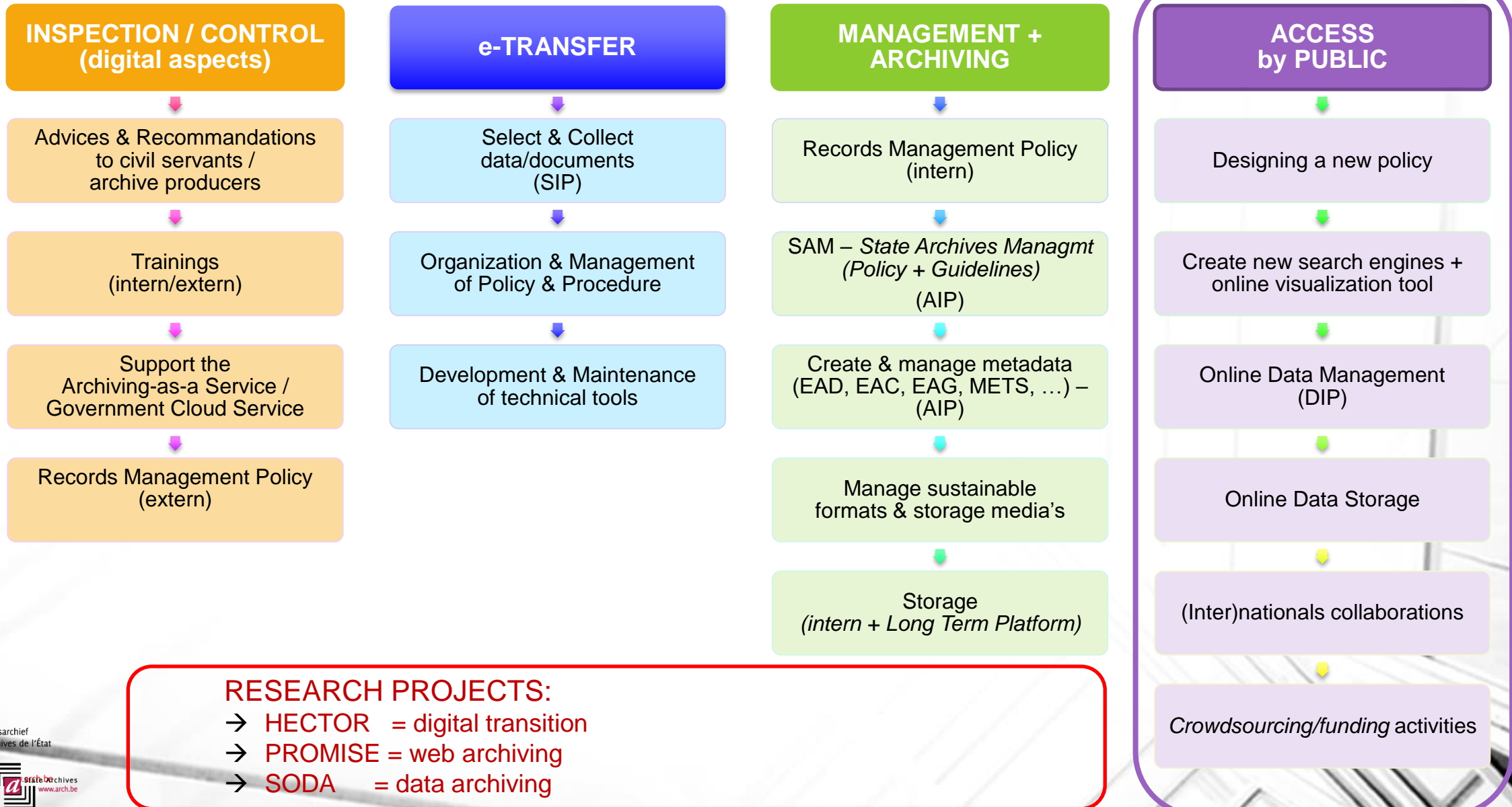
- Federal Scientific Institution (specific status for archivists)
- Depending on the Federal Science Policy Ministry
- HR : approx. 240 FTE (ca. 90 archivists)
- 19 deposits
- Around 320 km paper archives  
*(from 8th century till now)*
- More than 350 TB of digital archives  
*(25 millions digital files)*



# I. STATE ARCHIVES BELGIUM



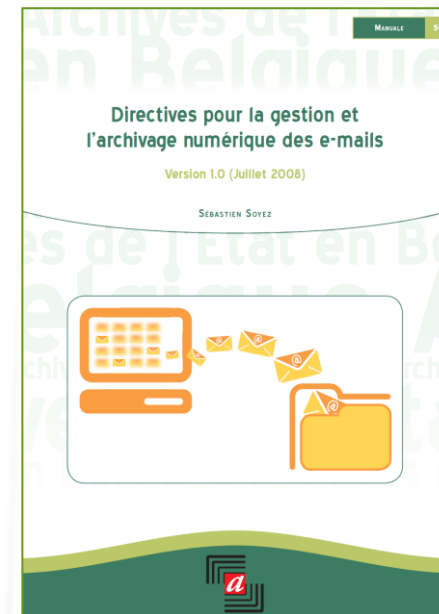
# II. DIGITAL STRATEGY ARCH.BE



# III. EMAILS (management & archiving)

INSPECTION / CONTROL

➔ *Recommandations (2009 – FR/NL) – cf. [arch.be/directive](http://arch.be/directive)*



➔ *Guidelines (2017 – FR/NL) – cf. [arch.be/FAQ](http://arch.be/FAQ)*

Documents > FAQ - e-mails

Archives de l'État  
www.arch.be

Archives de l'État en Belgique  
NOTRE MÉMOIRE À TOUS !

FAQ - e-mails

### Qu'est-ce qu'un e-mail ?

Un e-mail peut être défini comme « tout message sous forme de texte, de voix, de son ou d'image envoyé par un réseau public de communications qui peut être stocké dans le réseau ou dans l'équipement terminal du destinataire jusqu'à ce que ce dernier le récupère » (extrait de la Loi du 15 décembre 2013, article 2).

### Dois-je conserver mes e-mails professionnels?

OUI : Les e-mails professionnels, c'est-à-dire les e-mails échangés dans le cadre des fonctions d'un service public sont considérés comme des documents administratifs, et à ce titre tombent sous le coup de la loi sur les archives ainsi que de la loi sur la publicité de l'administration. Chaque administration est donc responsable de la conservation à court/moyen terme de ses e-mails professionnels, et ce pour toute cause qui pourrait engager sa responsabilité légale. (cf. Cadre légal)

### Comment organiser la gestion de mes e-mails professionnels (classement, tri, responsabilités) ?

a. le classement

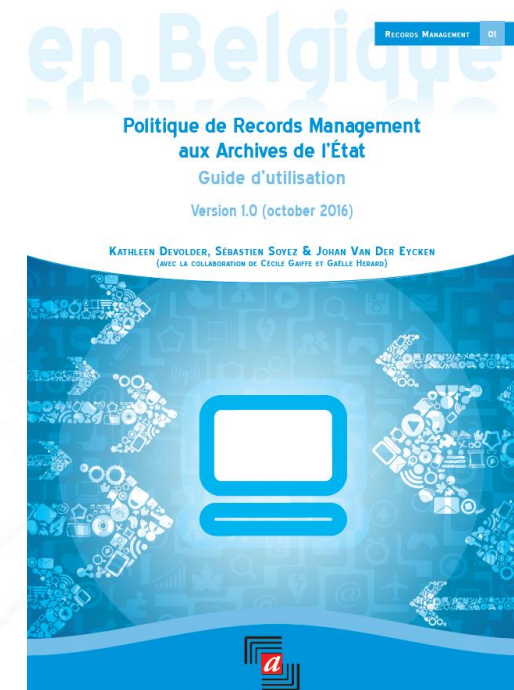
1. **La solution idéale** : Classer l'e-mail dans le serveur partagé ou le système de gestion de documents central de l'institution. Dans l'optique d'une gestion et d'un tri de document efficace, les Archives de l'État recommandent d'exporter les e-mails à archiver vers leur dossier numérique correspondant dans le classement commun et centralisé de l'institution. Eventuellement, l'institution pourrait décider de conserver intégralement les boîtes e-mails des agents des niveaux supérieurs de la hiérarchie (ex. présidents, directeurs-généraux, directeurs, administrateurs-généraux, chefs de service, ...).
2. **La solution temporaire** : Classer l'e-mail dans le mailbox. Dans la plupart des logiciels de messagerie électronique, il est possible de créer un classement sous forme d'arborescence, de la même façon que vous pouvez créer une arborescence de répertoires au sein de votre espace de travail électronique (partagé ou individuel). Utilisez idéalement une structure de classement identique pour tous vos

# III. EMAILS (management & archiving)

## RECORDS MANAGEMENT & DIGITAL ARCHIVING

→ *Recommandations (2009) & Guidelines (2017)*

→ *State Archives Records Management Policy – Emails Chapter (2016 – FR/NL)*



# IV. CHALLENGES

## A) Organisational & technical aspects

- > **Bad uses** : no rules, mix privacy/professional
- > **Roles & Responsibilities** (RM, IT, Lawyer, HoU, User)
- > **Individual** mailbox versus **Functional** mailbox
- > **Selection / Deletion**
- > **Classification**
- > **Archiving** of messages + attachments
- > **Authenticity** (content & context)
- > **Technical interoperability** (formats)





# IV. CHALLENGES

## B) Legal issues

--> **Privacy** : access & use of recorded/archived emails

--> **Authenticity + Probative value** :  
metadata < Sender, Dates, Headers, Message, ...

### **MUST BE COMPLIANT**

- GDPR & Archives Law
- Electronic Communications Law
- Work Convention (ex. CyberControl of workers)
- e-IDAS (EU) & Digital Act (BE) = **Digital Archiving Trust Service**

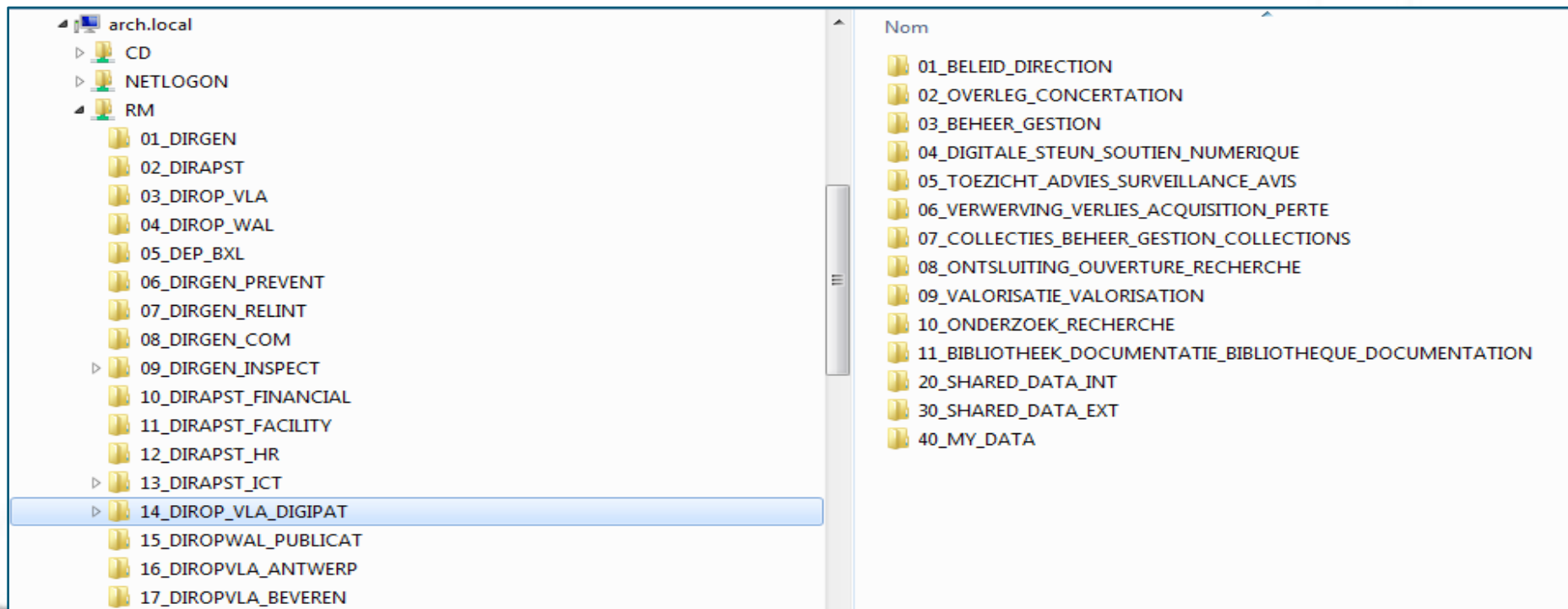


# V. SOLUTIONS (*State Archives Belgium*)

## 1) Classification

– Temporary solution (from 2009-2016)

--> **classify** e-mails in the mailbox : use a global **classification** of the institution



# V. SOLUTIONS (*State Archives Belgium*)

## 1) Classification

– **Ideal solution (since 2017)**

--> **classify** emails centrally on the RM or on the Secured File System of the institution

--> **export** emails into the file related to the task (context)

--> if necessary, apply the Capstone approach  
(full archiving of mailboxes from *HoU*, *Dir* and *GenDir* level)

# V. SOLUTIONS (State Archives Belgium)

The image shows a Windows File Explorer window with the following details:

- Address Bar:** Ordinateur > RM (R:) > 14\_DIROPVLA\_DIGIPAT > 30\_SHARED\_DATA\_EXT > 01\_PROJET\_RM > 00\_FICHE\_NOTES\_REUNIONS\_AVANCEMENT
- Search Bar:** Rechercher dans : 00\_FICHE\_N...
- Left Pane:** Shows a tree view of folders. The selected folder is 00\_FICHE\_NOTES\_REUNIONS\_AVANCEMENT. Other folders include 14\_DIROPVLA\_DIGIPAT, 01\_BELEID\_DIRECTION, 02\_OVERLEG\_CONCERTATION, 03\_BEHEER\_GESTION, 04\_DIGITALE\_STEUN\_SOUTIEN\_NUMERIQUE, 05\_TOEZICHT\_ADVIES\_SURVEILLANCE\_AVIS, 06\_VERWERVING\_VERLIES\_ACQUISITION\_PERTE, 07\_COLLECTIE\_BEHEER\_GESTION\_COLLECTIONS, 08\_ONTSLUITING\_OUVERTURE\_RECHERCHE, 09\_VALORISATIE\_VALORISATION, 10\_ONDERZOEK\_RECHERCHE, 11\_BIBLIOTHEEK\_DOCUMENTATIE\_BIBLIOTHEQUE\_DOCUME, 20\_SHARED\_DATA\_INT, 30\_SHARED\_DATA\_EXT, 01\_PROJET\_RM, 01\_ENQUETE\_USAGERS, 02\_PLAN\_DE\_CLASSEMENT, 03\_GUIDE\_DES\_PROCEDURES, 04\_NORMES\_STANDARDS, 05\_FORMATIONS\_INTERNES, 06\_RECHTEN, 02\_APEF, 03\_WEBSITE\_SCANS, 40\_MY\_DATA, 15\_DIROPWAL\_PUBLICAT, 31\_DEPBXL\_RUYSBR\_OLD, 32\_DEPBXL\_RUYSBR\_CONTEMP, 34\_DEPBXL\_KINGPAL, 36\_---\_CEGESOMA.
- Right Pane:** Shows a list of files with columns: Nom, Modifié le, Type, and Taille. The message "Aucun élément ne correspond à votre recherche." is displayed at the top. The file list includes:

Nom	Modifié le	Type	Taille
20190430_MAIL_RM_statistieken	20-05-19 23:35	Outlook Item	39 Ko
20170122_RM_etat_serveurs_janvier_2017_v03	23-01-17 16:14	Microsoft Excel W...	17 Ko
20170106_RAP_RM_status_v05 (Enregistré automatiqueme...	19-01-17 09:24	Microsoft Word D...	49 Ko
20170106_RAP_RM_status_v05	06-01-17 10:28	Microsoft Word D...	23 Ko
20160623_RAP_RM_status_v04	23-06-16 13:52	Microsoft Word D...	23 Ko
20160623_RAP_RM_status_v03	23-06-16 12:16	Microsoft Word D...	23 Ko
20160622_RAP_RM_status_v02	23-06-16 11:57	Microsoft Word D...	22 Ko
20160623_RAP_RM_status_v02	23-06-16 11:56	Microsoft Word D...	26 Ko
20160622_RAP_RM_status_v01	23-06-16 09:38	Microsoft Word D...	21 Ko
20151026_opleiding_RM_01_od_vlaanderen_v02	15-10-15 09:55	Microsoft PowerP...	6.155 Ko
20151026_opleiding_RM_01_od_vlaanderen_v01	12-10-15 16:10	Microsoft PowerP...	6.155 Ko
20150929_vergadering_od_vlaanderen_deelRM_20151005_...	01-10-15 09:52	Microsoft PowerP...	6.133 Ko
20150915_projet_rm_presentation_directeurs_KD_JV_SESO_...	15-09-15 16:47	Microsoft PowerP...	6.608 Ko
20150915_projet_rm_presentation_directeurs_KD_JV_SESO_...	15-09-15 10:24	Microsoft PowerP...	2.603 Ko
20150324_projet_rm_plan_classement_v01	24-03-15 11:09	Microsoft PowerP...	2.603 Ko
PROJET_RM_plan_classement_SESO_2015-03-24v01	24-03-15 11:09	Microsoft PowerP...	2.603 Ko
20140306_plan_classement_AGR_kd_seso_FR_NL_vdef	20-03-15 16:02	Microsoft PowerP...	530 Ko
20140610_fiche_projet_RM	20-03-15 16:02	Microsoft Word D...	52 Ko
20140827_Tableau_avancement	20-03-15 16:02	Microsoft Word D...	22 Ko
20140930_fiche_projet_RM	20-03-15 16:02	Microsoft Word D...	52 Ko
20141007_fiche_projet_RM	20-03-15 16:02	Microsoft Word D...	52 Ko
20150116_fiche_projet_RM	20-03-15 16:02	Microsoft Word D...	52 Ko
20150217_fiche_projet_RM	20-03-15 16:02	Microsoft Word D...	53 Ko
20150217_projet_rm_agenda_reunion_pilotage_vdef	20-03-15 16:02	Microsoft Word D...	50 Ko
20150217_projet_rm_PV_reunion_pilotage_vdef	20-03-15 16:02	Microsoft Word D...	215 Ko
20150225_projet_rm_note_synthese_conseil_direction_v01	20-03-15 16:02	Microsoft Word D...	58 Ko

# V. SOLUTIONS (*State Archives Belgium*)

## 1) Classification

### – TRICK

--> try to automated the **classification** of e-mails

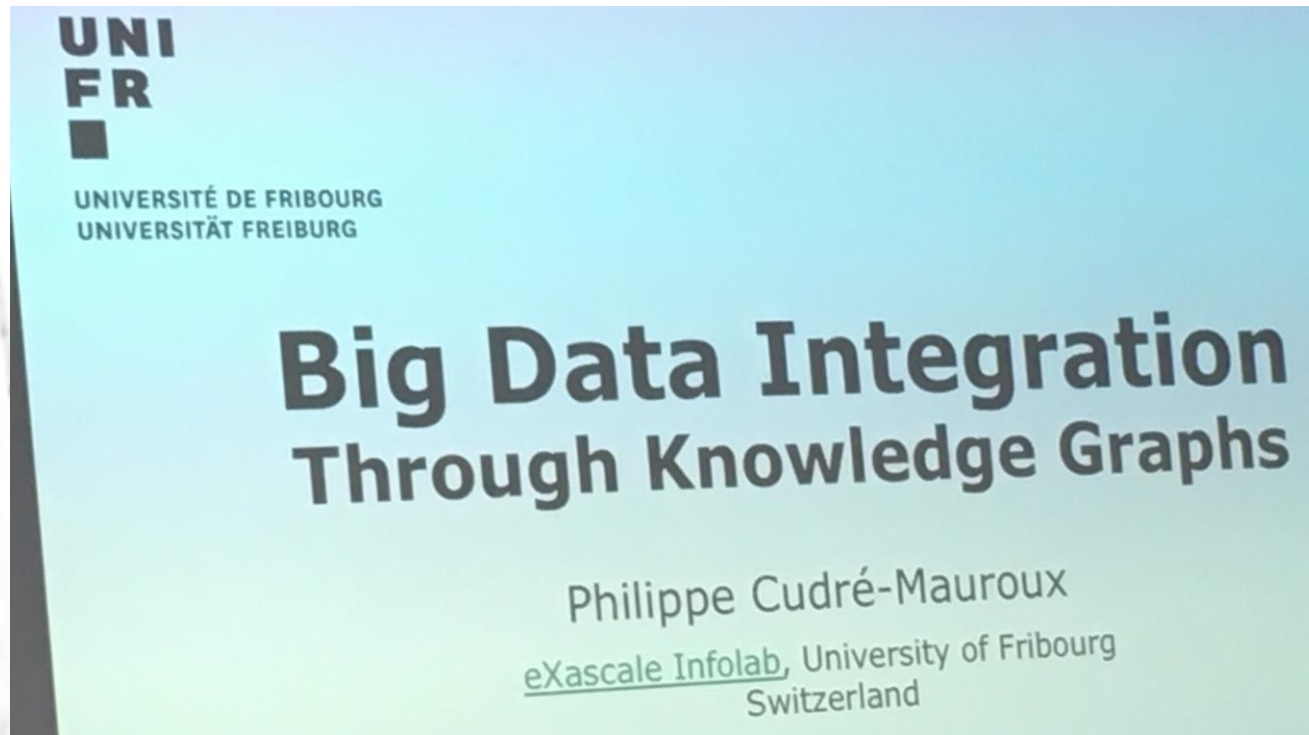
I.A. / machine learning tools that can facilitate the identification of subjects, sender/receiver, ... and than classify automatically the e-mails

# V. SOLUTIONS (*State Archives Belgium*)

## 1) Classification

– **TRICK**

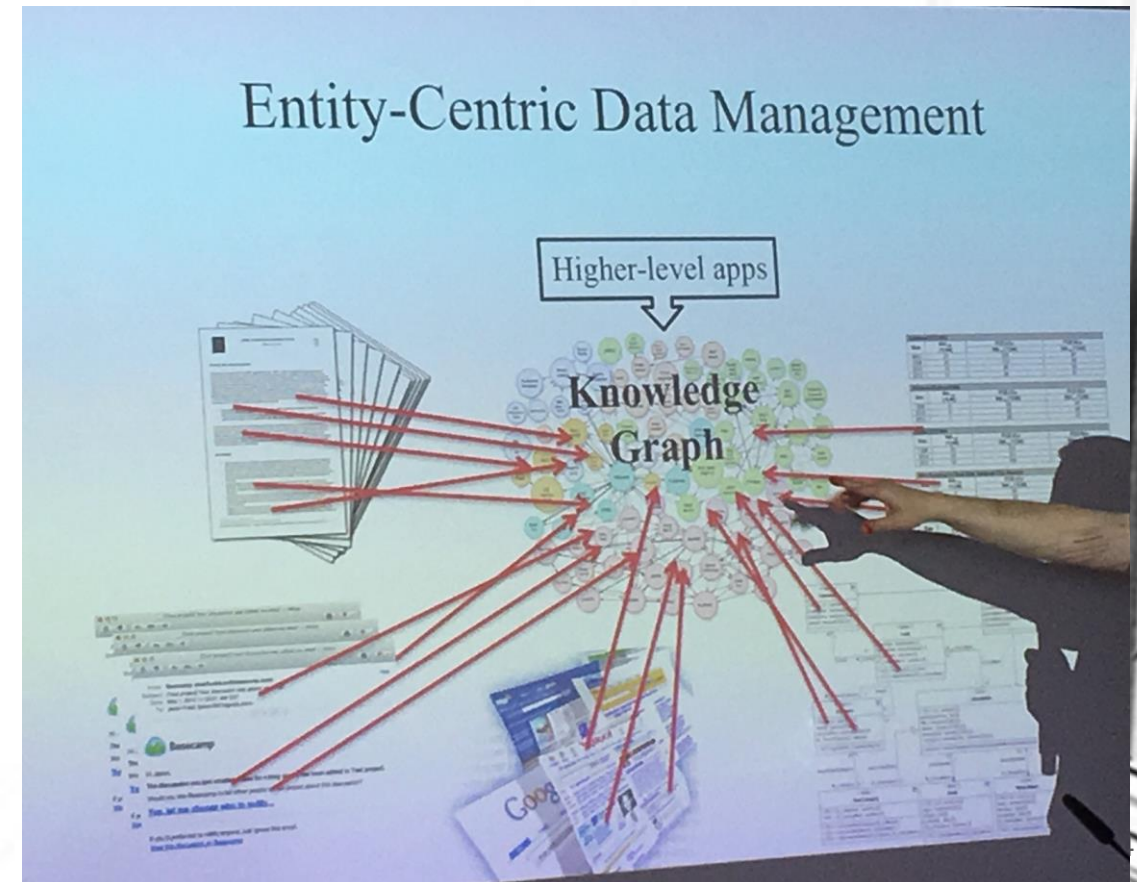
--> try to automated the **classification** of e-mails



**UNI  
FR**  
UNIVERSITÉ DE FRIBOURG  
UNIVERSITÄT FREIBURG

# Big Data Integration Through Knowledge Graphs

Philippe Cudré-Mauroux  
eXascale Infolab, University of Fribourg  
Switzerland



# V. SOLUTIONS (*State Archives Belgium*)

## 2) Selection

- During the current phase, final responsibility to the user
  - > **delete** informative e-mails (newsletters, mailing-lists, ...) & private e-mails (non-professional!) / personal e-mails (professional)
  - > **preserve** e-mails with probative value (administratively/legally)
- **TRICK**
  - > when a user leaves the institution, he/she is responsible to clean the mailbox(es)

# V. SOLUTIONS (*State Archives Belgium*)

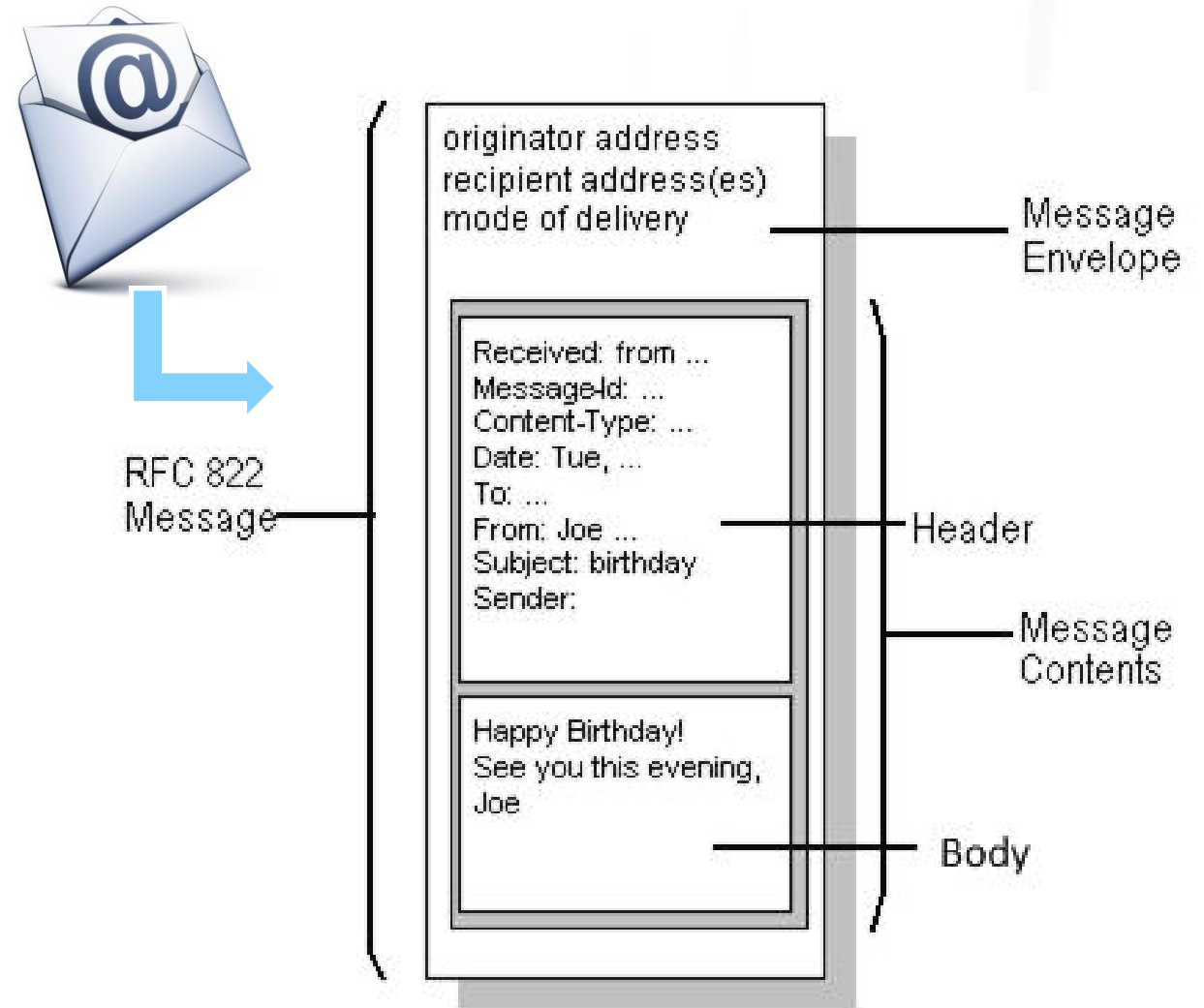
## 3) Record / Archive

– Content & descriptive elements

--> Header informations

--> Message content

--> Attachment(s)





# V. SOLUTIONS (*State Archives Belgium*)

## 3) Record / Archive

– Format(s)

EMAILS		Retention time		
		>10 years	< 10 years	Permanent
Message		EML, MSG, XML	XML	
Attachment(s)	<i>Text Doc</i>	DOCX, ODT, TXT, PDF	PDF/A, ODT	
	<i>Presentation</i>	PPT, ODP	PDF/A, ODP, XML, SVG	
	<i>Tabel / Stylesheet</i>	XLS, ODF	PDF/A, ODF, XML, CSV	
	<i>Database</i>	MDB, ACCDB, FMJ	XML, CSV	
	<i>Image</i>	JPEG, JPEG2000, PNG	TIFF, JPEG2000	
	<i>Video</i>	AVI	AAF, MXF	
	<i>Sound</i>	MP3, WAV	WAV, PCM	

# V. OTHER SOLUTIONS (*Belgian Foreign Office*)

- Diplomatic E-Mails (BE, Ministry of Foreign Office, 2010-2014)



ROYAUME DE BELGIQUE  
Affaires étrangères,  
Commerce extérieur et  
Coopération au Développement



– Distinction between 2 Emails-flows

- Normal
- **Diplomatic**

– **(Almost) Automatically Archived**

- **RM-System**  
*(Sharepoint 2013)*

# V. OTHER SOLUTIONS (*FelixArchief Antwerpen*)

- E-David (BE, Stadsarchief Antwerpen, 2007)

- [http://www.edavid.be/digitaaldepotproject/documenten/folders/pdf/folder2\\_online.pdf](http://www.edavid.be/digitaaldepotproject/documenten/folders/pdf/folder2_online.pdf)

- MAIN COMPONENTS

- Email = Content, Structure, Transmission data

- CONTEXT

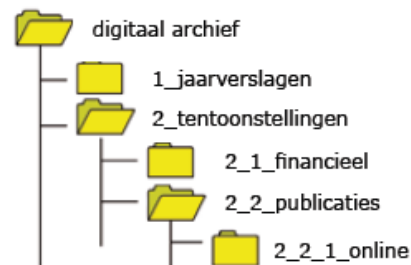
- Classified with the other records

- MIGRATION

- Preserved in an « archiving-format » (XML, PDF/A?)



```
Content-Type: message/rfc822; name="eDAVID-  
Nieuwsbrief"  
Content-Transfer-Encoding: 8bit  
Delivered-To: info@edavid.be  
Date: Wed, 28 Jun 2006 11:02:55 +0200  
User-Agent: Thunderbird 1.5.0.4  
Content-Transfer-Encoding: 8bit  
Content-Type: text/html; charset="utf-8"
```



```
<email>  
...  
<correspondent>  
<name>eDAVID</name>  
<emailAddress>info@edavid.be</emailAddress>  
</correspondent>  
...  
</email>
```

# V. OTHER SOLUTIONS (NARA)

- CAPSTONE approach (USA-NARA, 2011 + update 2017)

- <https://www.archives.gov/records-mgmt/grs/grs06-1-faqs.html>

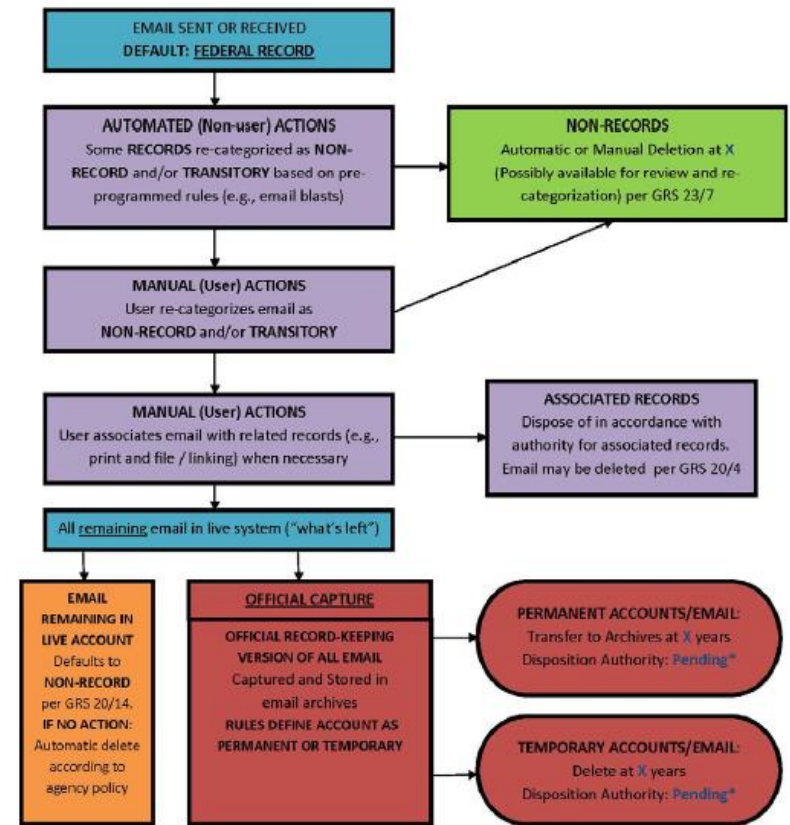
## Capstone Approach



Records View

## ONE APPROACH TO CAPSTONE

This example assumes the use of an email archive, and allows for both automated and manual culling.



\* A valid disposition authority will be required.

# VI. WRAP UP

- A sustainable and ideal solution for managing and/or archiving e-mails is related to the implementation of a **Records Management** or a **Digital Archiving System**
  - **integrated**: all information systems
  - **global**: all the documents with probative value (at least)
  - as **automated** as possible

"Capture e-mail,  
but use Records Management"  
(Jason Baron, NARA, 2010)

# VI. WRAP UP

- Classifying
  - **Transversal** : must concern the entire institution
  - **Functional** : must reflect tasks & activities
- Selecting & Recording
  - **Basic uniform rules (first selection)**
    - 1) Message **formally** created/received?
    - 2) Implies possible action, follow-up, response (**engaging**)?
    - 3) Contents **substantial** & **non-ephemeral** informations?

If answer=yes to those 3 questions → e-mail must be recorded !
  - **Unique identifier**



# VI. WRAP UP

- Roles distribution

- **RM/Archivist**

- Global & Functional classification
    - Metadata based on legal obligations & administrative usefulness
    - File Formats identification

- **IT**

- Technical implementation (automated classification, format migration,...)

- **LAWYER (DPO)**

- Verifies if laws are proportionally applied
    - Sustains the RM/IT

- **User**

- Sets business criteria for selection
    - Applies the rules (classification, record)





# Archive ~~All~~ Your Email

Never lose another important email again.



## **THE DEVIL IS IN THE DETAILS**

E-MAILS ARCHIVING might seem simple at a first look but will take more time and effort to complete than expected





# Questions?



**Sébastien SOYEZ**

Head of works < Digital Archiving Unit >

STATE ARCHIVES BELGIUM

[sebastien.soyez@arch.be](mailto:sebastien.soyez@arch.be)



# References

- J. Baron, *The future of email preservation*, Washington, 2010. (<http://www.archives.gov/records-mgmt/pdf/baron-raco2010.pdf>)
- F. Boudrez, *Filling and archiving e-mails*, Anvers, 2006 (<http://www.expertisecentrumdavid.be>)
- M.-A. Chabin, *Normes et guide pour l'archivage*, Paris, 2012. (<http://www.archive17.fr>)
- M. Grandi, *Guidelines and Recommendations for E-Mail Records Management and Long-Term Preservation (v. 2.2 draft)*, InterPARES 3, 2011. (<http://www.interpares.org>)
- J. Lappin, *Preserving e-mails - records management perspective*, 2012. (<http://thinkingrecords.co.uk>)
- A. Magnien (ss.dir.), *La gestion et l'archivage des courriels*, Paris, Archives Nationales, 2011. (<http://www.archivesnationales.culture.gouv.fr>)
- *Orientations pour la gestion documentaire des courriels au gouvernement du Québec*, Québec, Bibliothèque et Archives Nationales du Québec, 2009. (<http://www.banq.qc.ca>)
- M. Pennock, *Curating e-mails*, Digital Curation Center, University of Bath, 2006. (<http://www.dcc.ac.uk>)
- C. Prom, *Preserving e-mail*, Digital Preservation Coalition, 2011. (<http://www.dpconline.org>)
- R. Robert, Archivage des e-mails et protection de la vie privée, in *L'Archivage électronique et le droit* (ss.dir. M Demoulin), Bruxelles, Larcier-CRIDS, 2012. (<http://editions.larcier.com>)
- S. Soyez, *Directives sur la gestion et l'archivage des e-mails*, Bruxelles, Archives Générales du Royaume et Archives de l'Etat dans les Provinces, 2008. (<http://www.arch.be/directives>)