General Model of E-ARK Services

DLM Forum Members' Meeting
10-11 June 2014, Athens

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National Archives of Hungary

Agenda

E-ARK General Model

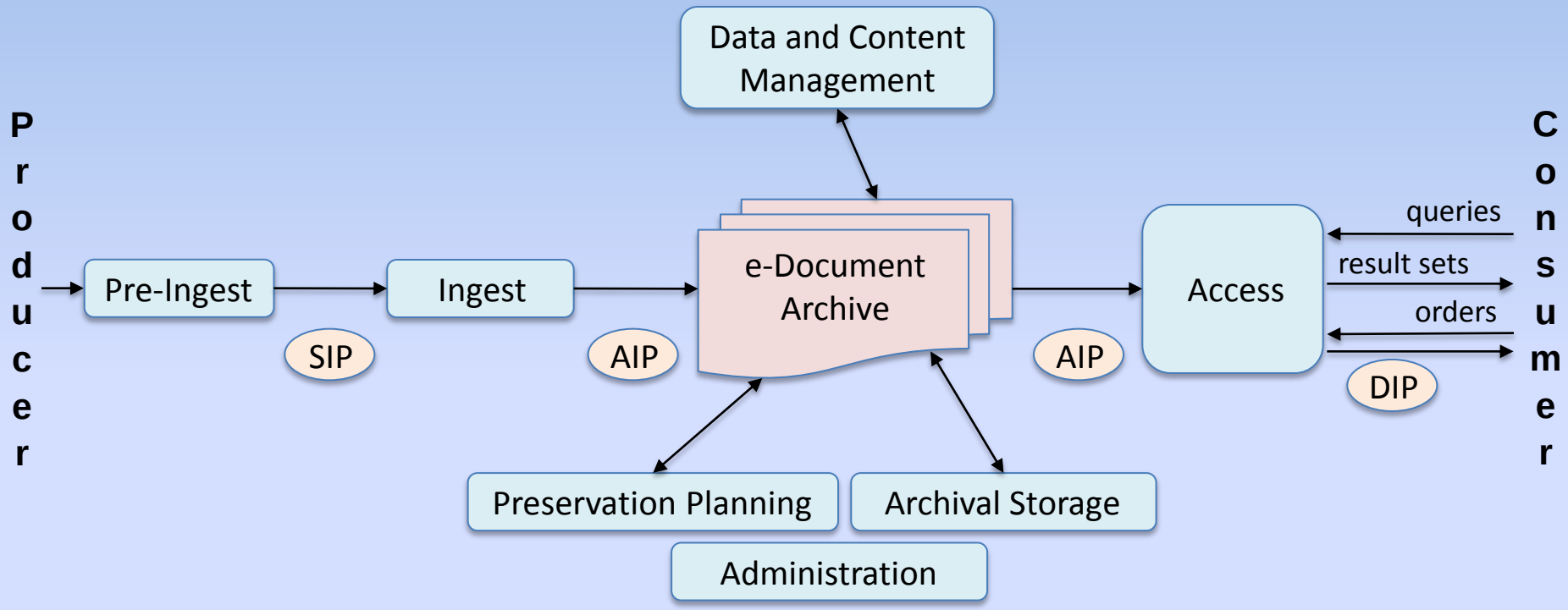
- Conceptual framework
- Used methodology
- Results (not final)

General Model of E-ARK Services

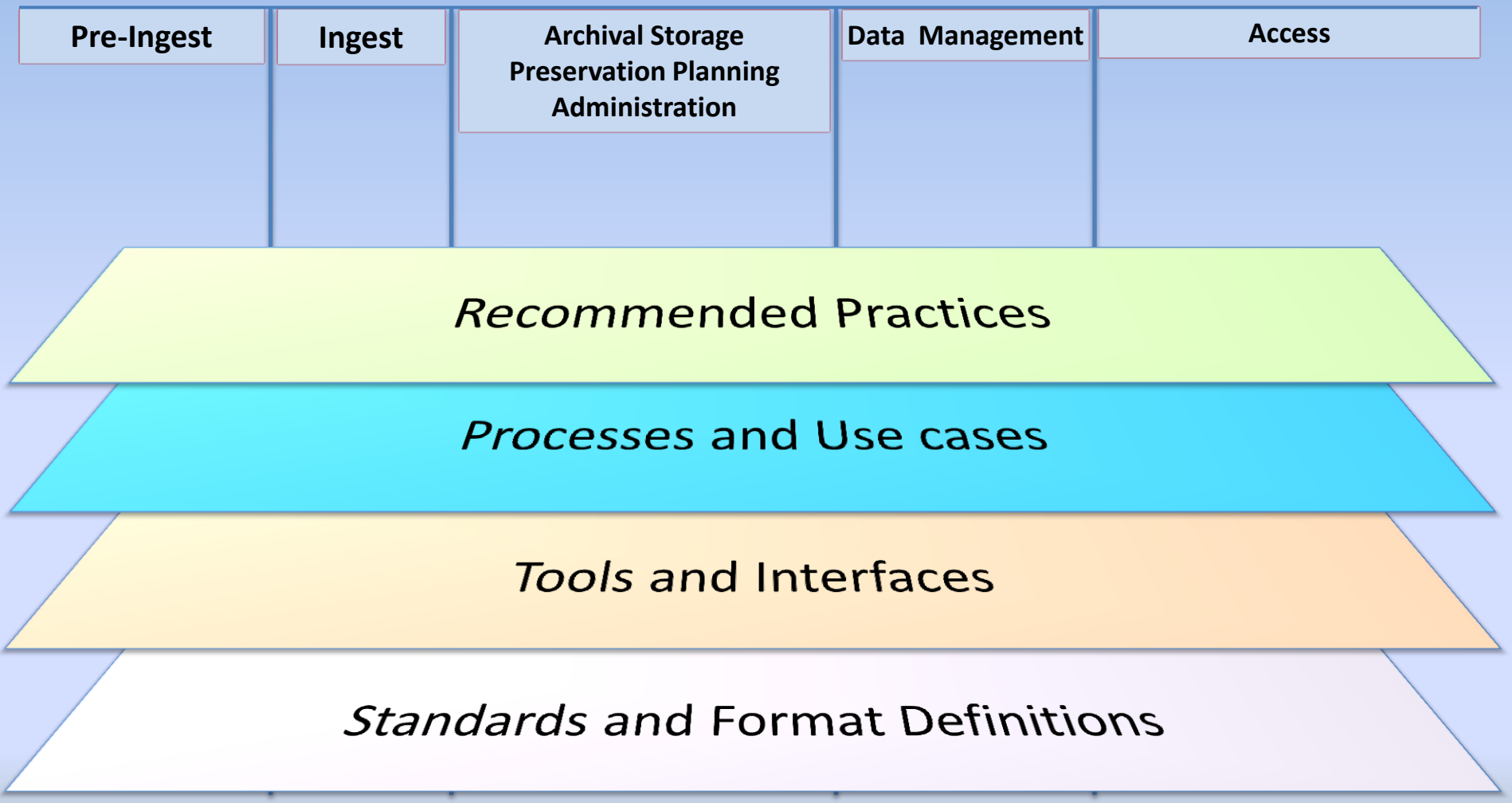
”The scope of the E-ARK service is to provide a reference implementation, which integrates these currently non-interoperable tools into a replicable and scalable, common seamless workflow, allowing data owners and repositories to flexibly select and use the components most relevant for their specific situations. To achieve this, a set of common interfaces and information package formats will be defined by the E-ARK project and implemented using these tools.”

(E-ARK DoW Part B Finalised version 2.0 - B1.3)

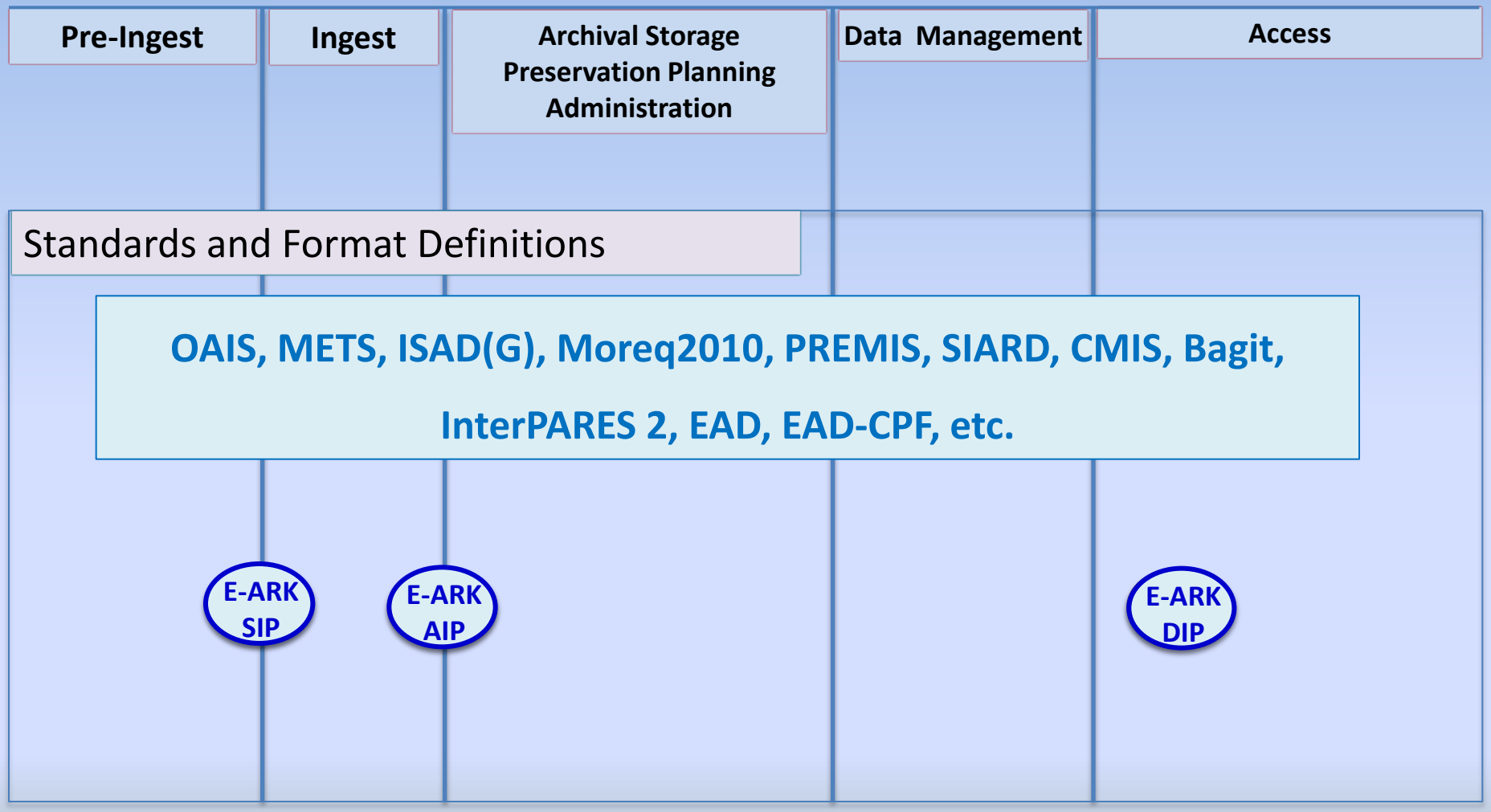
OAIS Reference Model



Conceptual Framework



Conceptual Framework – Standards and Format Definitions



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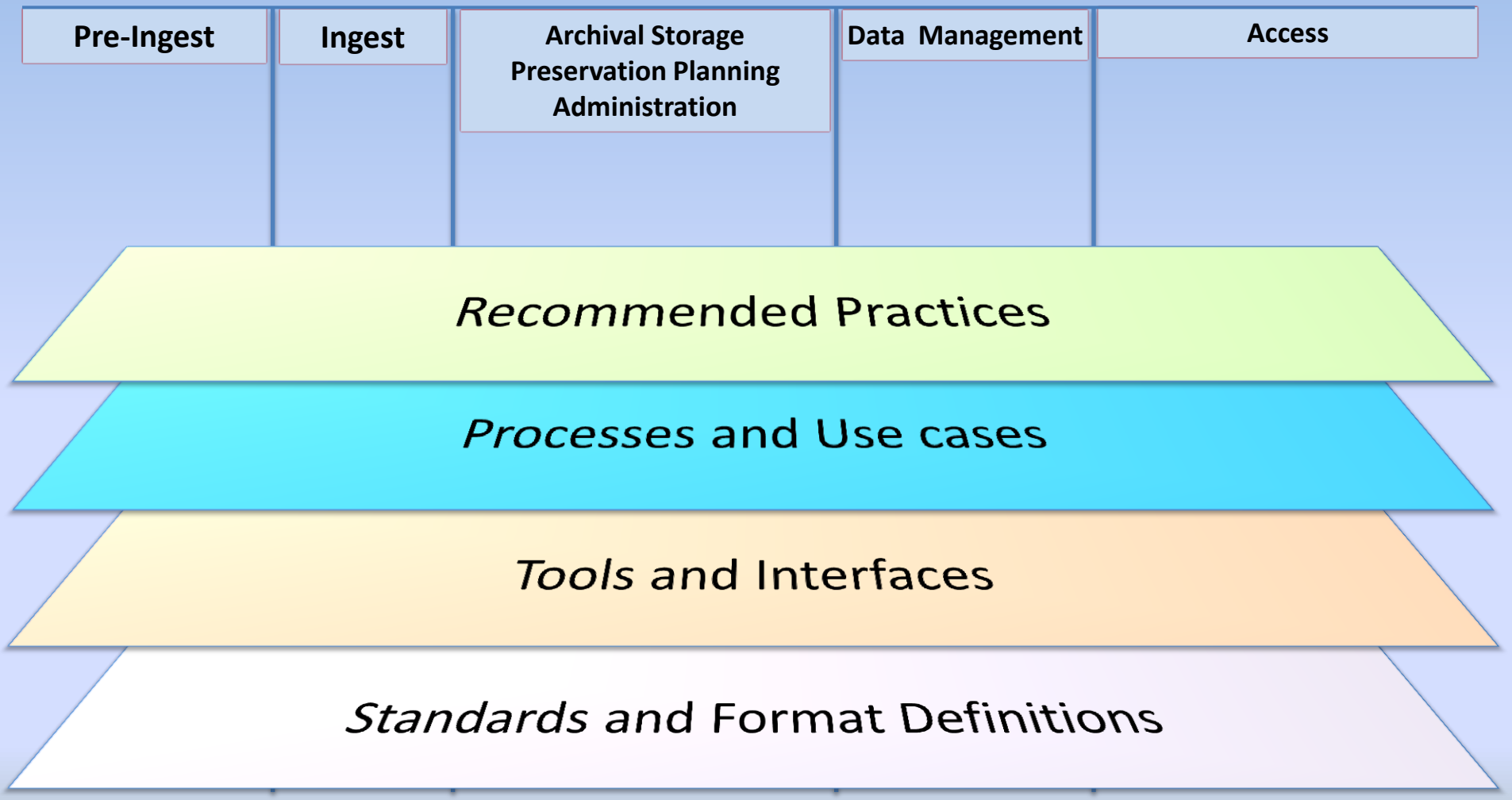
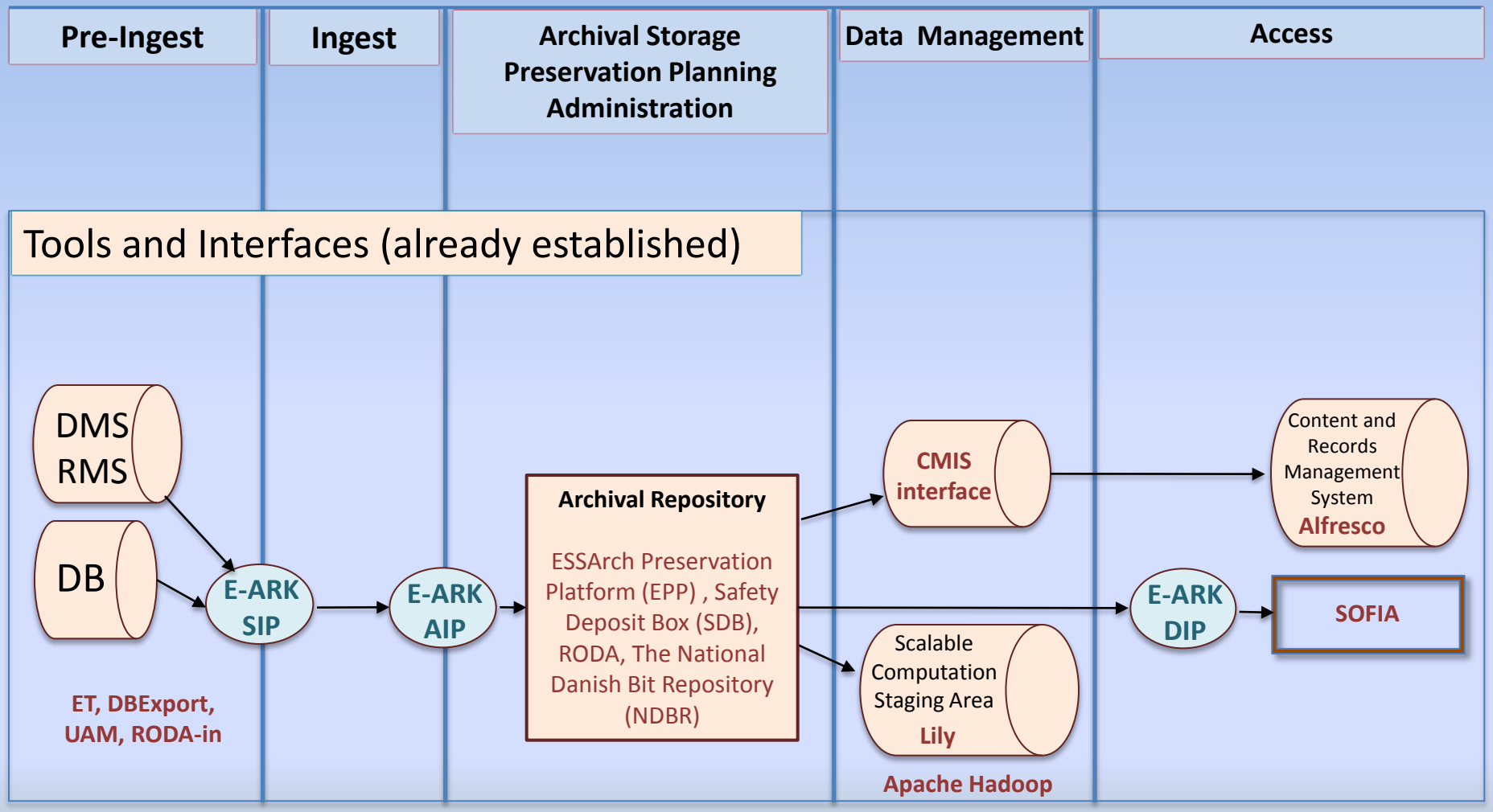


Conceptual Framework – Tools and Interfaces



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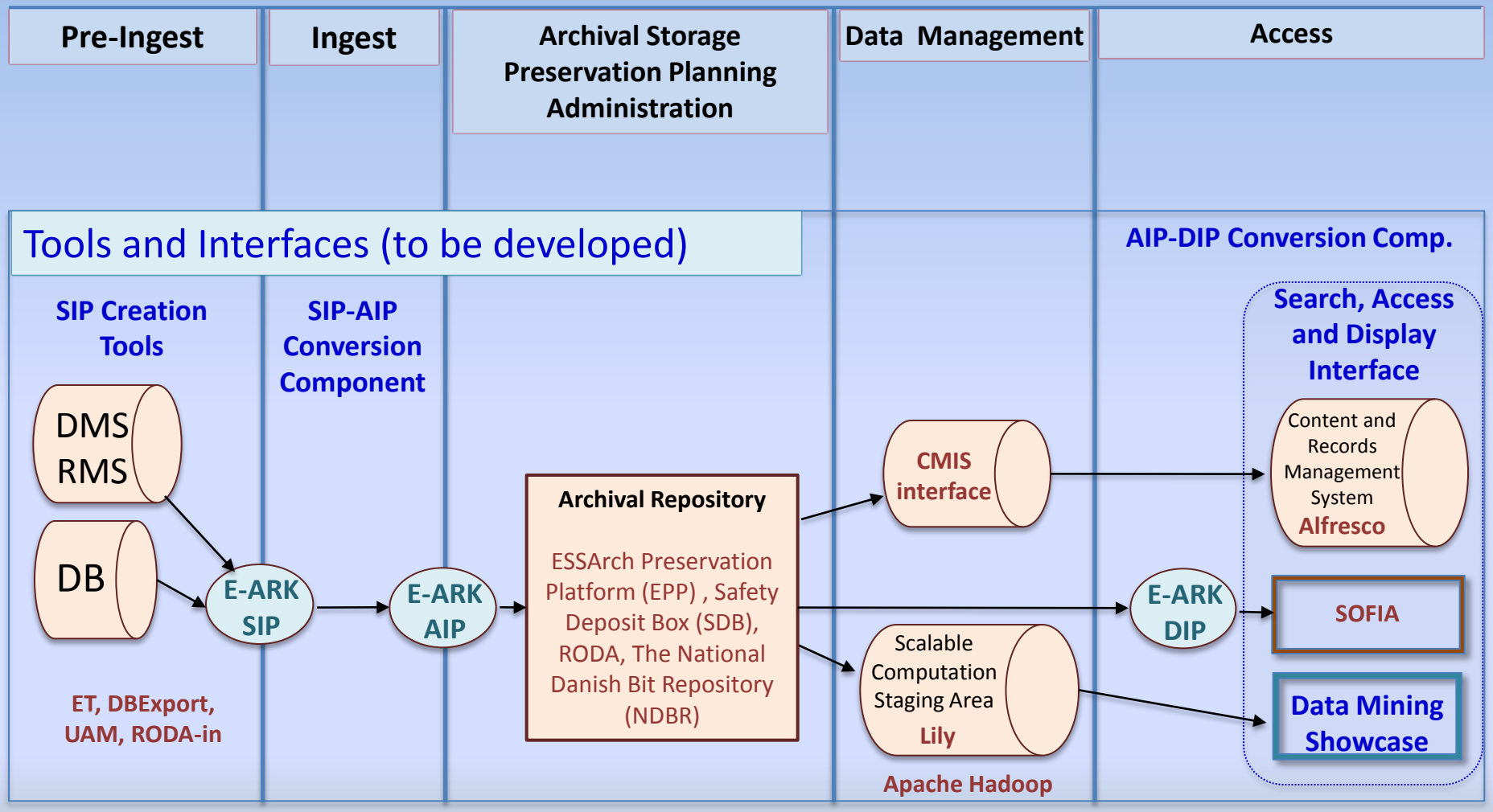

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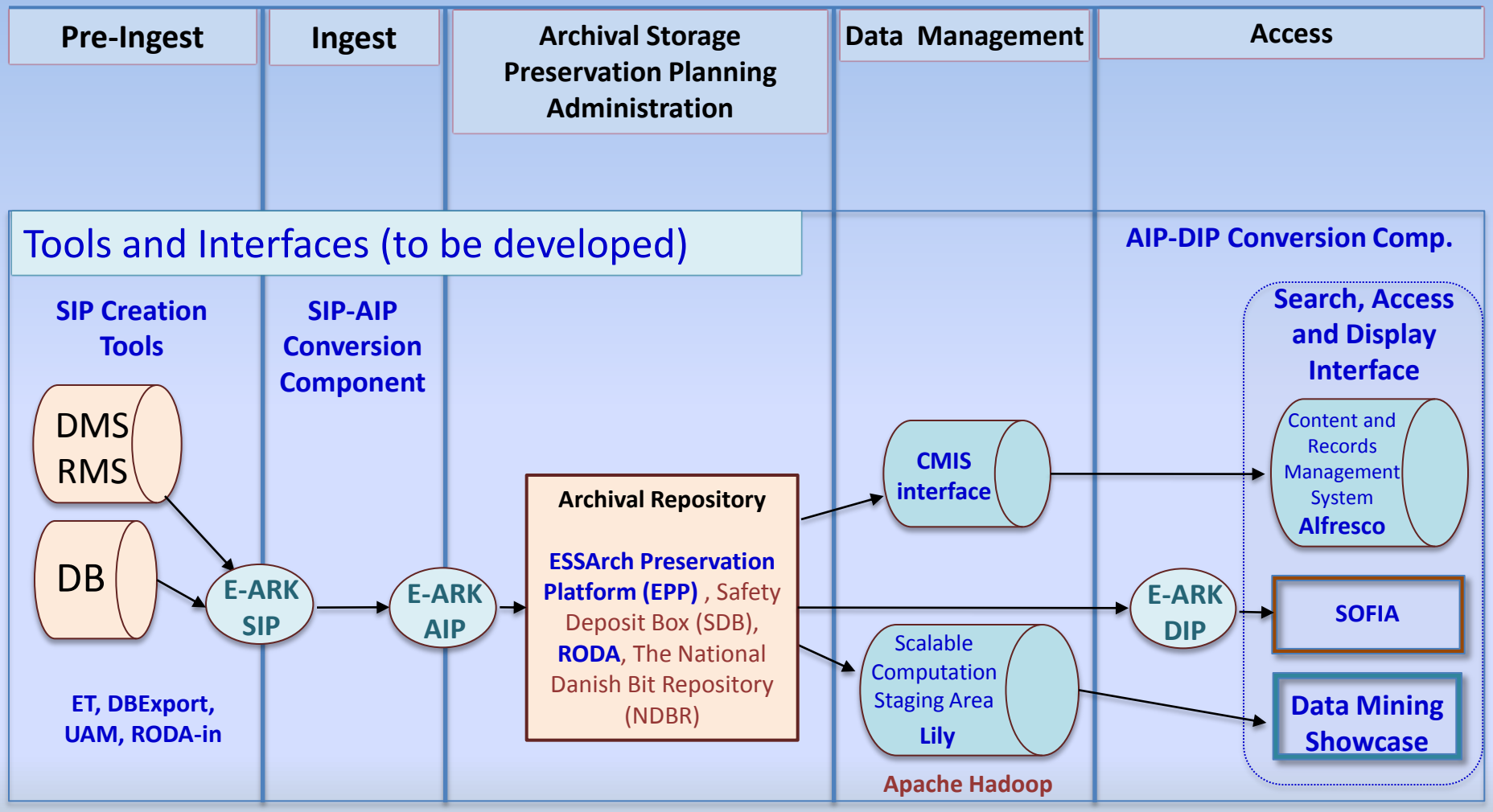

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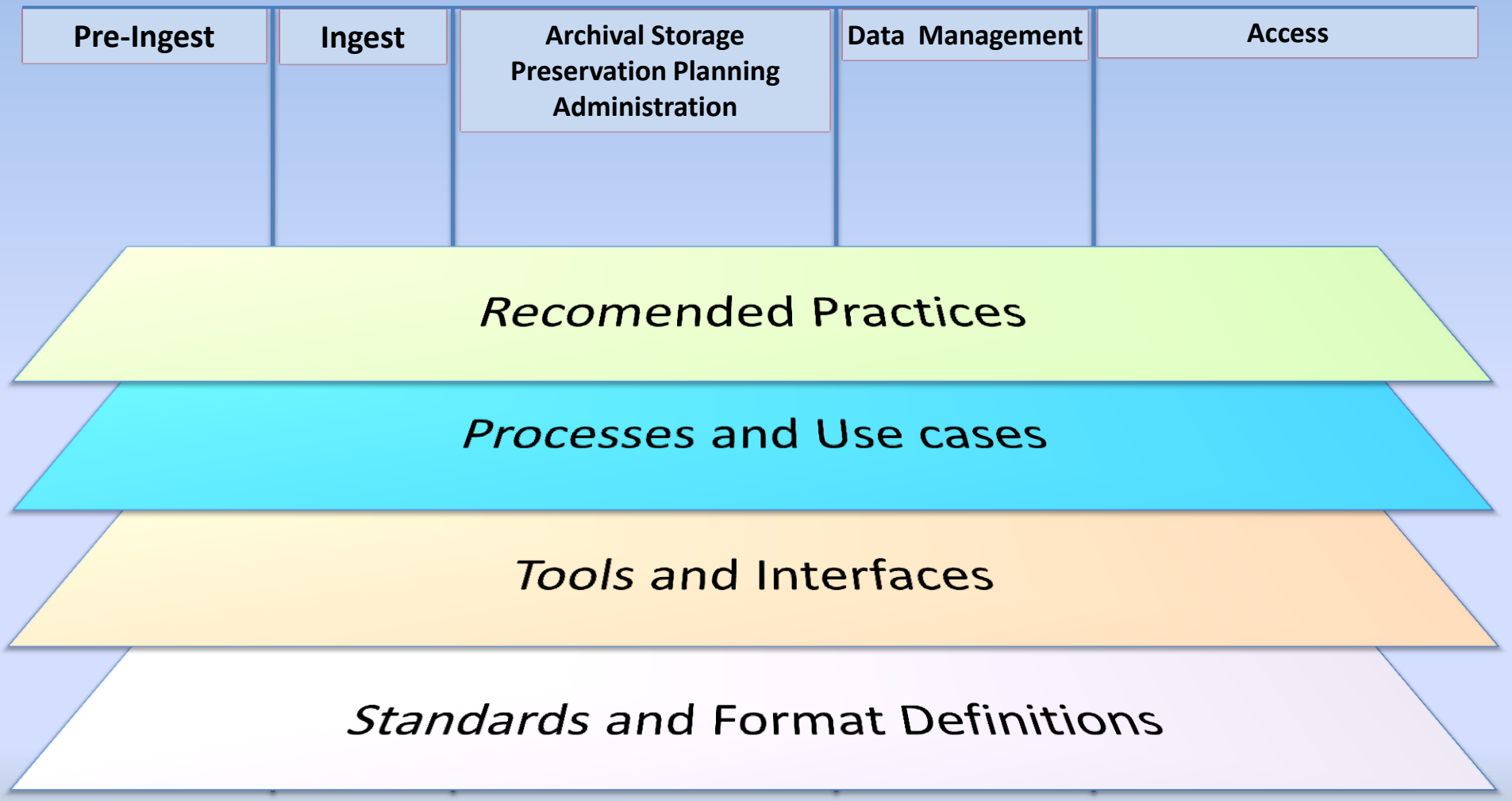
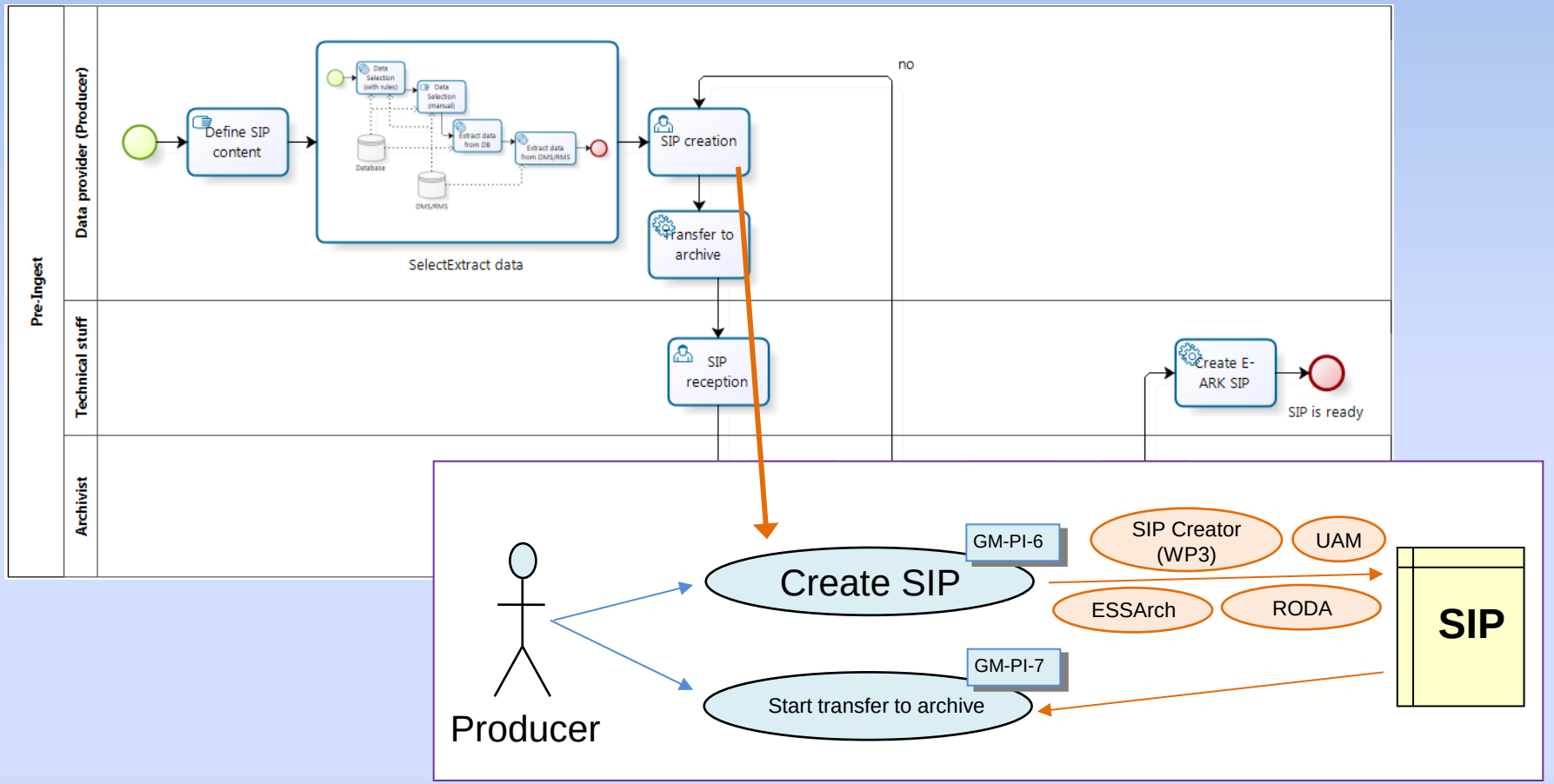


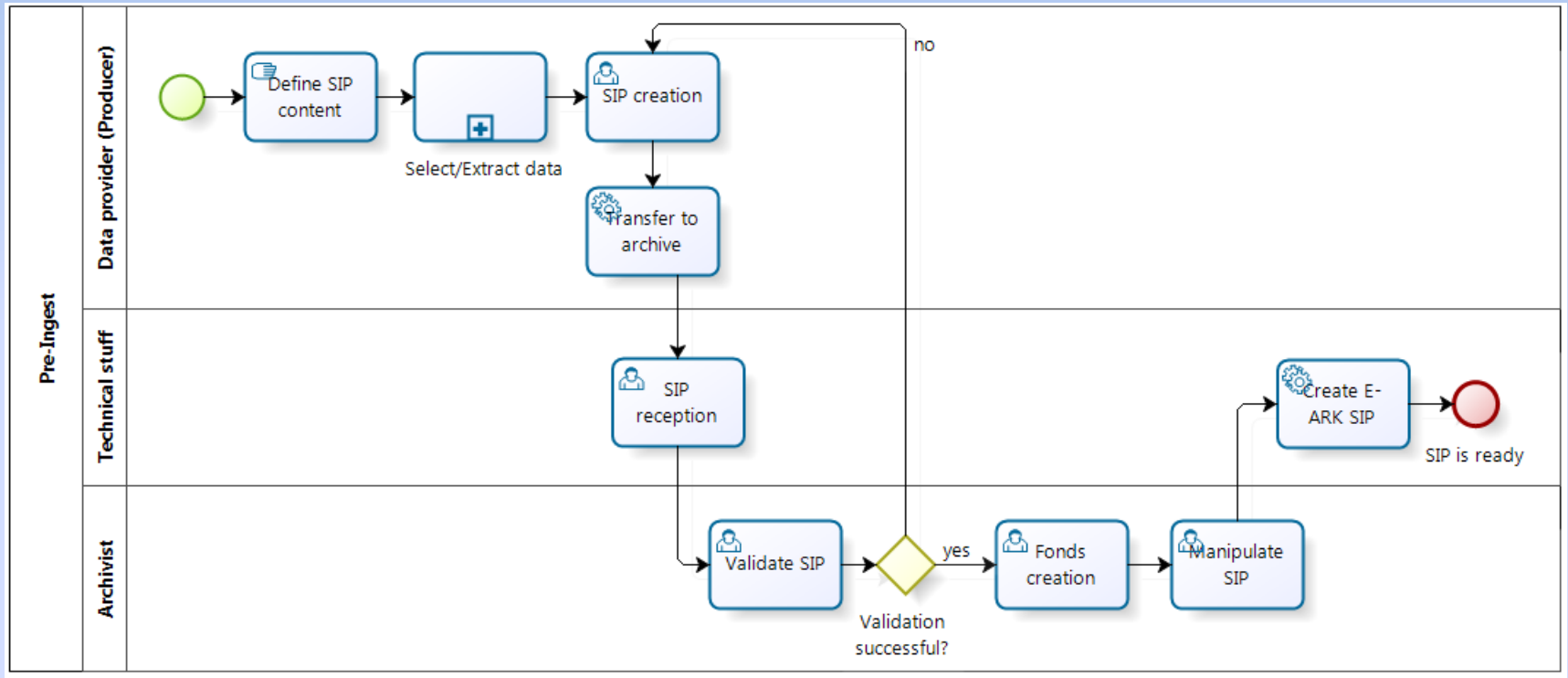
Conceptual Framework – Processes and Use Cases

Process and Use Case Diagrams



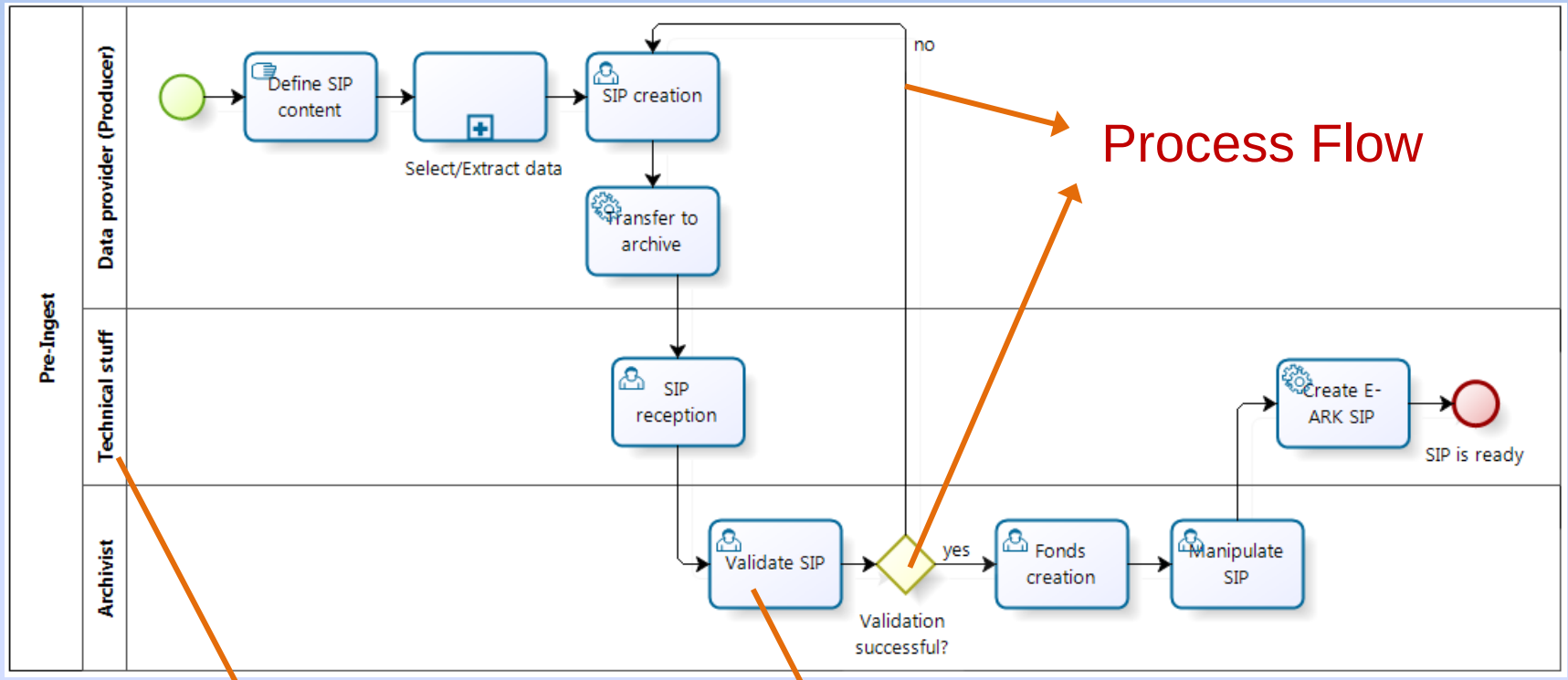
Conceptual Framework – Processes and Use Cases

Process Diagrams



Conceptual Framework – Processes and Use Cases

Business Process Modeling Notation (BPMN)



Conceptual Framework – Processes and Use Cases

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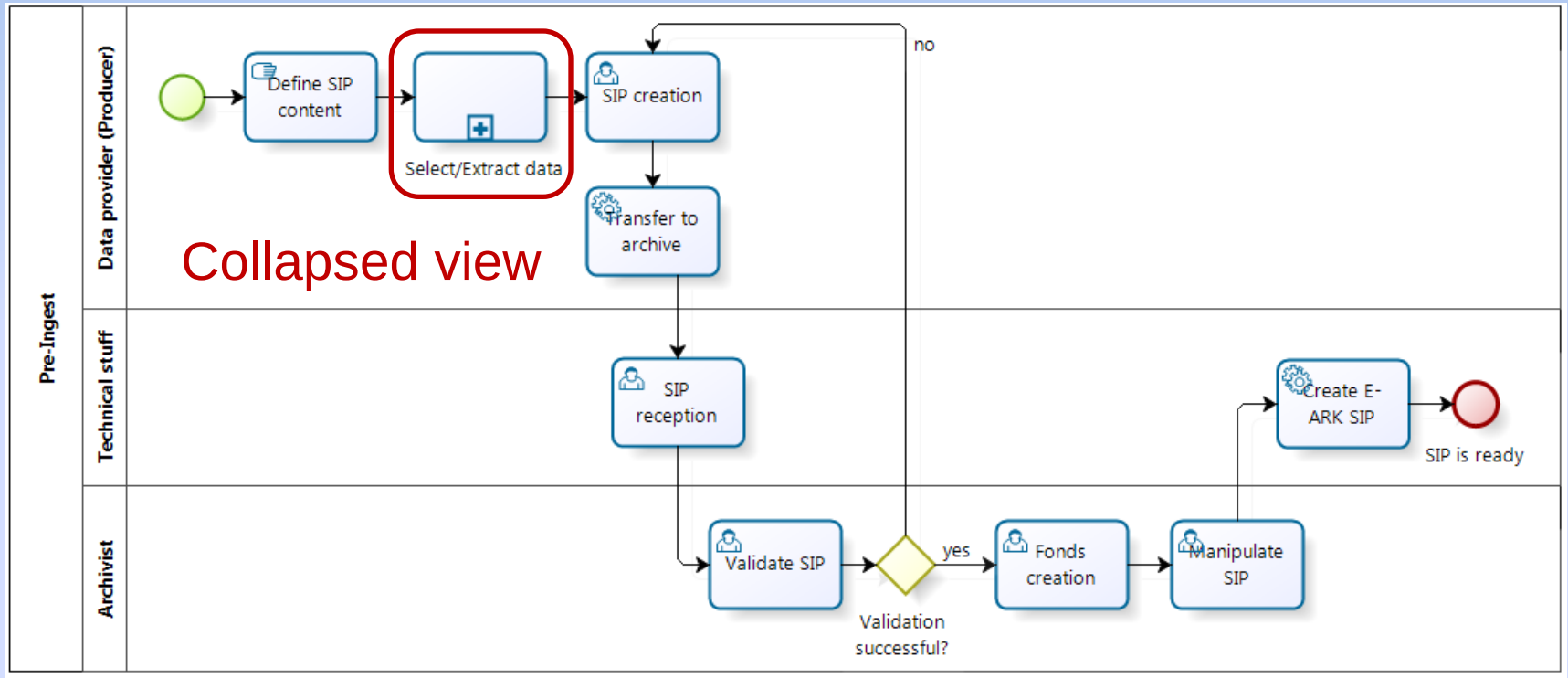
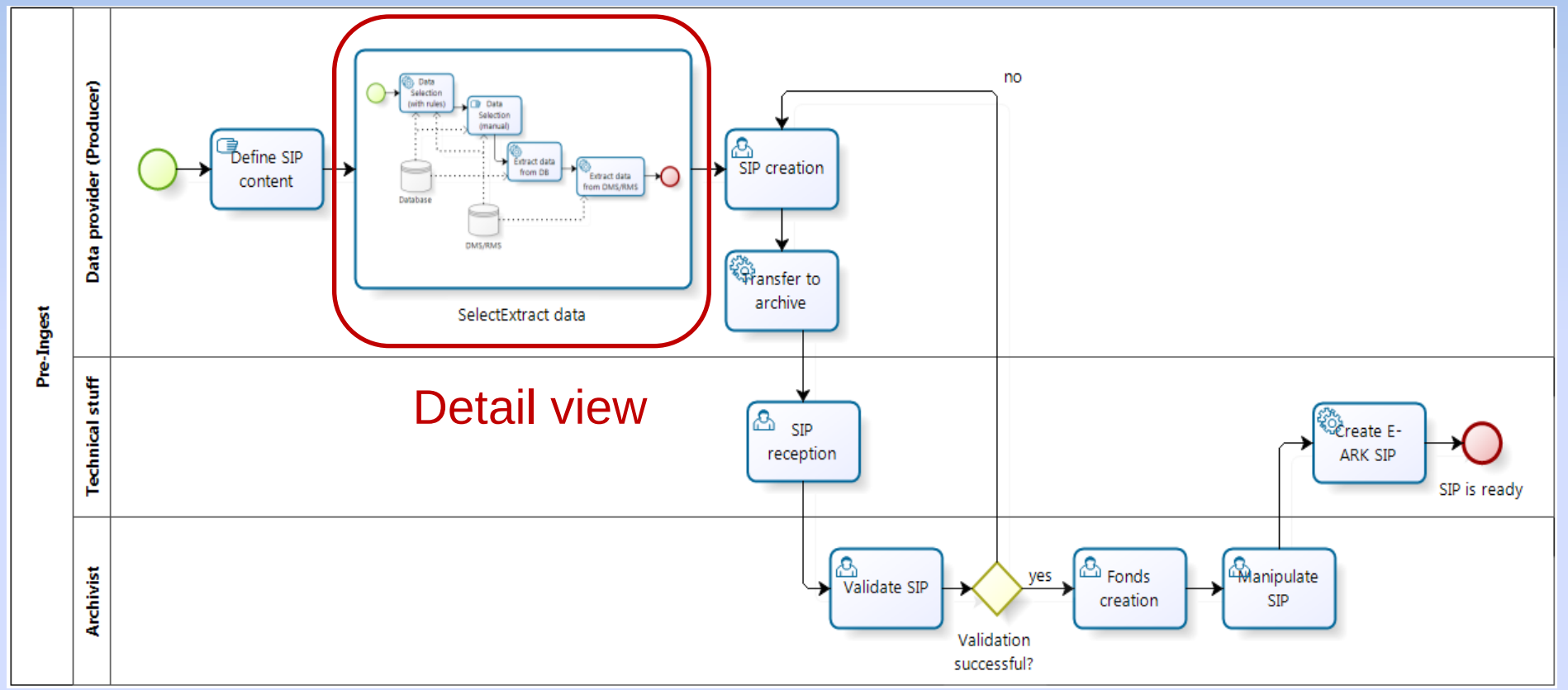


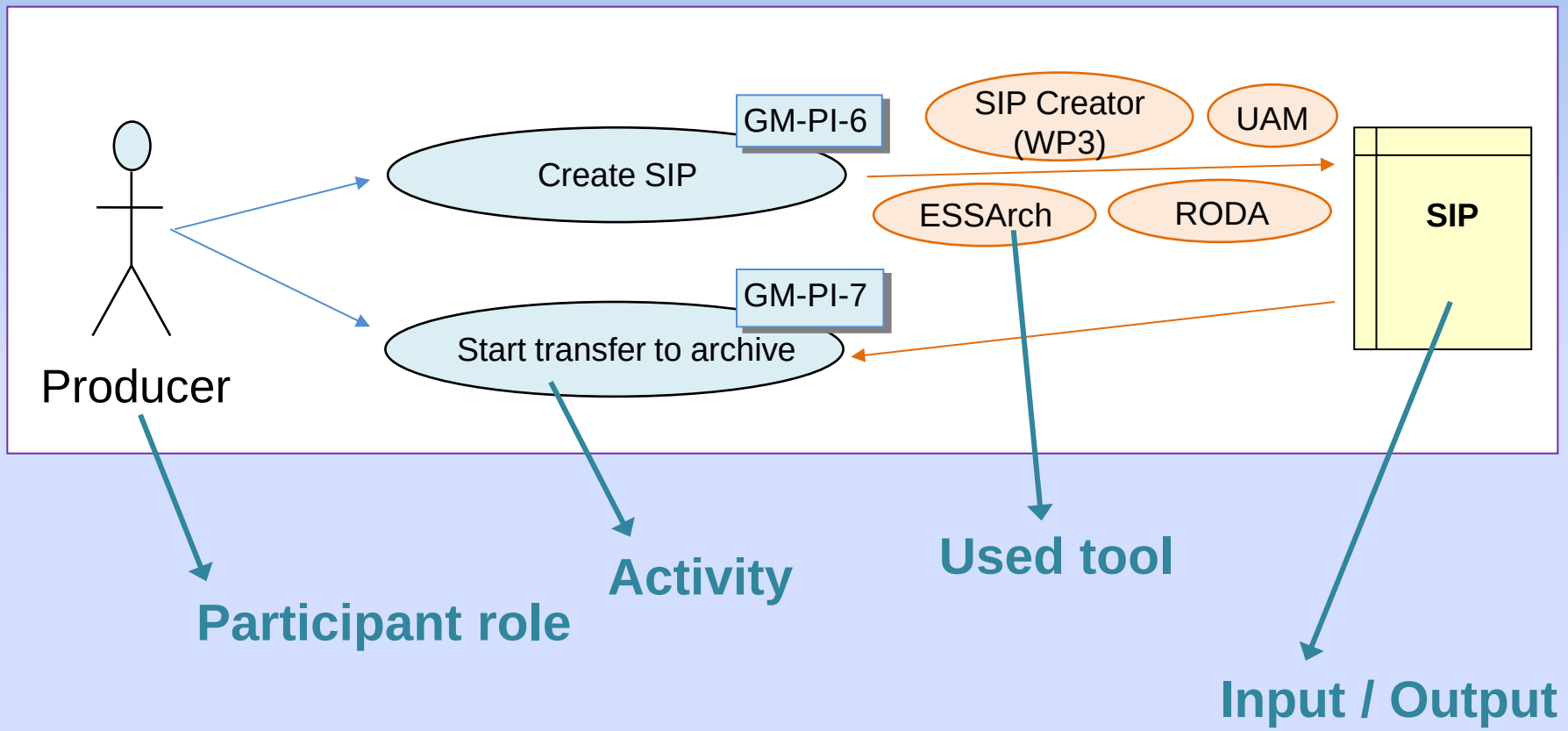
Conceptual Framework – Processes and Use Cases

Standard Process Diagrams (BPMN)

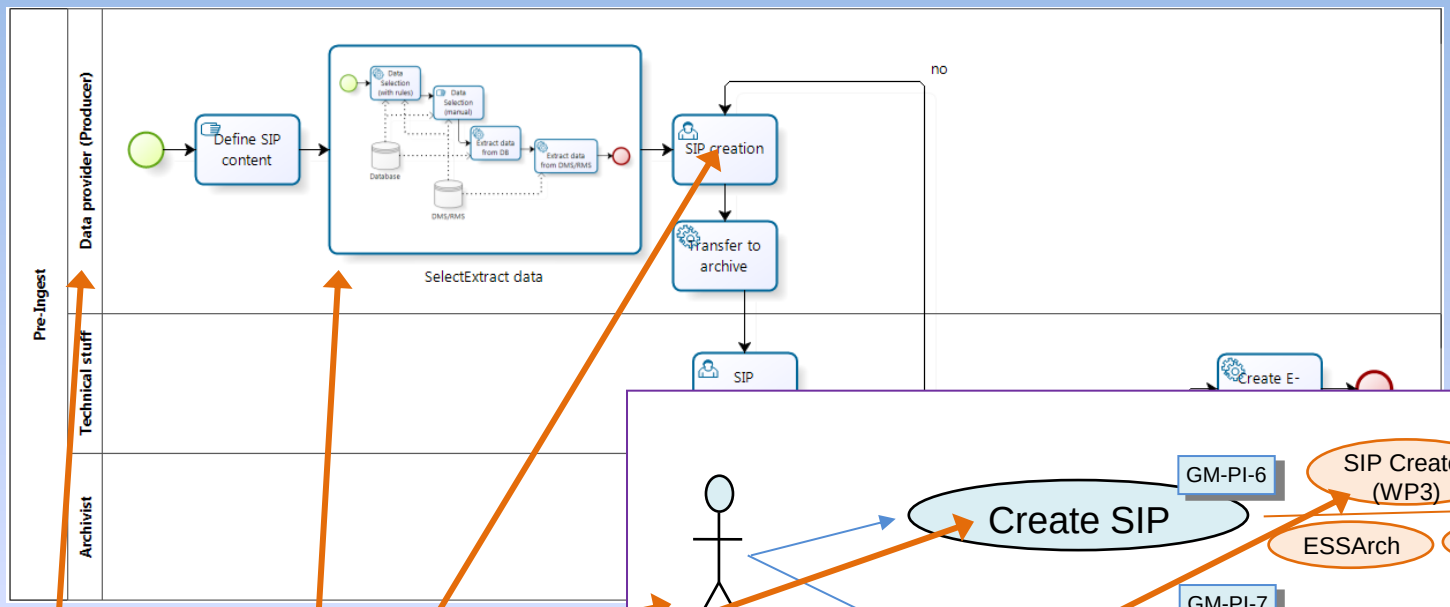


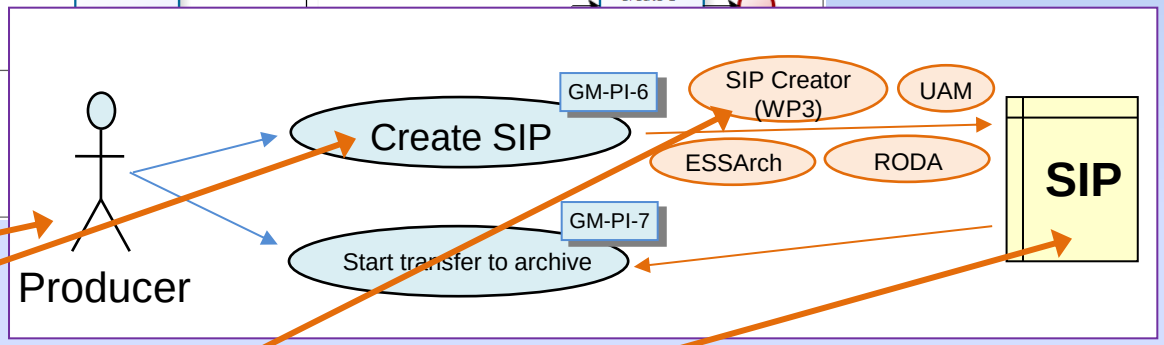
Conceptual Framework – Processes and Use Cases

Use Case Diagrams



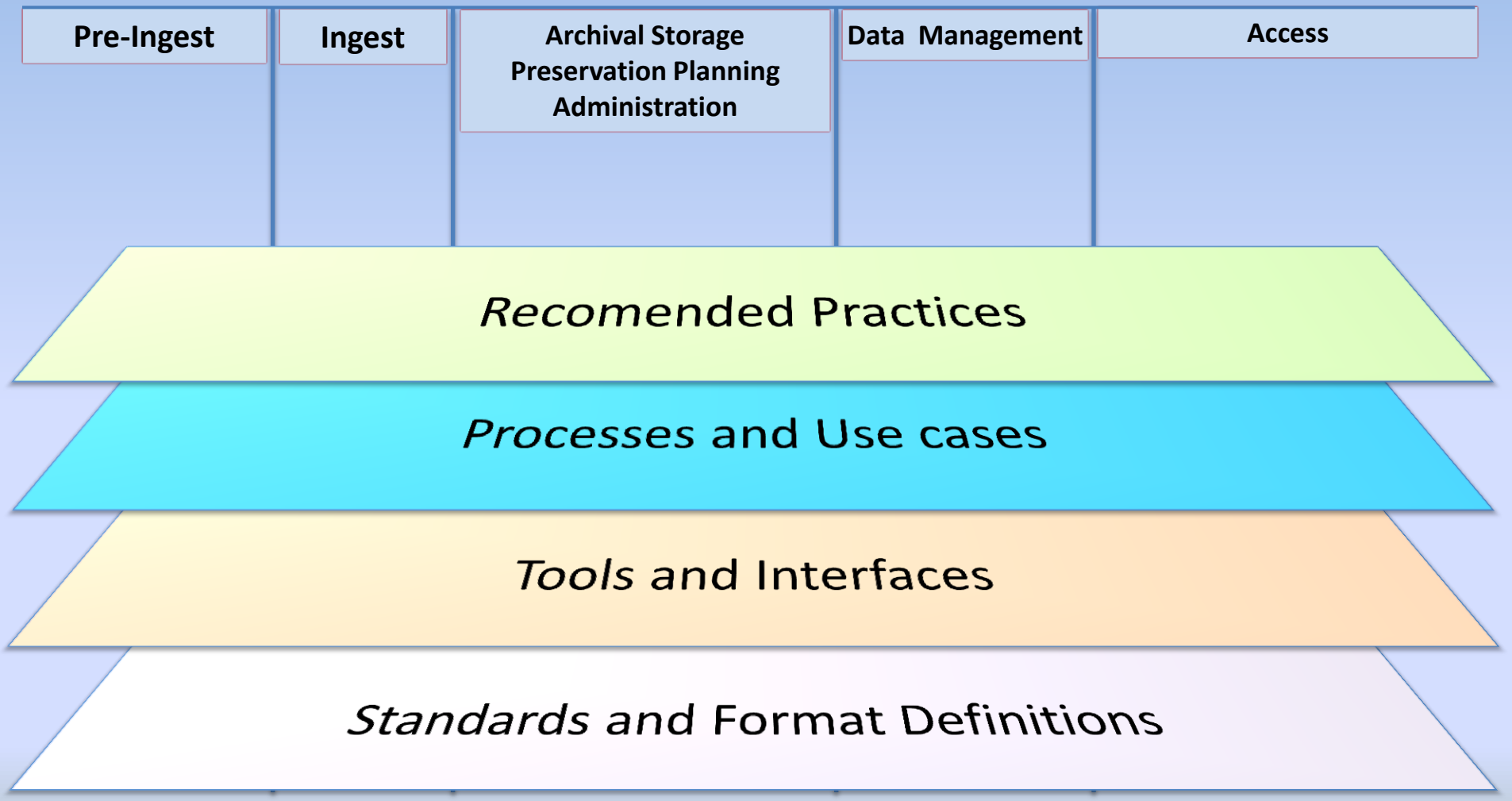
Conceptual Framework – Processes and Use Cases





Who does what?
In what order?
Using what kind of tool?
Required input?
Produced output?

Conceptual Framework



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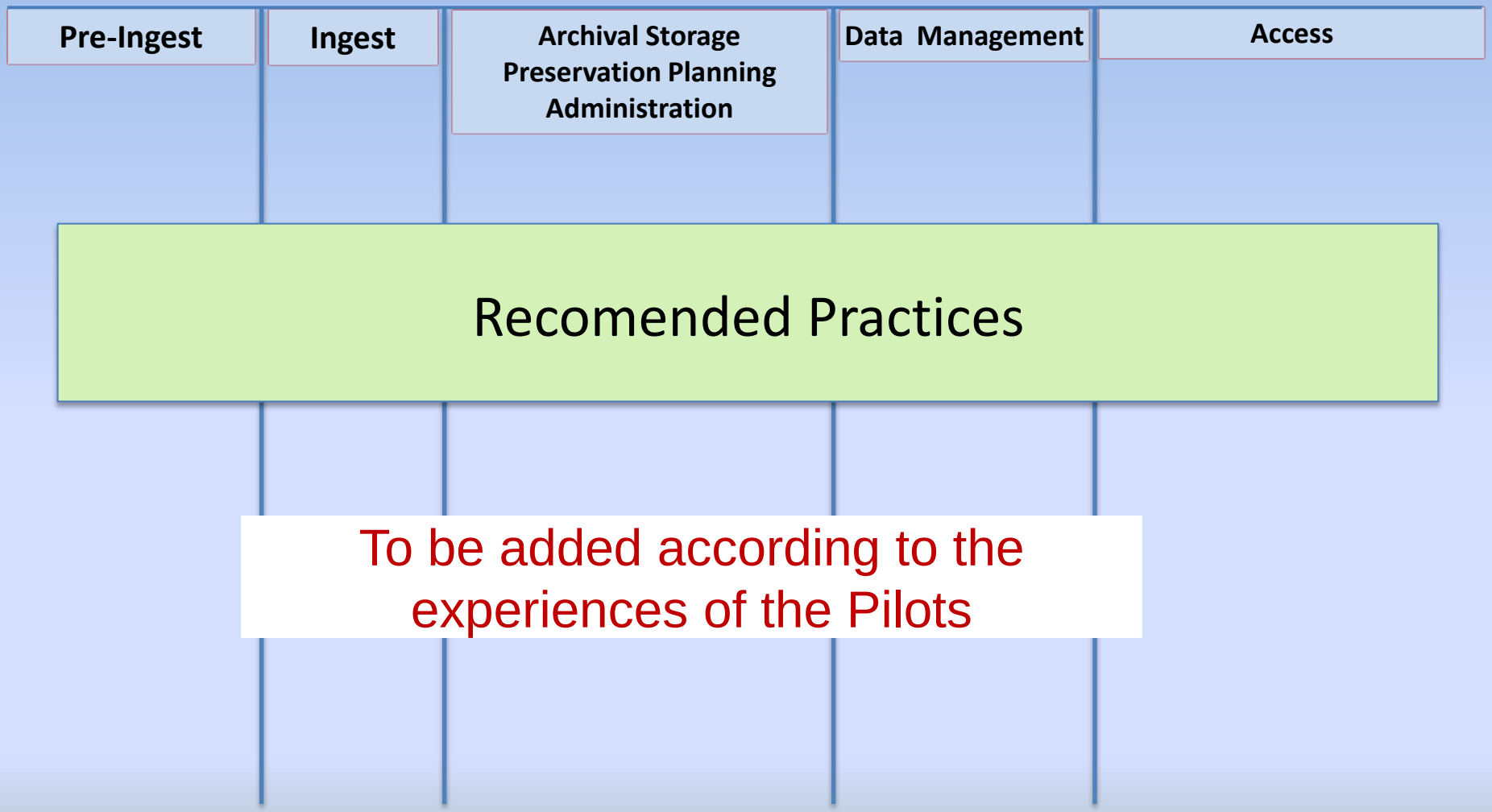


Used Methodology and Schedule

Surveys

- Questionnaire 1 (11 February, 2014)
  - Infrastructure overview
  - Process overview
  - Data overview
- Questionnaire 2 (3 March, 2014)
  - Detailed process information
  - Detailed tool description
  - General high-level requirements
- Input data profile survey (30 May, 2014)

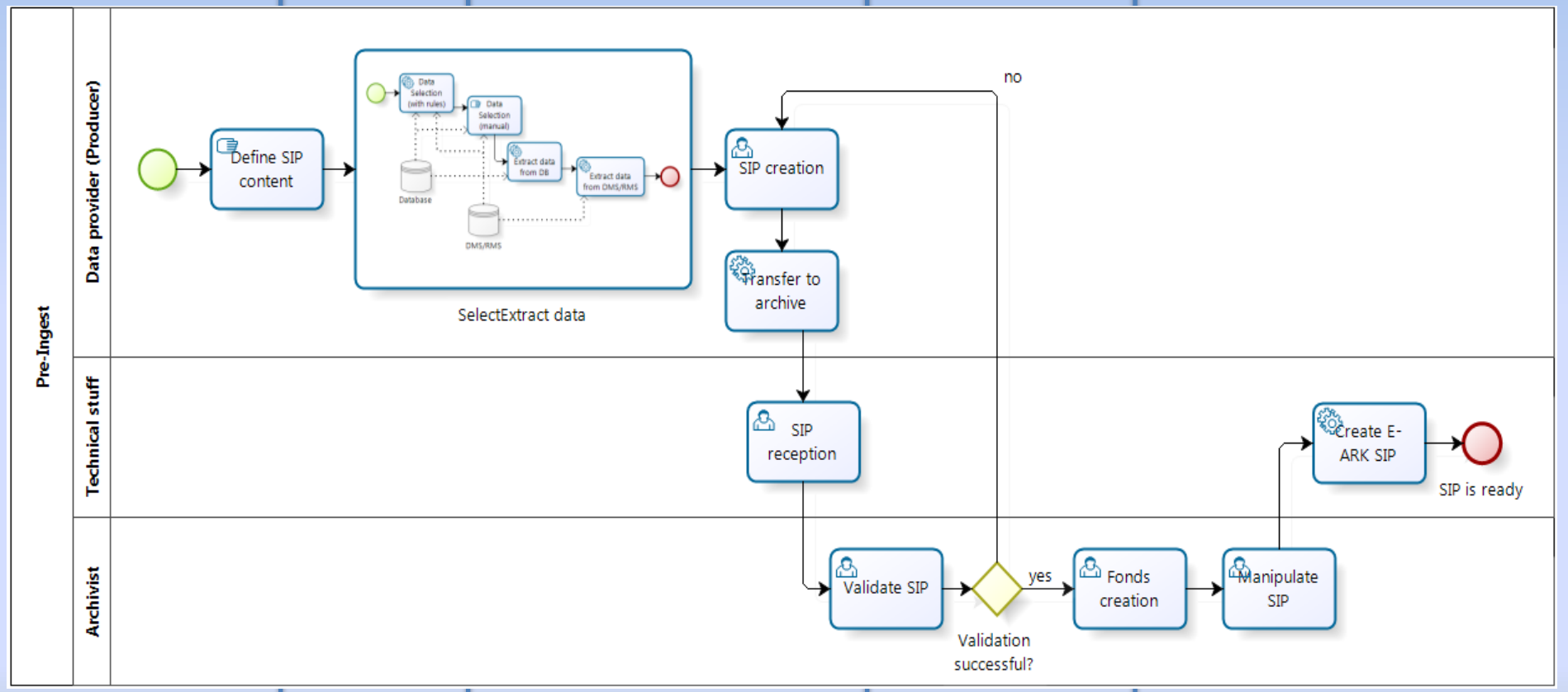
Draft model and Discussion

- Draft model sent out (26 May, 2014)
- Comments in e-mail
- E-ARK technical meeting (12-13 June 2014, Athens)

Final model and approval (July 2014)

Results – Processes and Use cases

Pre-Ingest



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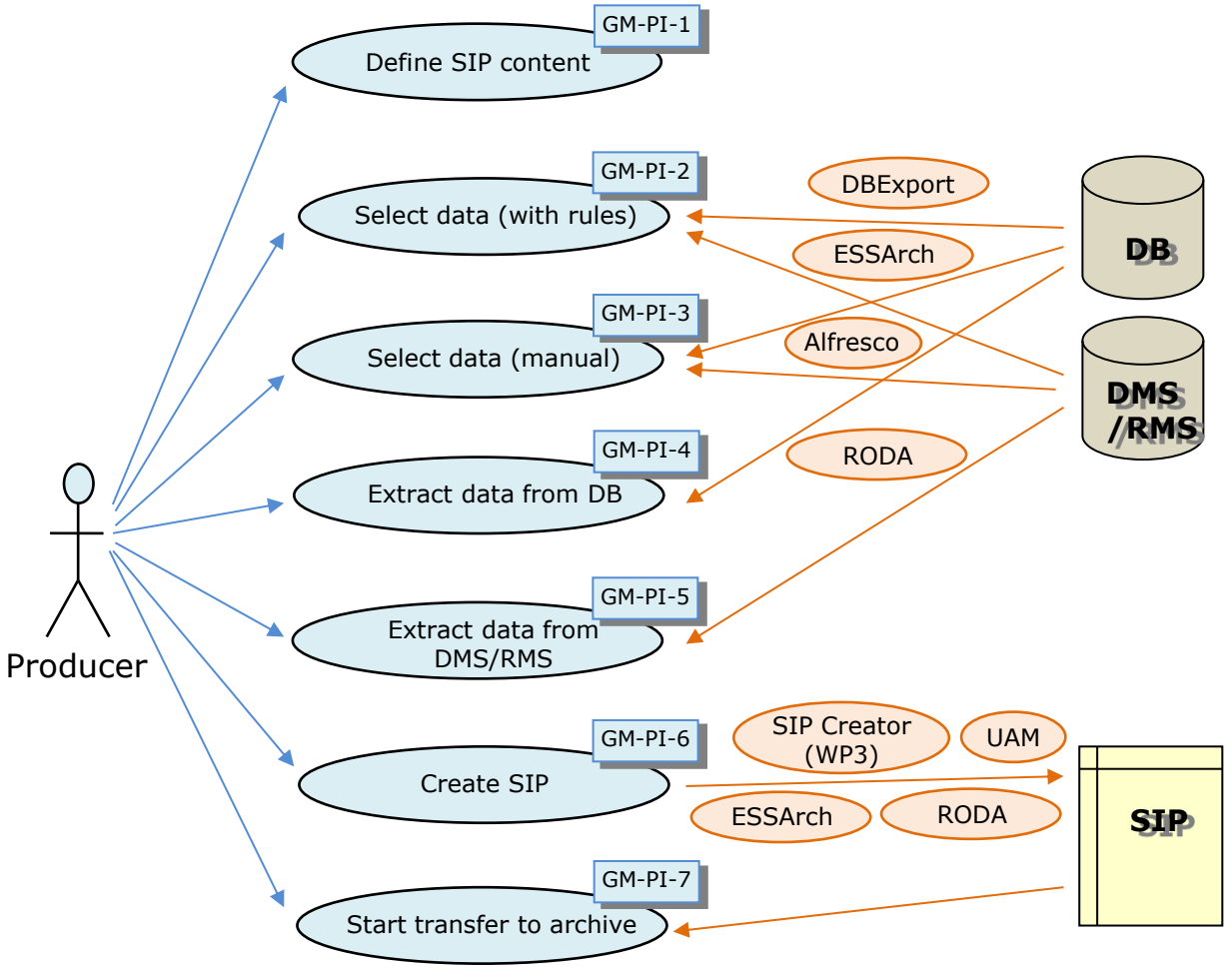

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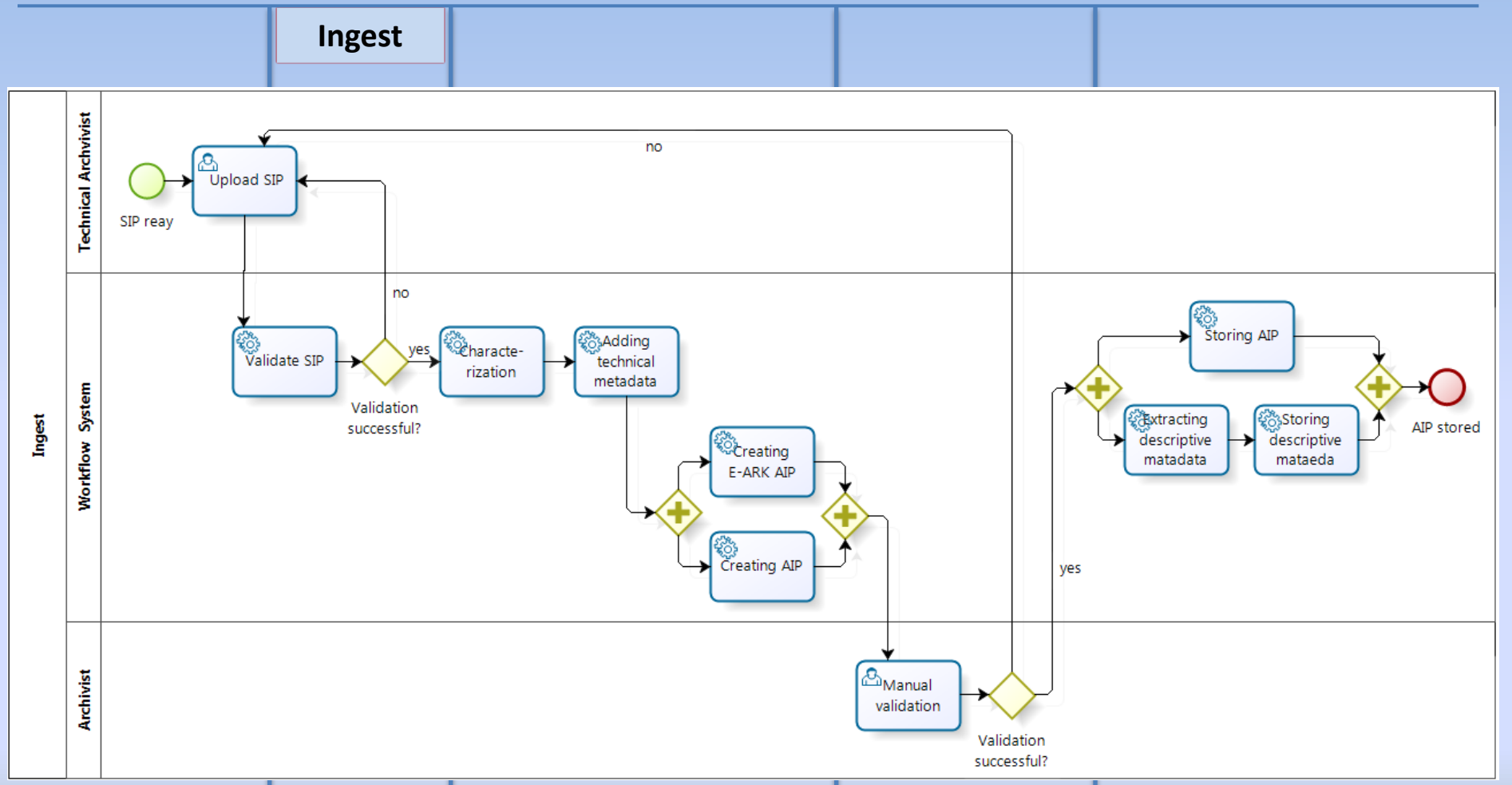

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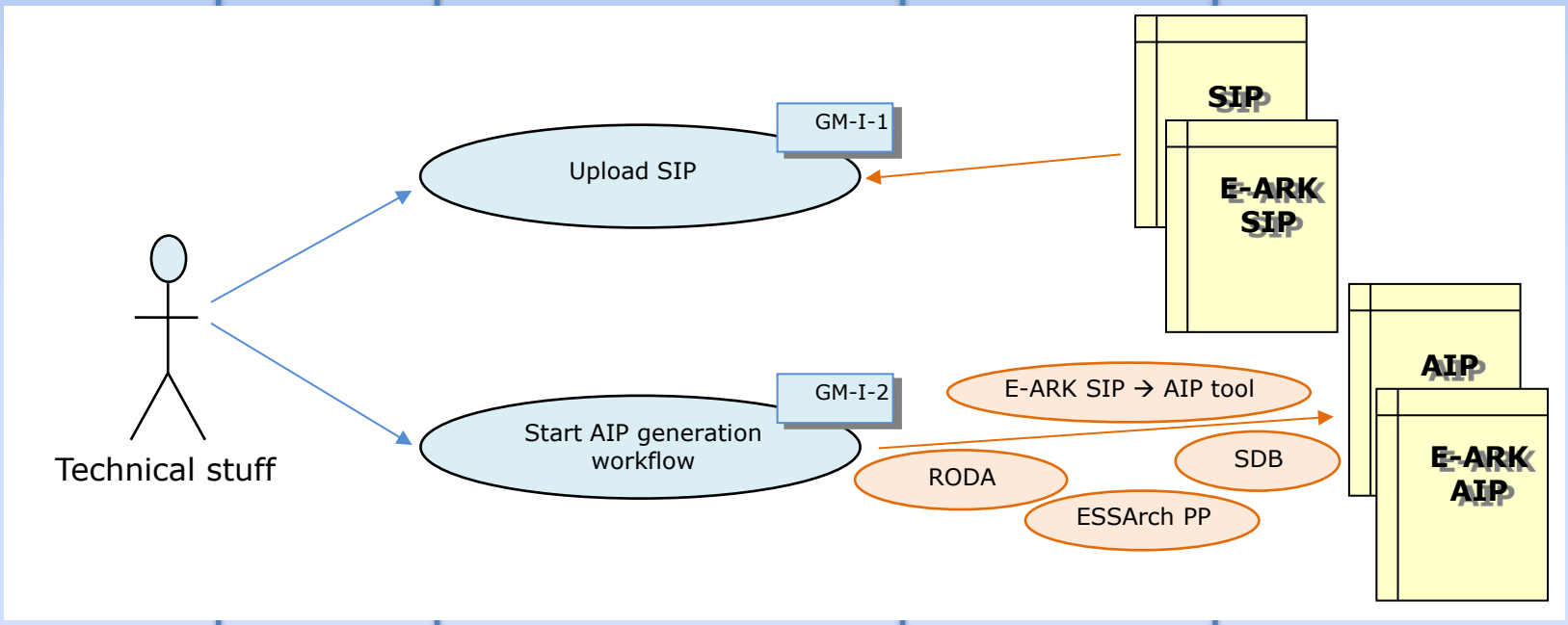

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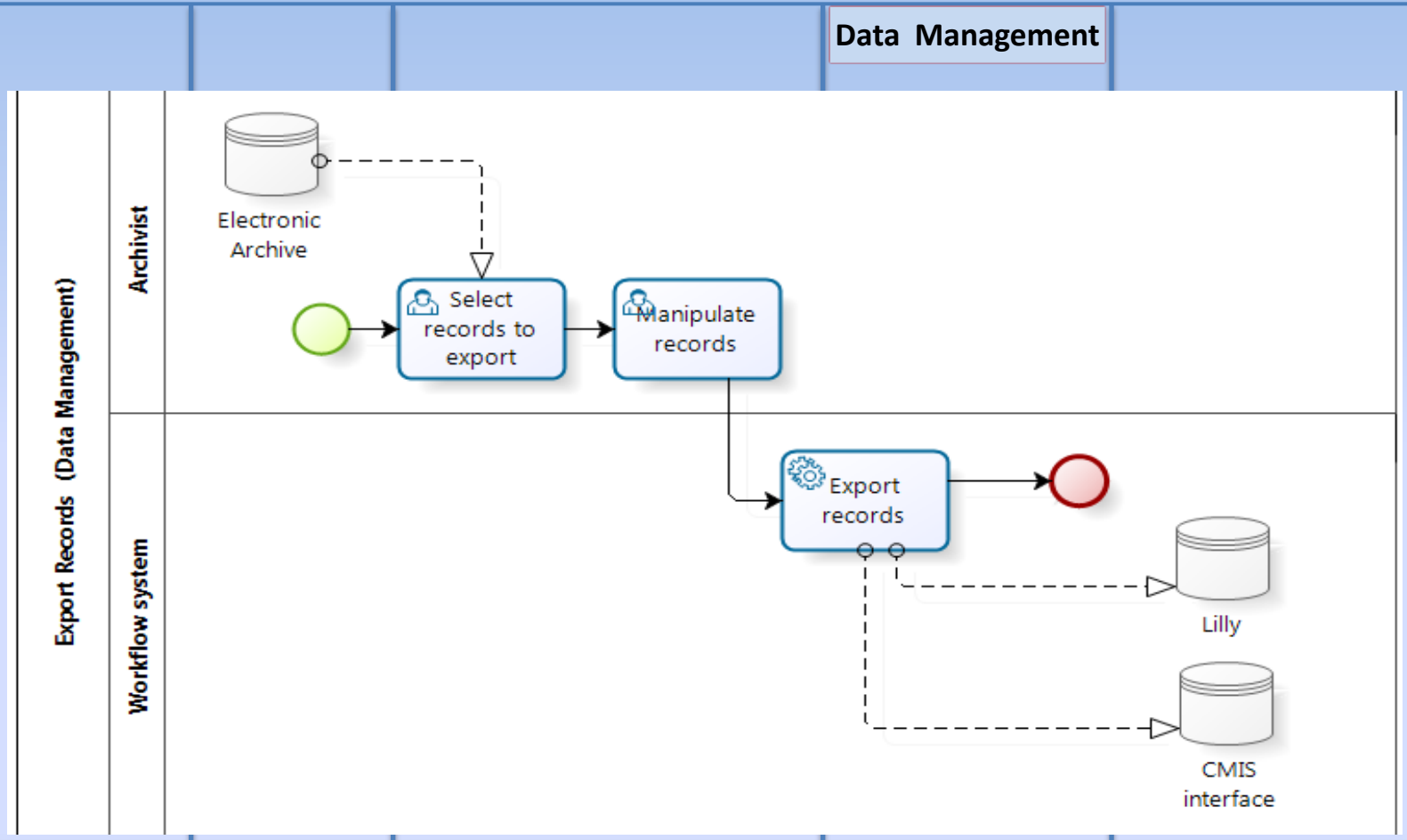

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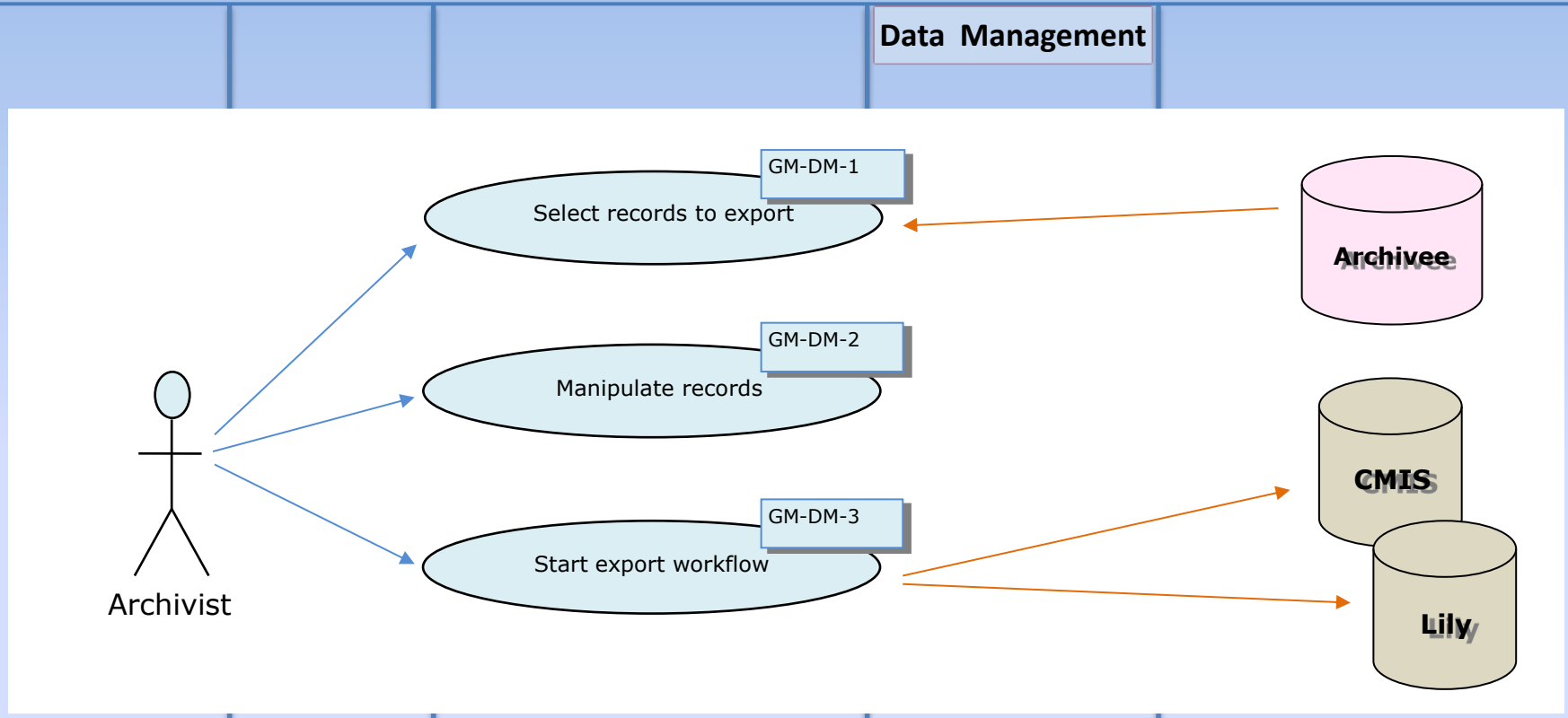
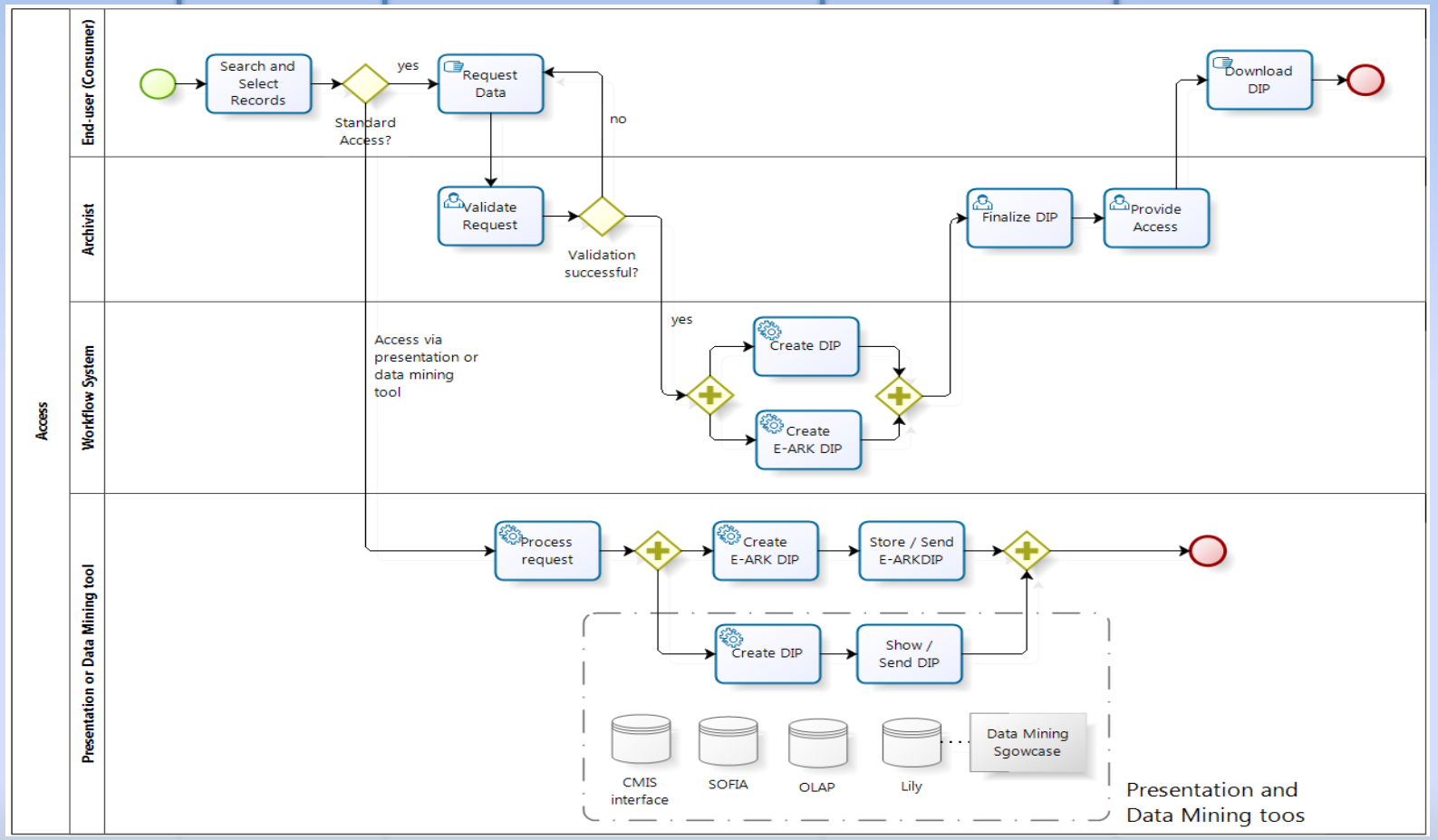
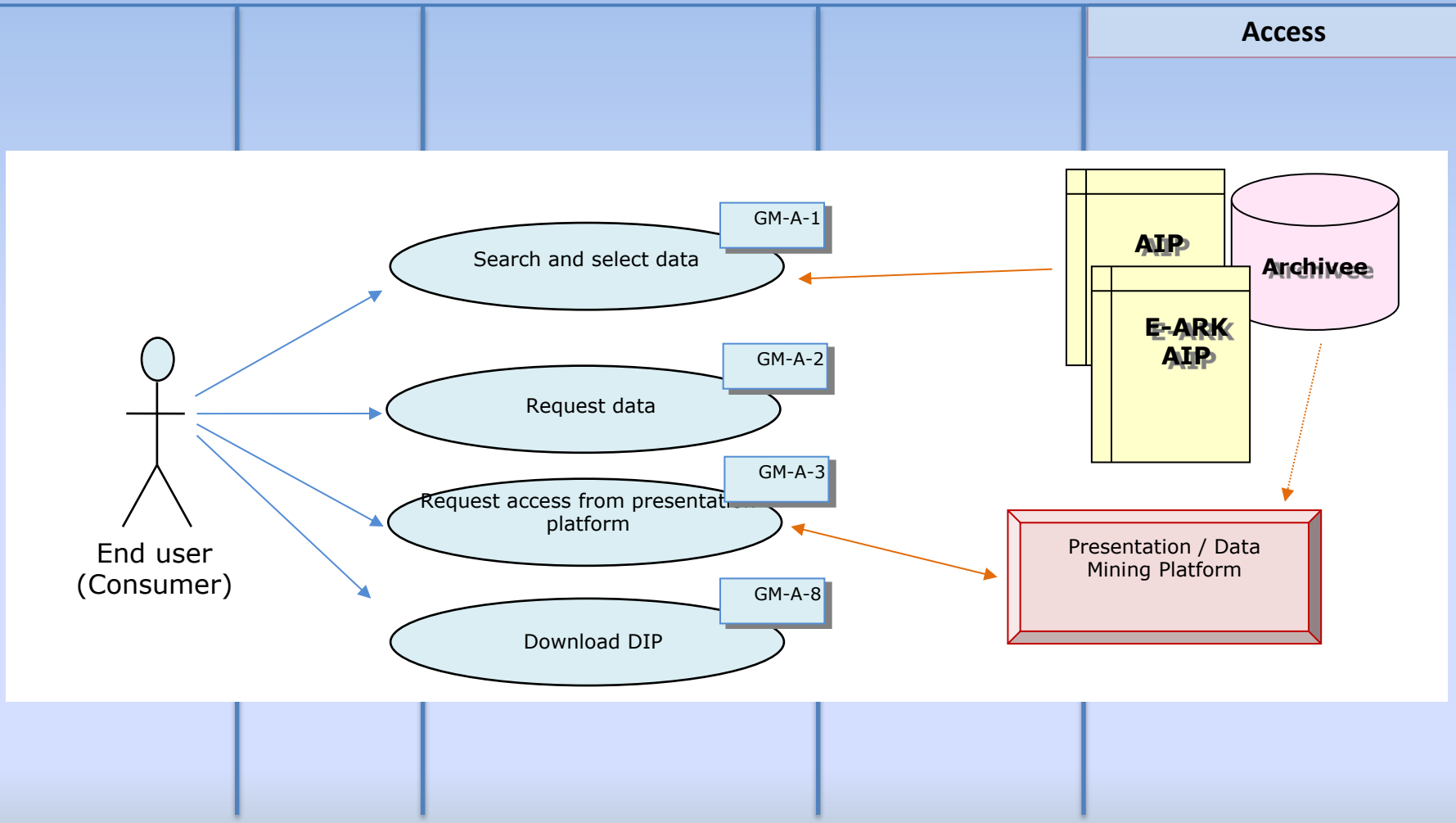


Results – Processes and Use cases

Access



Results – Processes and Use cases



General Model – Work package overview

Work Package - OAIS Process cross reference table	
E-ARK	General Model

Work Package		Pre-Ingest	Ingest	Archival Storage Preservation	Data Management	Access
WP 1	Project Co-Ordination					
WP 2	Use Cases and Pilots					
WP 3	Transfer of Records to Archives					
WP 4	Archival Records Preservation					
WP 5	Archival Records Access Services					
WP 6	Archival Storage, Services, and Integration					
WP 7	Evaluation & Assessment					
WP 8	Dissemination and Exploitation					

General Model – Pilot overview

Pilot - OAIS Process cross reference table	
E-ARK	General Model

Full-scale Pilot		Pre-Ingest	Ingest	Archival Storage Preservation	Data Management	Access
Pilot 1	SIP creation of relational databases (Danish National Archives)	■	■			■
Pilot 2	SIP creation and ingest of records (National Archives of Norway)	■	■	■	■	■
Pilot 3	Ingest from government agencies (National Archives of Estonia)	■	■	■	■	■
Pilot 4	Business archives (National Archives of Estonia, Estonian Business Archives)	■	■	■	■	■
Pilot 5	Preservation and access to records with geodata (National Archives of Slovenia)	■	■	■	■	■
Pilot 6	Seamless integration between a live document management system and a long-term digital archiving and preservation service (KEEP SOLUTIONS)	■	■	■	■	■
Pilot 7	Access to databases (National Archives of Hungary)	■	■	■		■

■ Focus of the pilot

■ Elements also used/tried within the pilot

Cross Reference Tables – Use case view

Use Case View	
E-ARK	General Model

Use Case		Pilots							Work Package				Tools
		Pilot 1 (DNA)	Pilot 2 (NAN)	Pilot 3 (NAE)	Pilot 4 (EBA)	Pilot 5 (NAS)	Pilot 6 (KEEP)	Pilot 7 (NAH)	WP3	WP4	WP5	WP6	
Pre-Ingest													
GM-PI-1	Define SIP content	x	x	x	x	x	x	x					
GM-PI-2	Select data (with rules)	x		x	x		x	x	x				DBExport tool
GM-PI-3	Select data (manual)		x	x	x	x			x				DBExport tool
GM-PI-4	Extract data from DB	x				x		x	x				ESSArch Tools
GM-PI-5	Extract data from DMS/RMS		x	x	x		x		x				ESSArch Tools, Noark, Alfresco, RODA
GM-PI-6	Create SIP	x	x	x	x	x	x	x	x				DBExport tool, ESSArch Tools, SIP creation tools, RODA-in, UAM
GM-PI-7	Start transfer to archive	x	x	x	x	x	x	x					
GM-PI-8	SIP reception	x	x	x	x	x	x	x					
GM-PI-9	Validate SIP	x	x	x	x	x	x	x	x				SIP to AIP conversion tools
GM-PI-10	Enhance SIP	?	?	?	?	?	?	?	x				
GM-PI-11	Create fond(s)	x	x	x	x	x	x	x					SDB, EPP, RODA, AIS

Cross Reference Tables – Tools view

Tools View	
E-ARK	General Model

		Pilots							Work Package			
Tool	**Description**	Pilot 1 (DNA)	Pilot 2 (NAN)	Pilot 3 (NAE)	Pilot 4 (EBA)	Pilot 5 (NAS)	Pilot 6 (KEEP)	Pilot 7 (NAH)	WP3	WP4	WP5	WP6
Alfresco	Alfresco is the most used open source content and records management platform worldwide. While its main use is in content creation, management and access the platform will also be used to pilot the E-ARK records export recommendations and providing crucial source data for the E-ARK service.											
ESSArch Tools (ET)	ET is a stand-alone application that allows producers and preservation organizations to prepare, create, deliver and receive SIPs.											
DBExport Tool	DBExport is used to create SIP packages in SIARD format based on the content in relational database systems and provide a first level of integrity and technical checks.											
E-ARK SIP creation tools	SIP creation tools (to be developed in WP3) implement the final Pan-European SIP format based on the Alfrexco platform, ESSArch Tools (ET) suite and the DBExport tool.											
Universal Archiving Module (UAM)	UAM allows data owners to prepare the transfer themselves – import data from records and content management systems; rearrange, classify and further describe the contents of the ransfer; validate the transfer according to the rules established by the National Archives of Estonia and finally create SIP packages to be transferred to the digital repository.											

Thank you!