High Level Architecture

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Workshop with ROSPATENT
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Current system set

Formalities & Support

EPASYS
EP files

MASAI
PCT files

ADM
All search work

PHOENIX
Electronic dossiers

Examiner Applications

EPOQUE
Search & view

Dossier Management
Production

Trimaran
Communications

DocTool /Clip-on
Classification

Production

MUSE
Examination

SDMS
search results

Patent Data Collections

DocDB
Patent family bibliographic data

BNS
Patent images

Various Databases
Searchable data

General Administration

FIPS
Finance & Personnel

Post-Grant
Fees

Lotus Notes
e-mail etc.

CDS
Client directory

External Services

OCR & Publication
Contractors

Online Filing
EP/PCT files

Register
EP files

epoquenet
National Offices

esp@cenet
Public access

Open Patent Services
3rd parties

Each system is self-contained

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EPASYS **EP files**	Management of European Patents
MASAI **PCT files**	Management of PCT (Chapter I and Chapter II)
ADM **All search work**	Management of search work (EP, PCT, National)
PHOENIX **Electronic dossiers**	Electronic dossier management
EPOQUE **Search & view**	Examiners search tools
Trimaran **Communications**	Writing of search reports and examiners' communications
esp@cenet **Public access**	Public internet access to all patent documents

Applications are independent and built in 'silos'
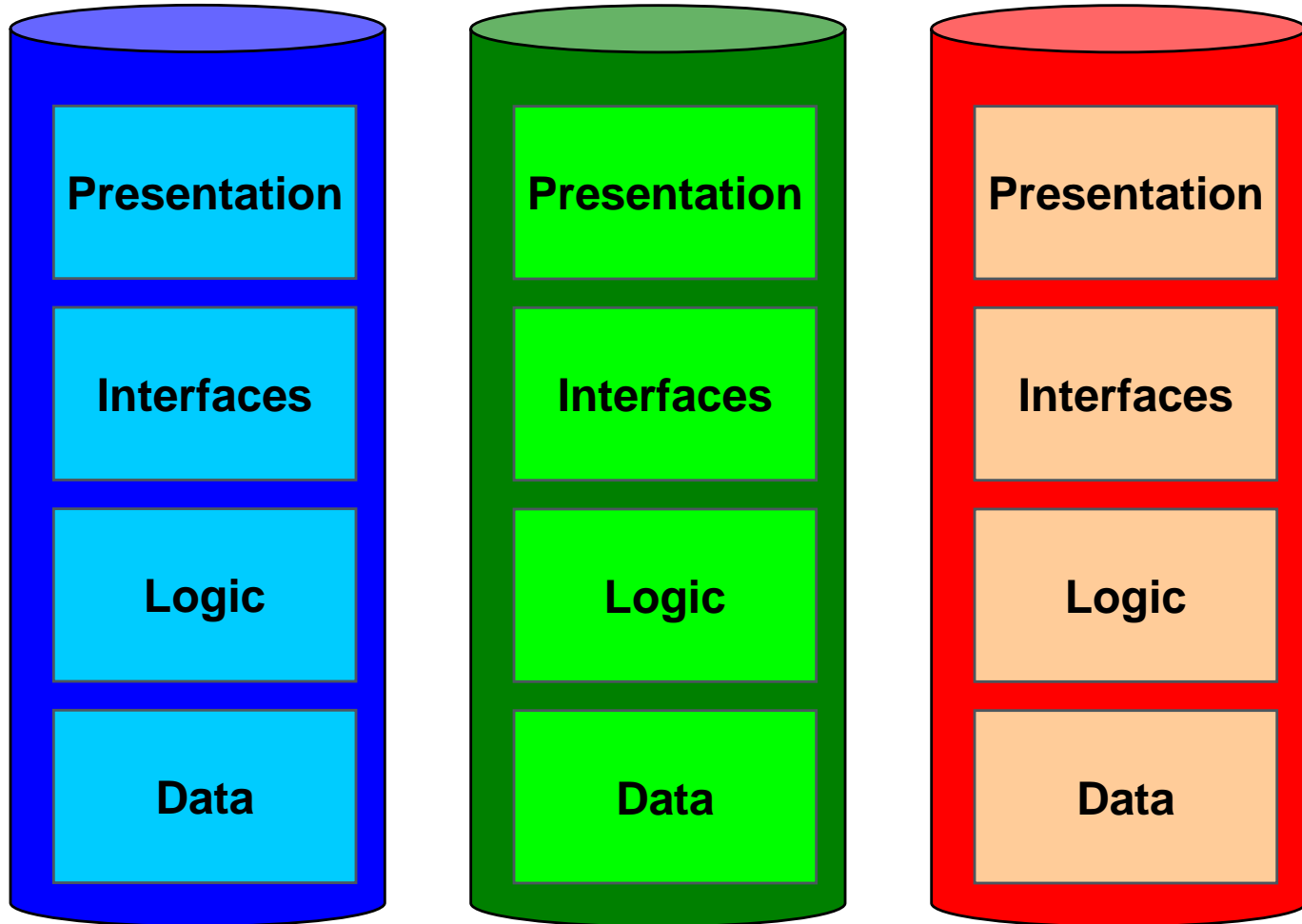
High-Level Architecture (HLA)
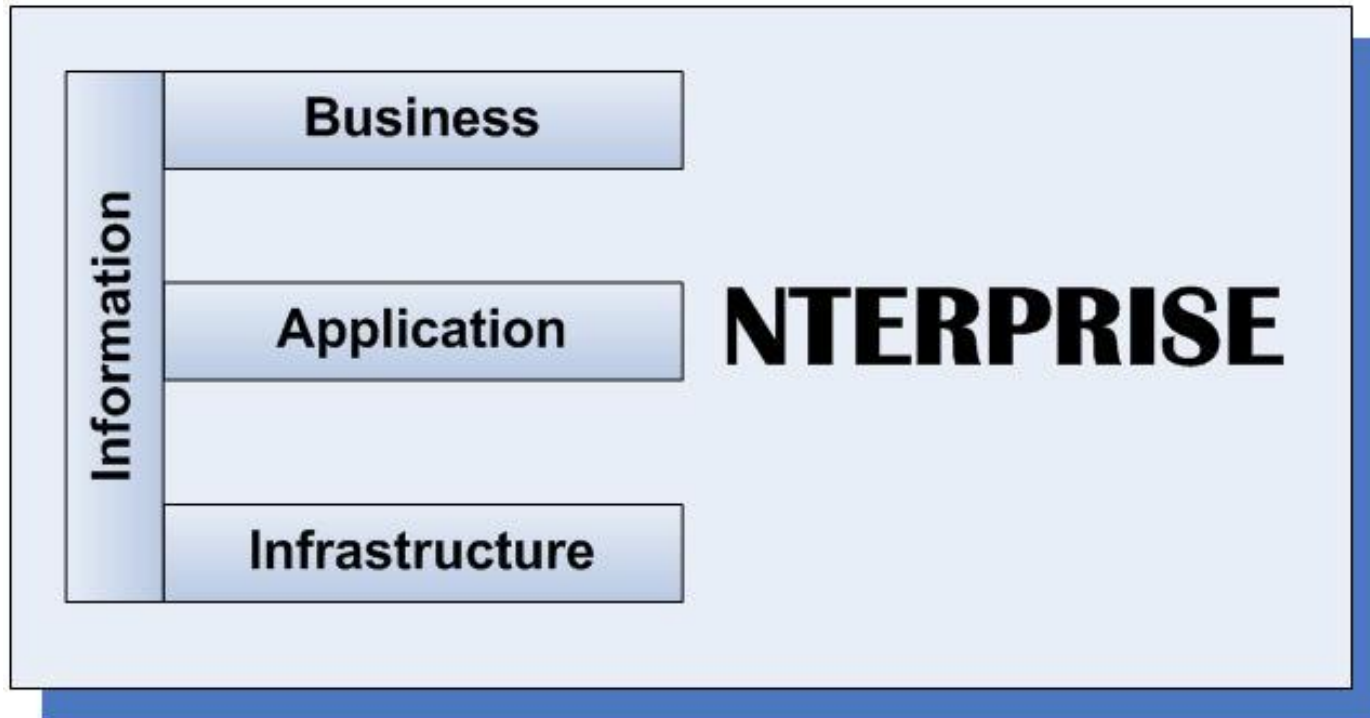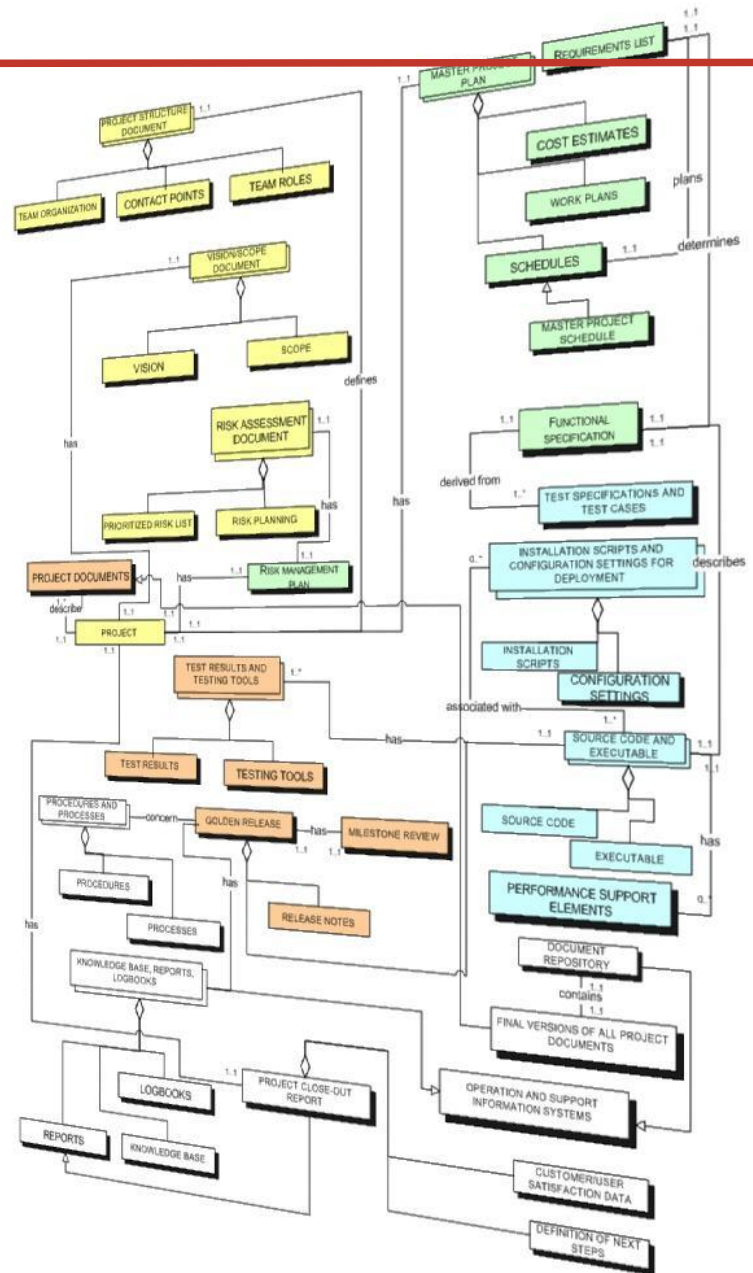
Business Architecture
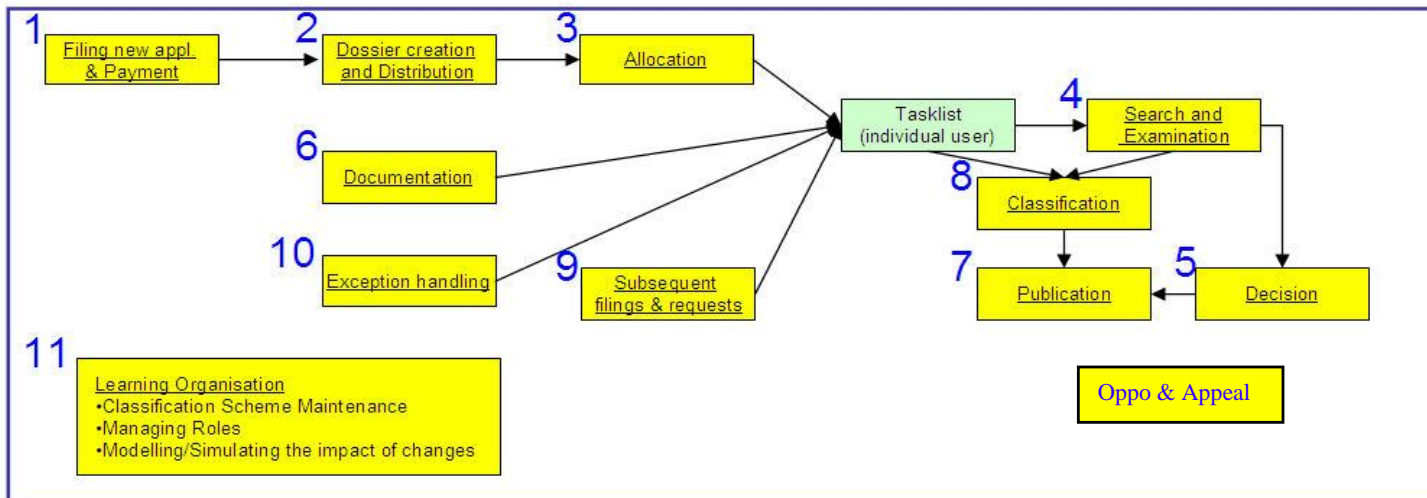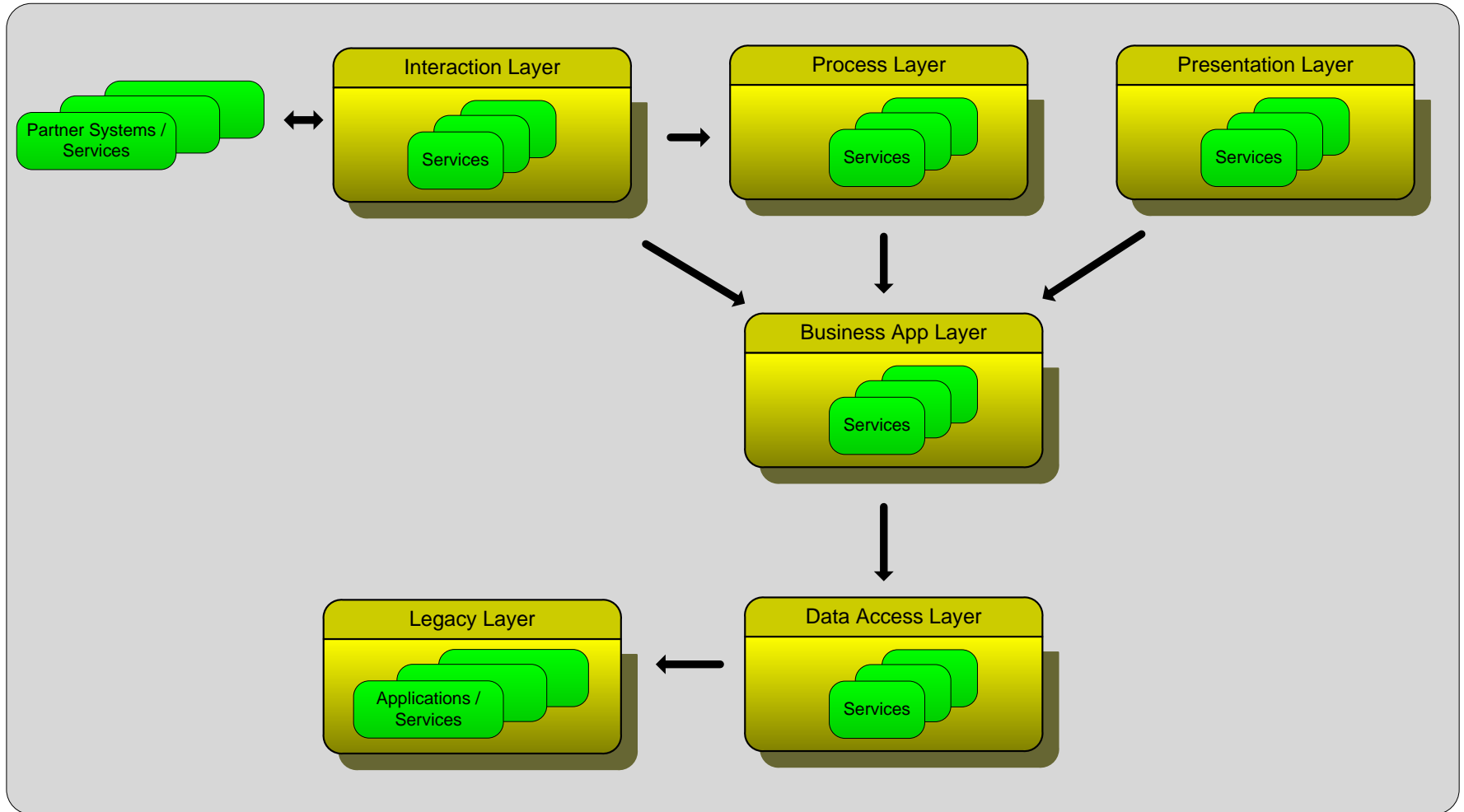
Information Architecture

One logical data model, split into information domains:

- dossier
- collection
- social
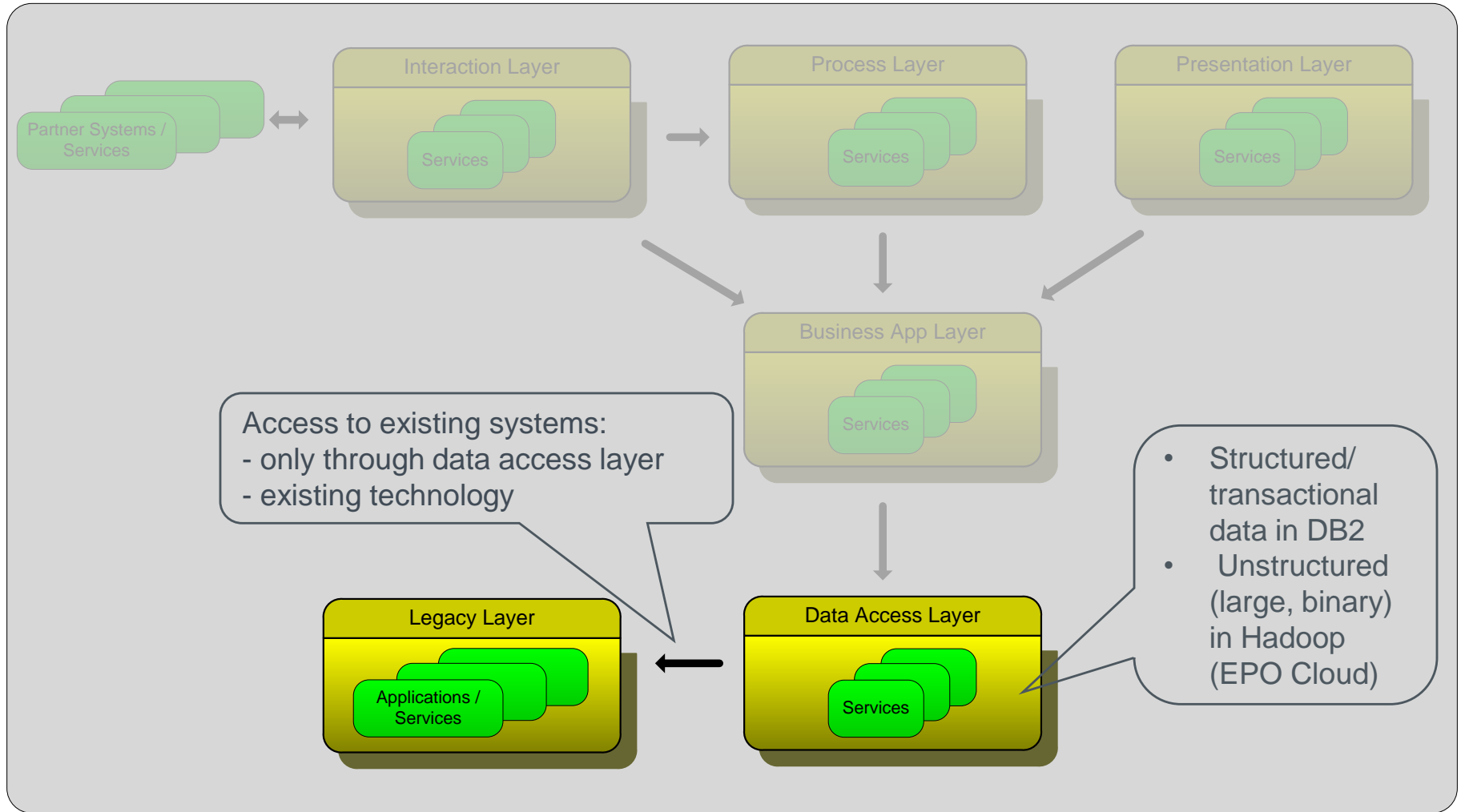- user/staff/account
- meta-data
- [...]

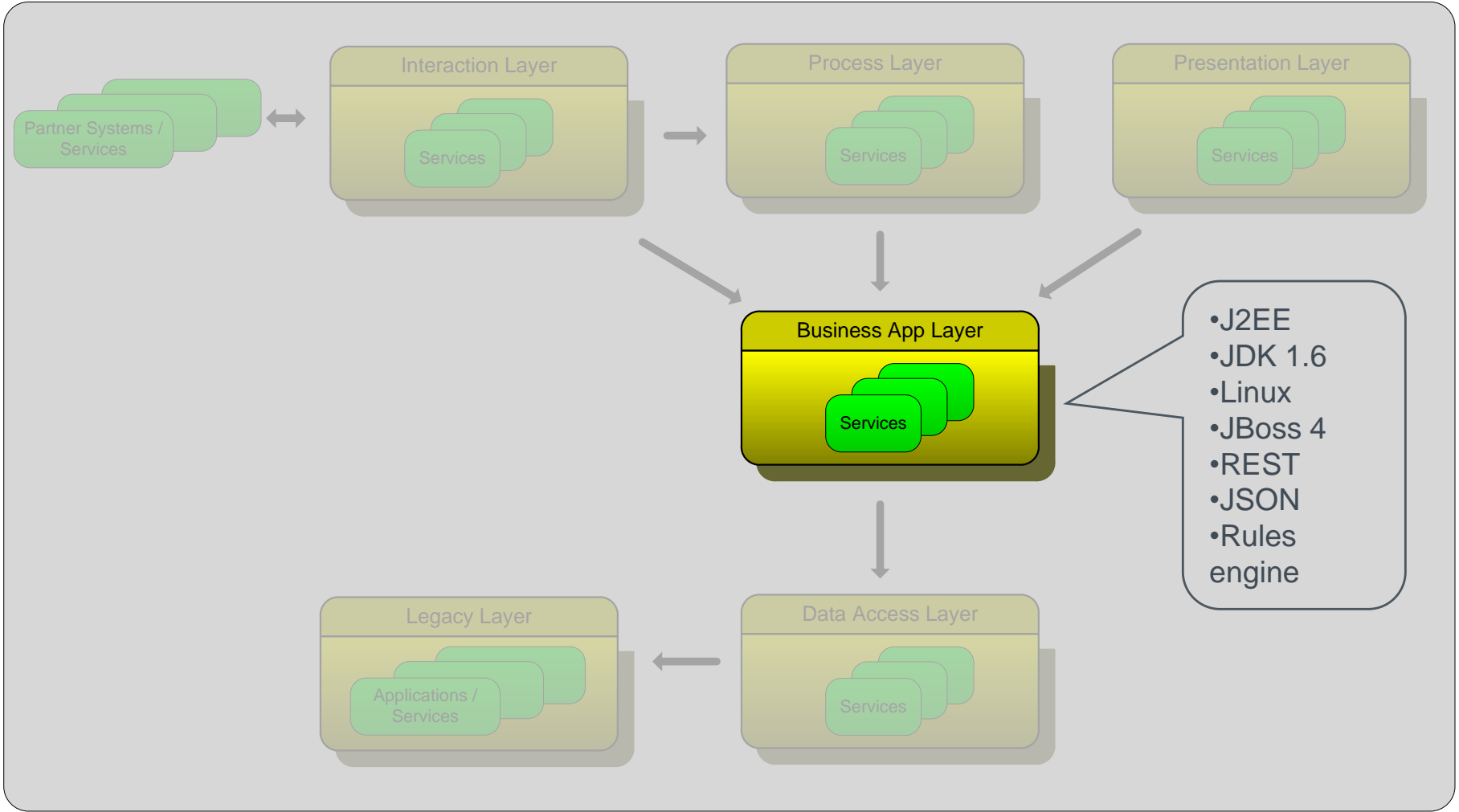Detailed analysis of these domains mainly in the e-dossier project

Application Architecture: Service-Oriented Architecture

Application Architecture: Data Access Layer

Interaction Layer

Services

Partner Systems / Services

Process Layer

Services

Presentation Layer

Services

Business App Layer

Services

Access to existing systems:
- only through data access layer
- existing technology

Legacy Layer

Applications / Services

Data Access Layer

Services

- Structured/ transactional data in DB2
- Unstructured (large, binary) in Hadoop (EPO Cloud)

Application Architecture: Business App Layer

Interaction Layer

Services

Partner Systems / Services

Process Layer

Services

Presentation Layer

Services

Business App Layer

Services

- J2EE
- JDK 1.6
- Linux
- JBoss 4
- REST
- JSON
- Rules engine

Legacy Layer

Applications / Services

Data Access Layer

Services

Application Architecture: Process Layer

Interaction Layer

Partner Systems / Services

Services

Process Layer

Services

Presentation Layer

Services

Business App Layer

Services

- Separation of task control and execution
- Workflow and rules engine

Legacy Layer

Applications / Services

Data Access Layer

Services
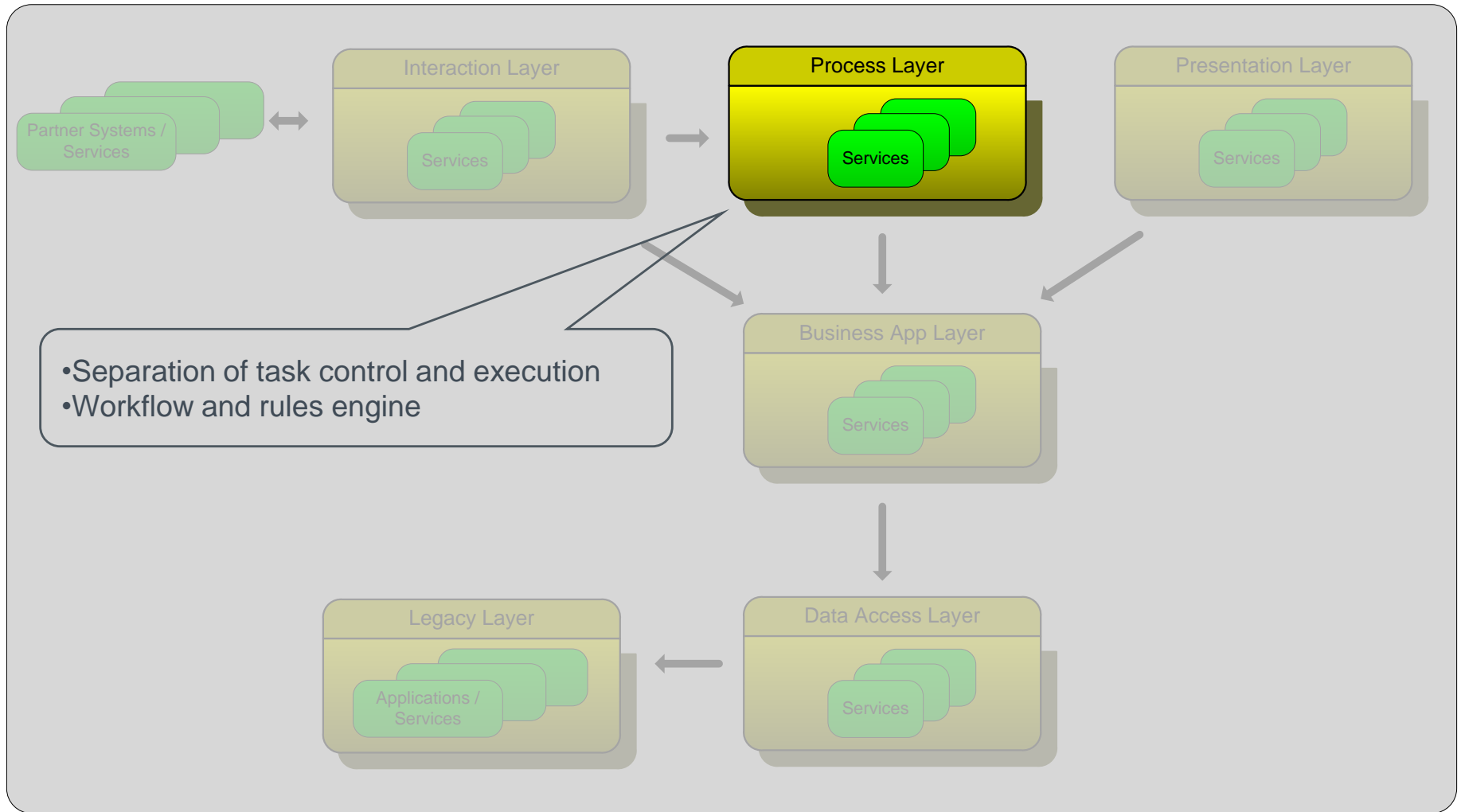
Application Architecture: Presentation Layer

Partner Systems / Services

Interaction Layer
Services

Process Layer
Services

Presentation Layer
Services

Business App Layer
Services

•Browser based
•WEB 2.0
•AJAX
•REST
•Javascript
•JSON

Legacy Layer
Applications / Services

Data Access Layer
Services
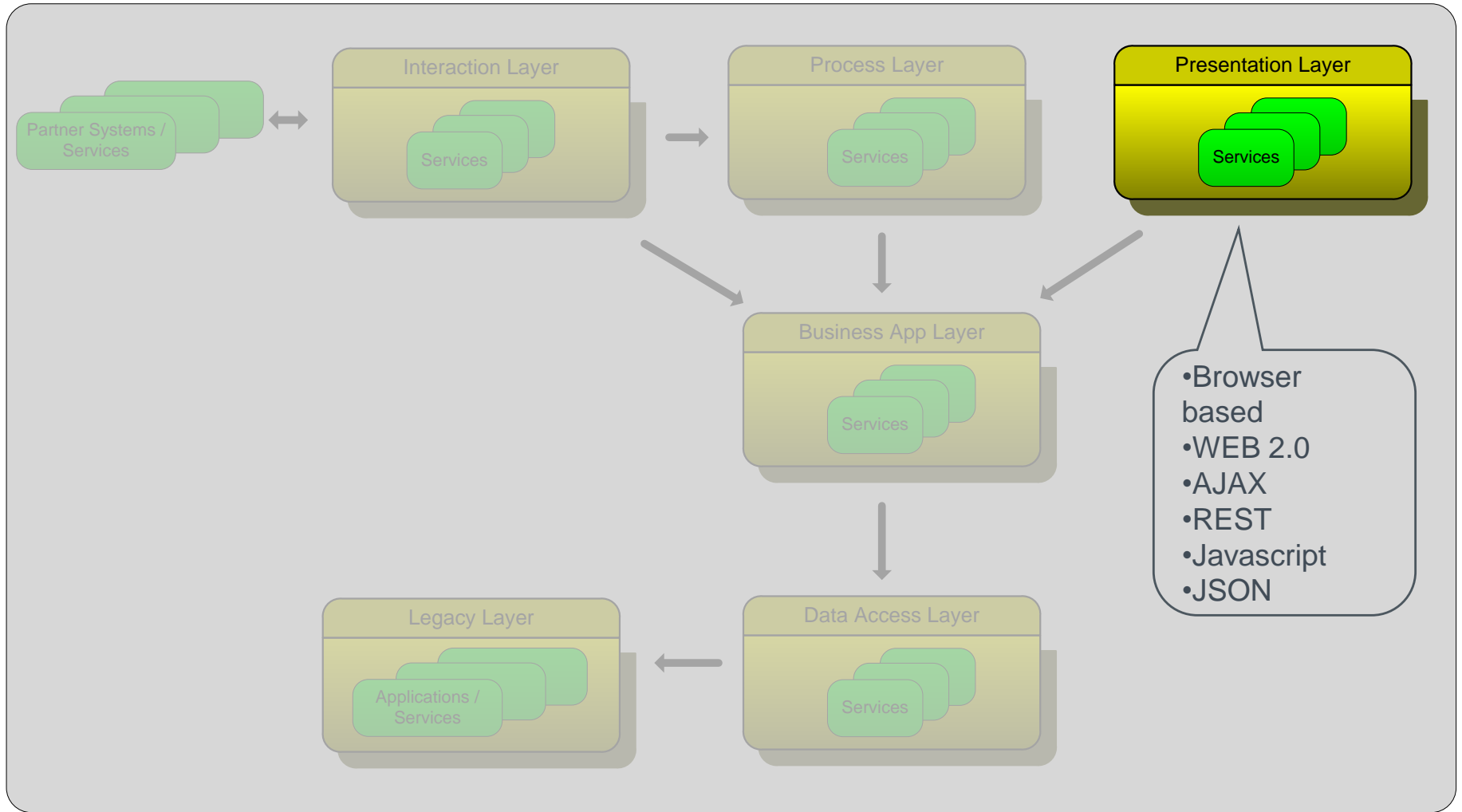
Application Architecture: Interaction Layer

Partner Systems / Services

Interaction Layer

Services

Process Layer

Services

Presentation Layer

Services

Responsible for communication to external systems (e.g., IP5)

Business App Layer

Services

Legacy Layer

Applications / Services
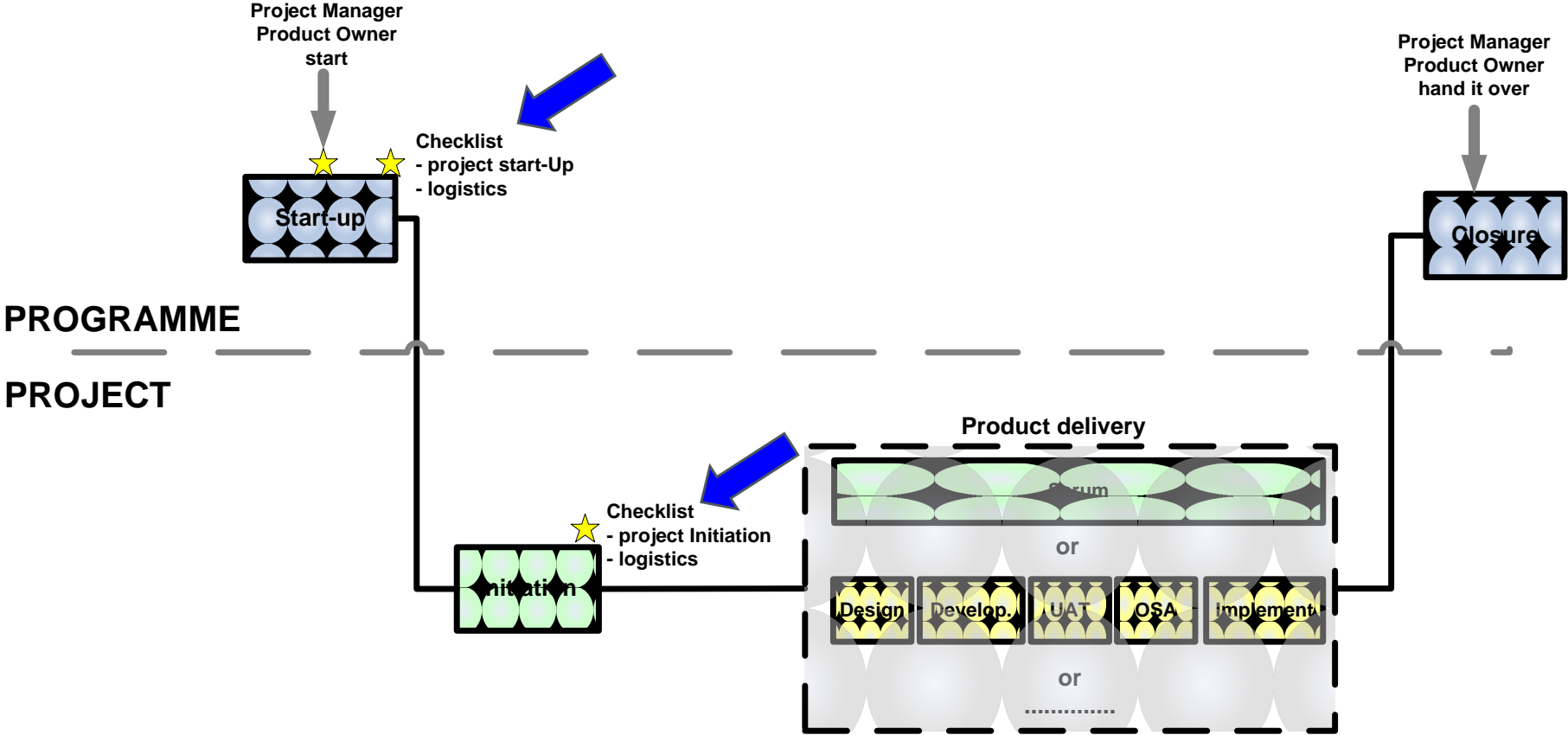
Data Access Layer

Services
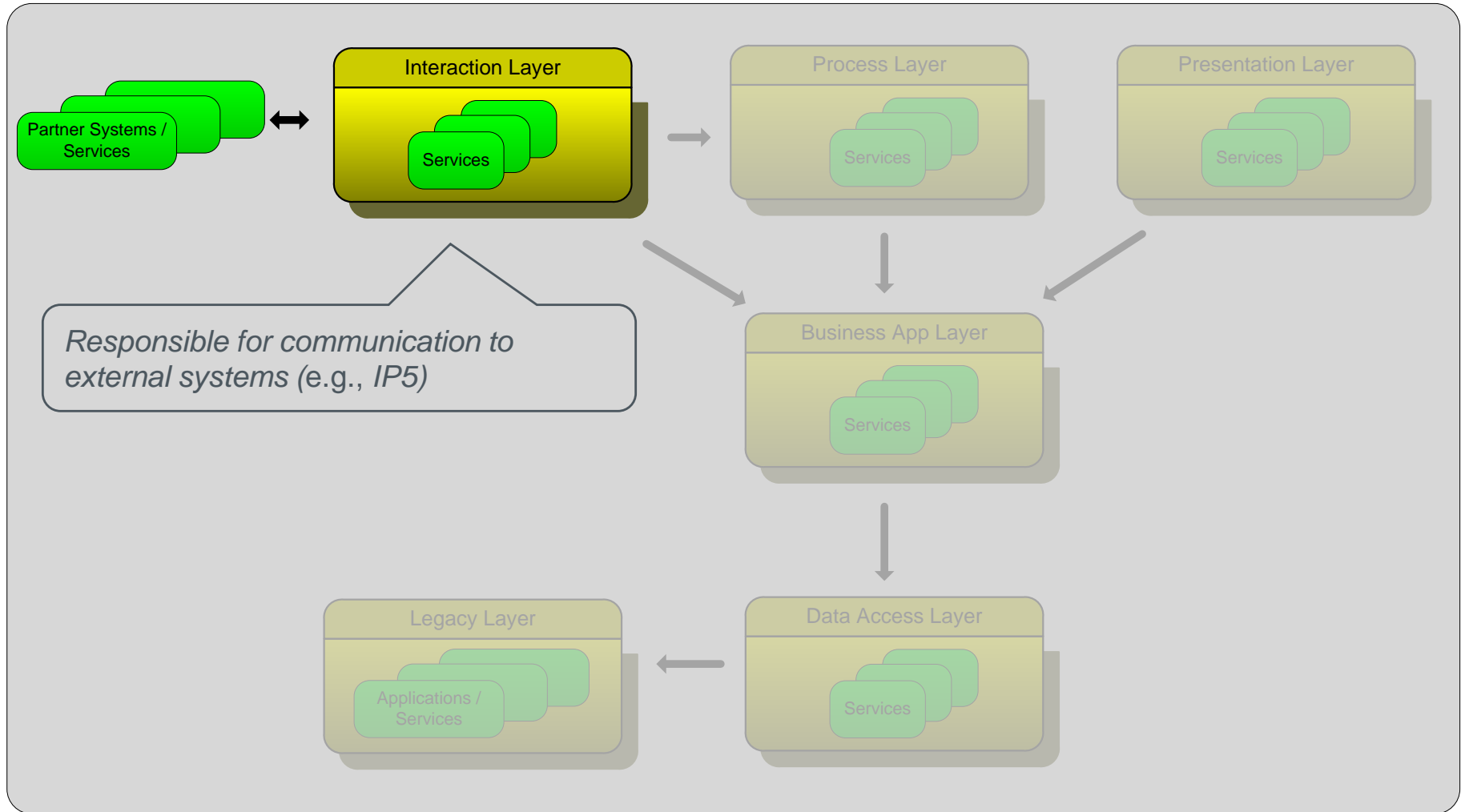
Development Toolset

- **Based on RefApp**
- **Extended with JavaScript tools**
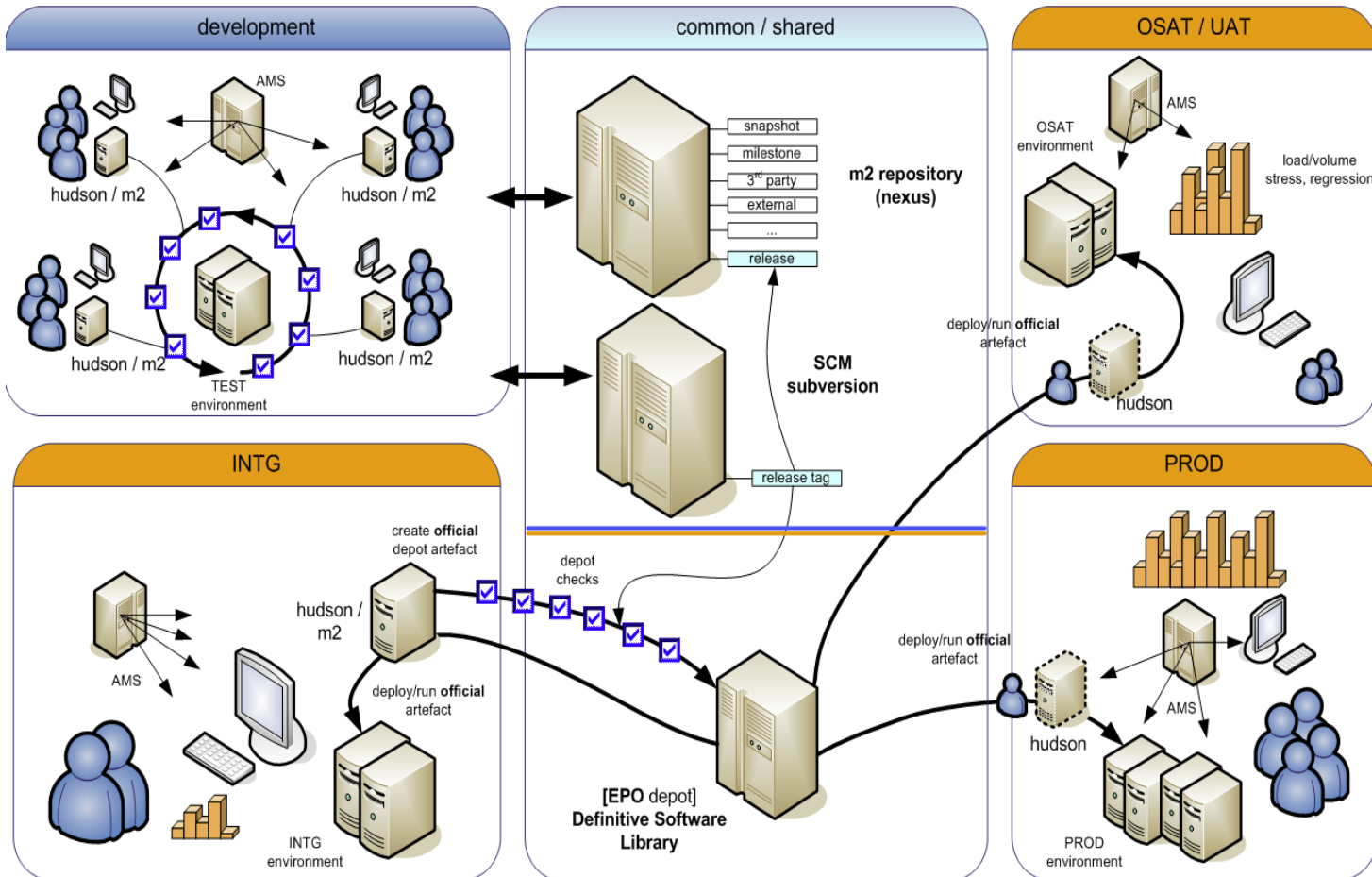
Project flow and Checklists

Change Procedure (Change Request)

Create
main change request

Close
main change request

Start-up

Closure

Change-request children
for the deliverables of every iteration

PROGRAMME

PROJECT

Product delivery

Scrum

or

Initiation

Design | Develop. | UAT | OSA | Implement

or

....
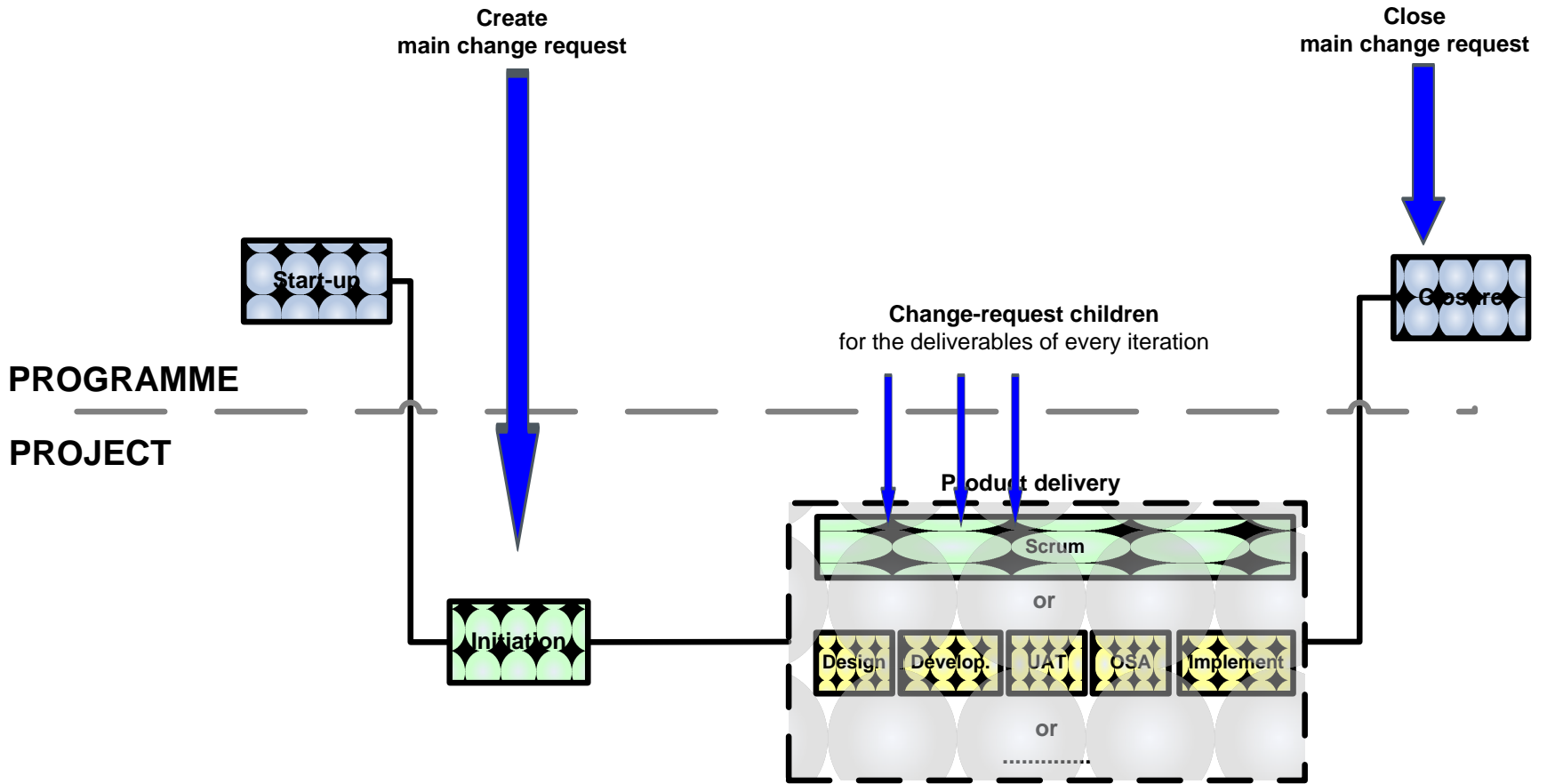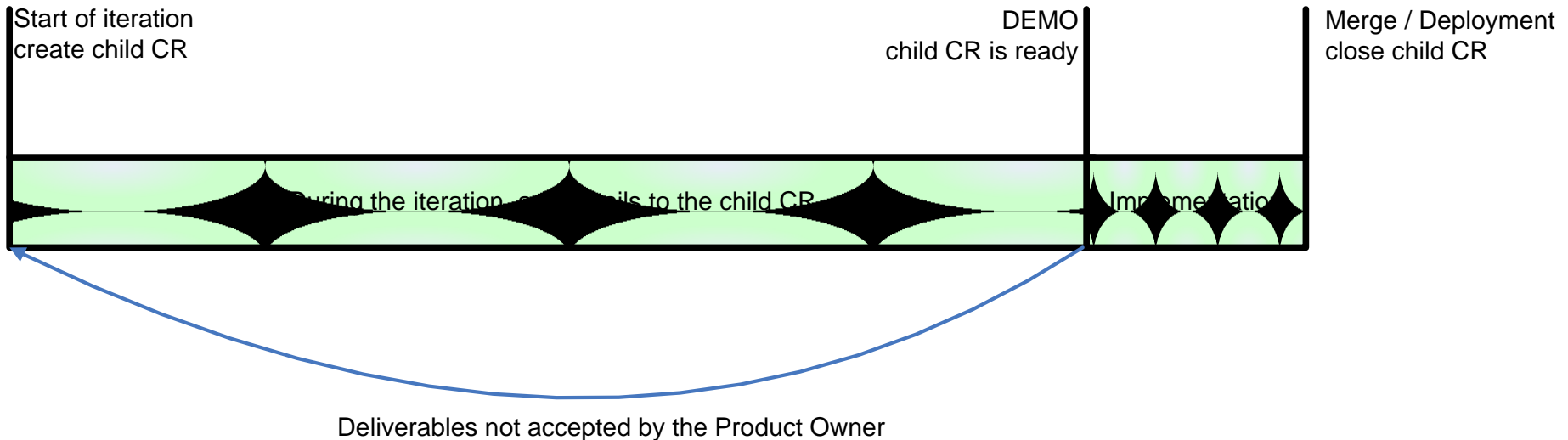
Change Procedure (Implementation)

- Iterations of two weeks
- Demo: acceptance by product owner
- Implementation: additional testing (regression, load)
- Merge and deployment on the following Wednesday

Start of iteration
create child CR

DEMO
child CR is ready

Merge / Deployment
close child CR

During the iteration, emails to the child CR

Implementation

Deliverables not accepted by the Product Owner

More Information

Babylon: SPP Programme/Projects/SPP Preparation

Wiki : http://confluence-p.internal.epo.org/display/RNA/SPP

Q and A

We're Listening. Let us Know What You Think.

SPP programme

Further questions, or feedback?

Feel free to get in touch.