Licensing Division Reengineering Project

Requirements Workshop
Copyright Owners

1/26/2011
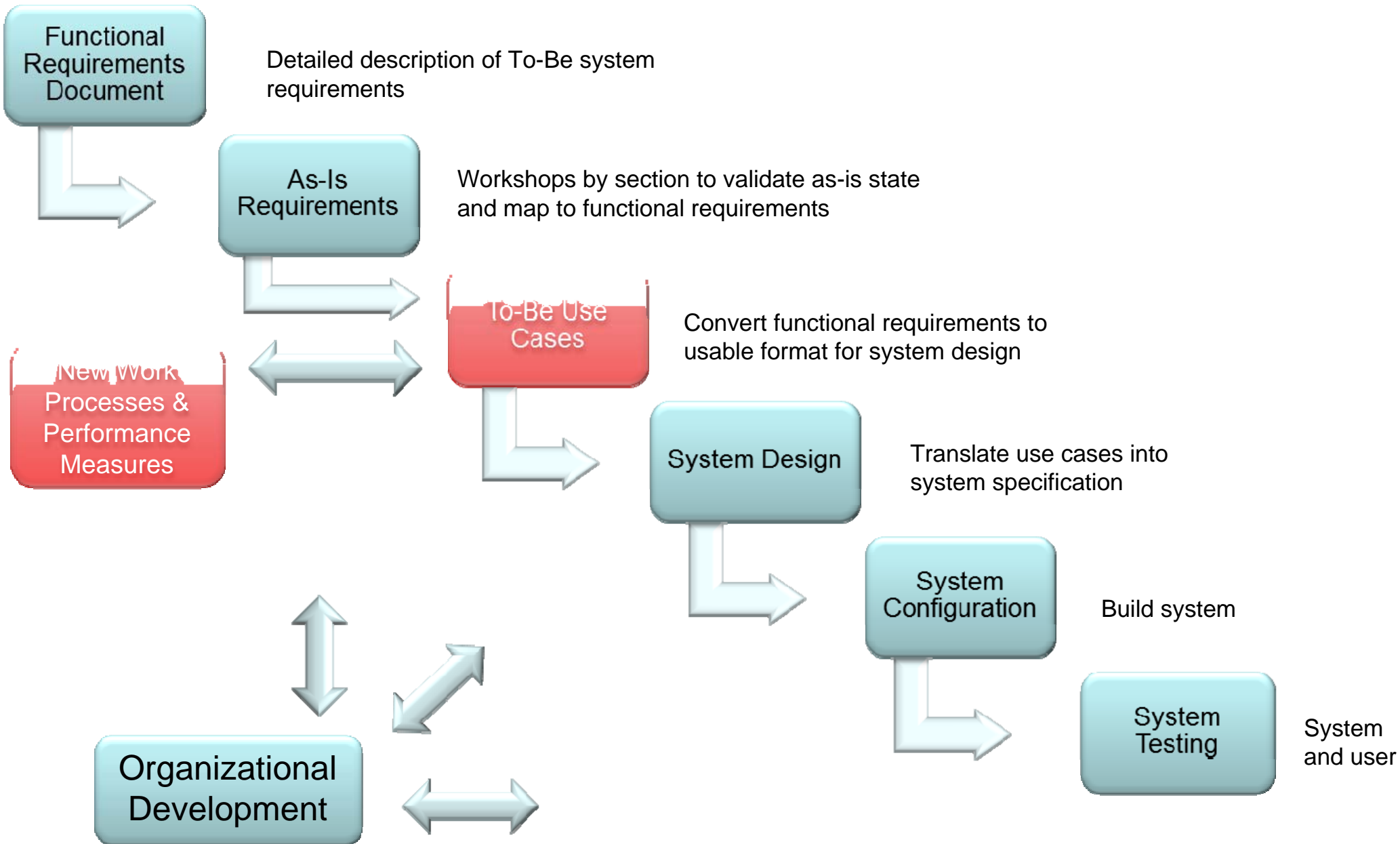
Agenda

- Welcome and introductions

- Project stage

- To-Be system discussion

  – Certification of documents (digital signature)

  – Conceptual model - To-Be System

- Break (12:00 PM – 1:00 PM)

- Requirements gathering – Use Cases

- Next steps

- Q & A

Project Stage

Functional Requirements Document

Detailed description of To-Be system requirements

As-Is Requirements

Workshops by section to validate as-is state and map to functional requirements

New Work Processes & Performance Measures

To-Be Use Cases

Convert functional requirements to usable format for system design

System Design

Translate use cases into system specification

System Configuration

Build system

Organizational Development

System Testing

System and user

Why E-Signature?

Old

- **Sign signature page**

- **Submit 15-20 pages (non-secure) with signature page to LoC**

- **Only page authenticated is signature page**

New

Apply code

Create unique hash/ ID of electronic document

Apply digital signature

Complete document is locked and verifiable

Confidentiality

Authenticity

Authorization

Integrity

Accountability

Non-repudiation

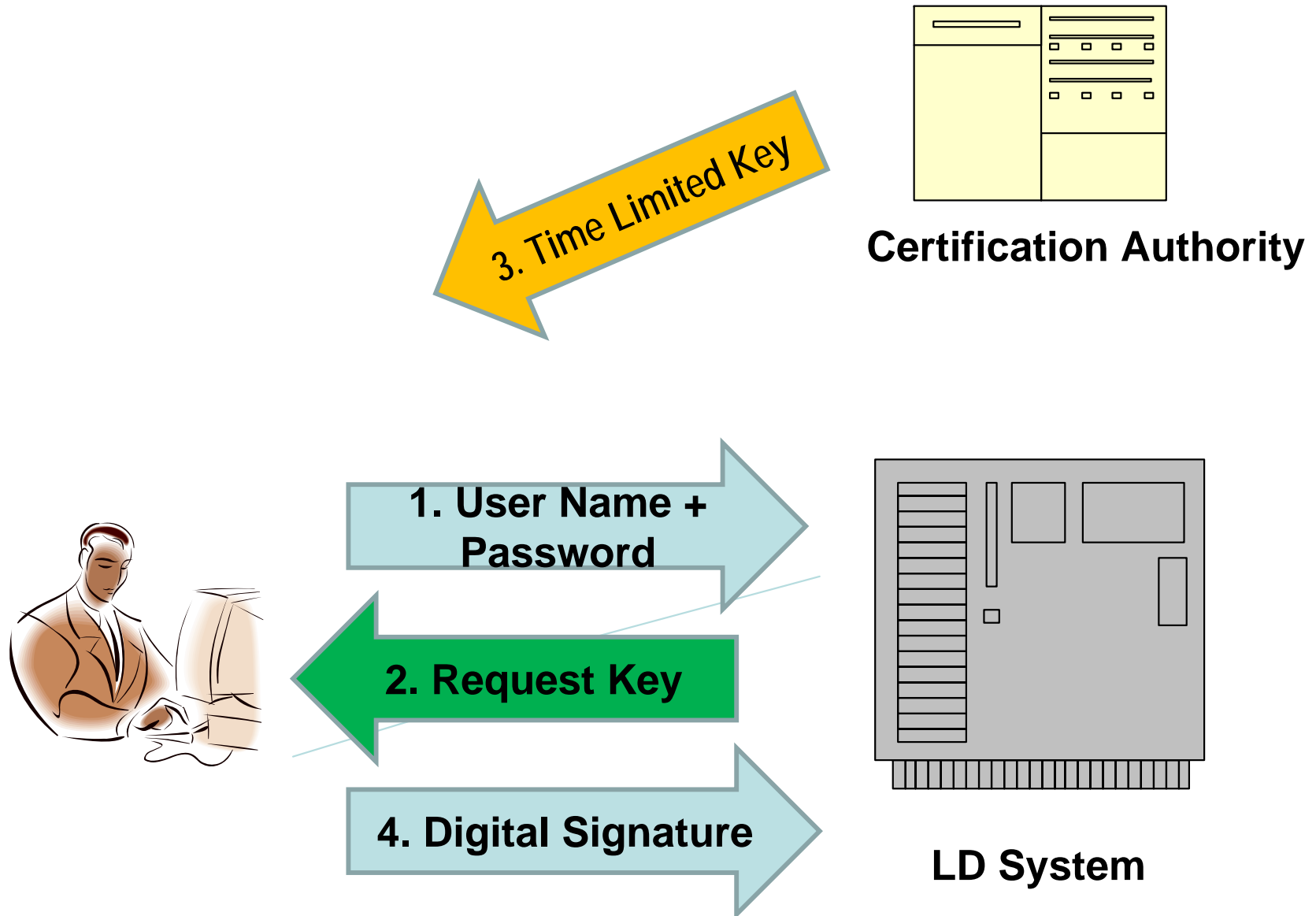# Electronic Signature Requirements
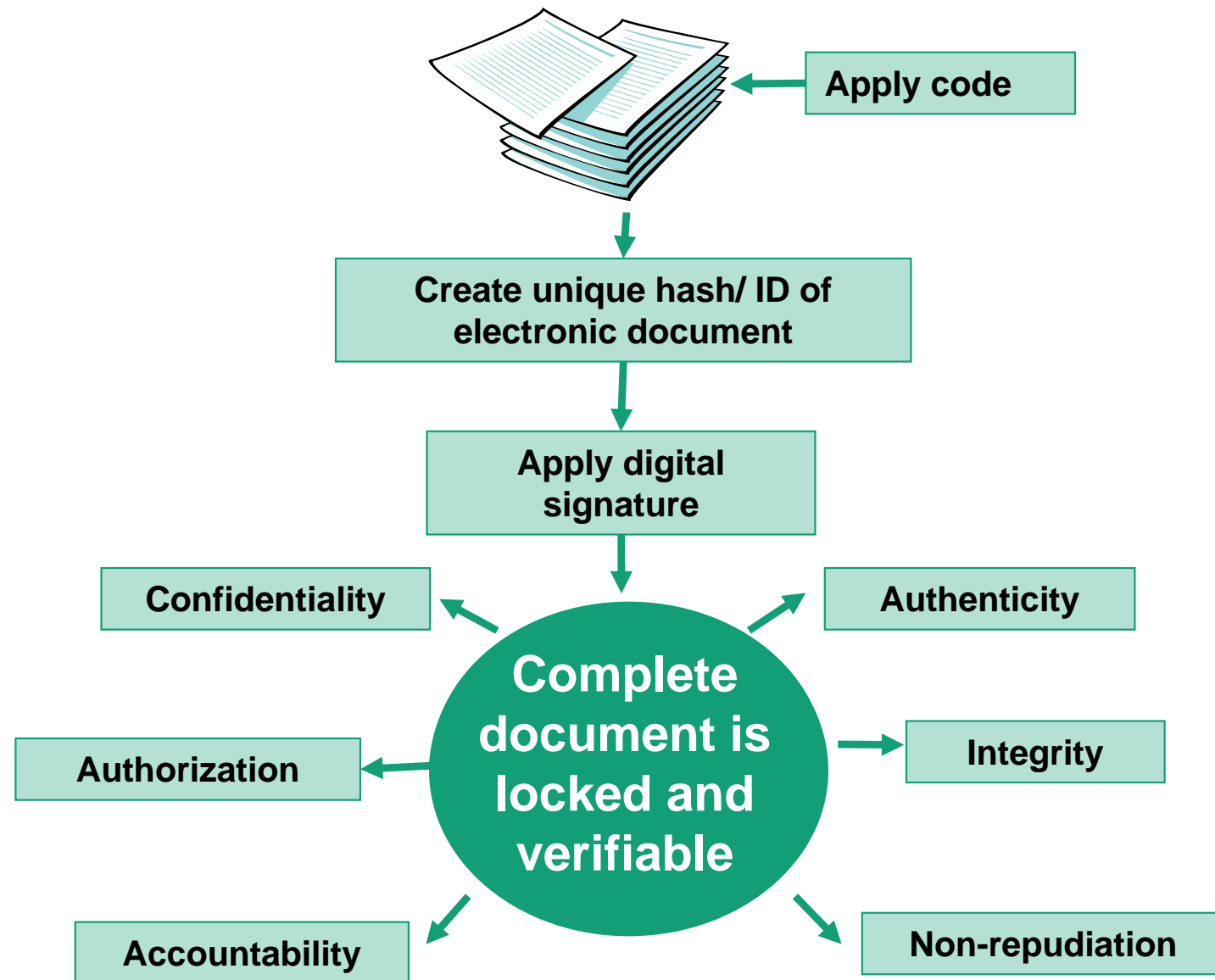
- Establishing the Participant's Identity

- Establishing Consent
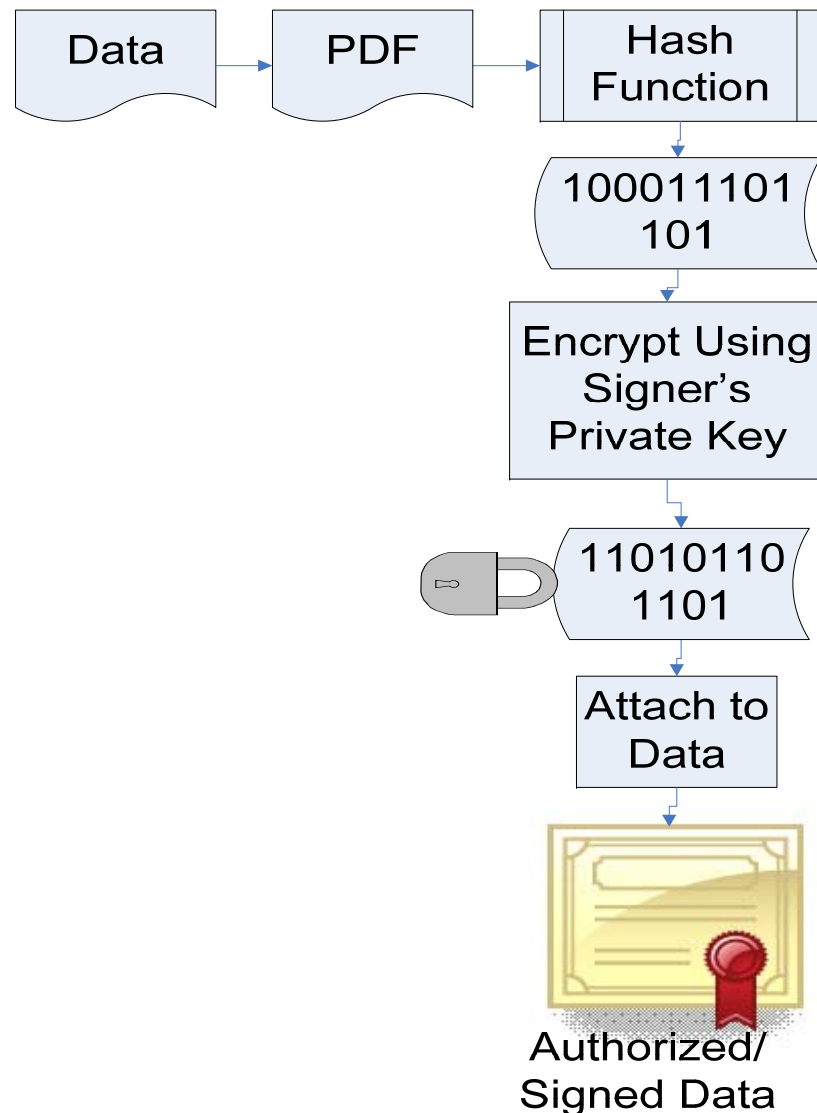
- Creating the Record

- Protecting the Signed Document

Digital Signature and Document Security

Reference: 'A primer on electronic document security' Adobe Systems Inc. 2007

E-Signature Technology 101
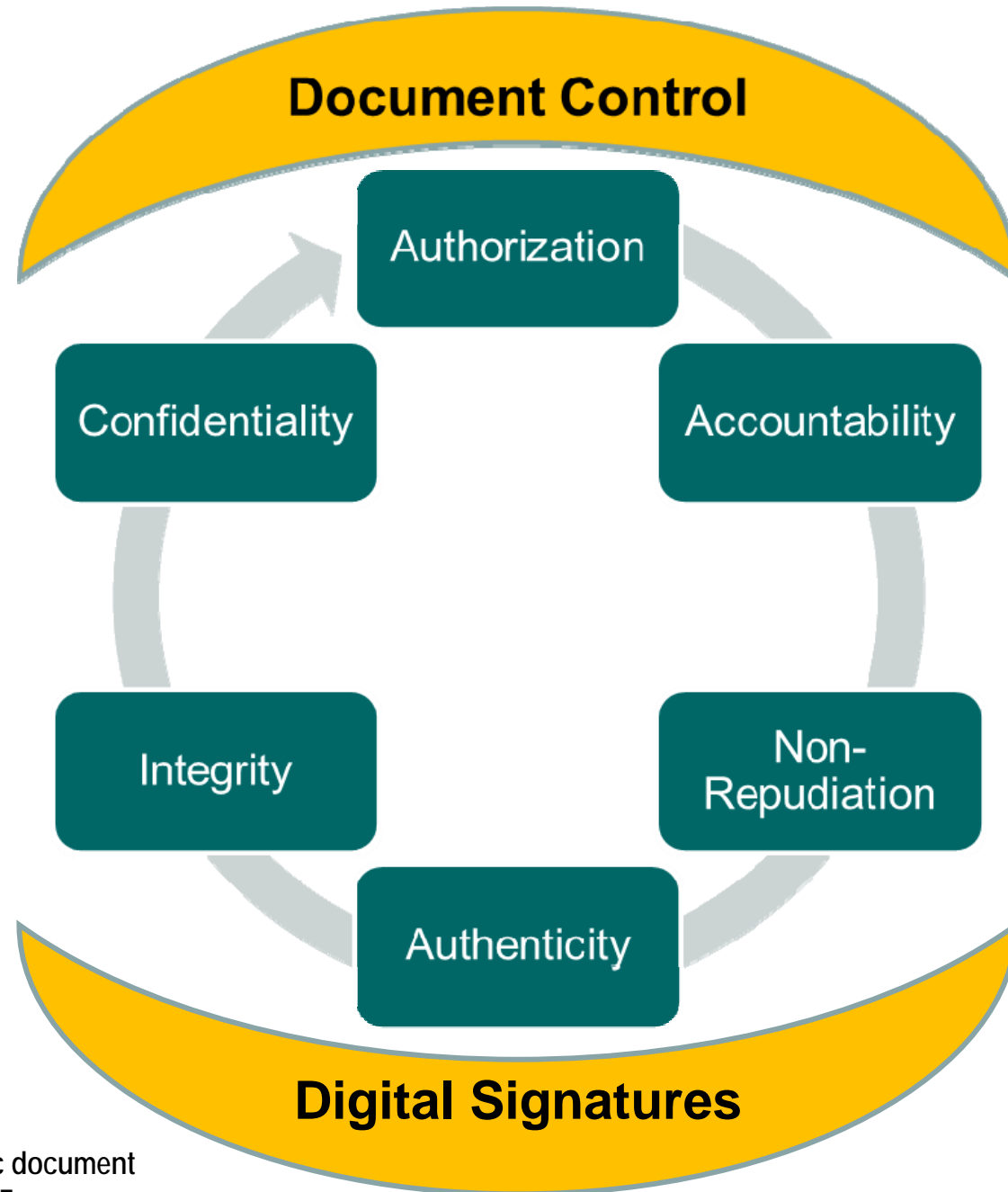
- Securing the Communication

- Two Factor Authentication

- Applying a Digital Signature

Authentication Process

3. Time Limited Key

Certification Authority

1. User Name + Password

2. Request Key

4. Digital Signature

LD System

Signature Process

Data → PDF → Hash Function

100011101101

Encrypt Using Signer's Private Key

110101101101

Attach to Data

Authorized/Signed Data

- **Data is converted to pdf document**

- **A unique hash key is computed for pdf document**

- **User supplied key is used to encrypt the hash key**

- **The encrypted hash key is attached to the pdf document**

- **Document is digitally signed**

E-Signature Technology Options

| Option	Initial Cost	Support Cost	Deployment	Security
SMS	Low	Low	Easy	High
Virtual Token	Medium	Low	Easy	Very High
Biometric	High	Medium	Medium	High Error Rate
Smart Cards	Medium	Medium	Medium	Vulnerable (1)
USB Token	High	Medium	Easy	Vulnerable (1)
Digital Certificates	Medium	High	High	High
Tokens/Fobs	High	High	Easy	Vulnerable (1)

Notes: (1) Vulnerable to Theft, Loss or Fraud
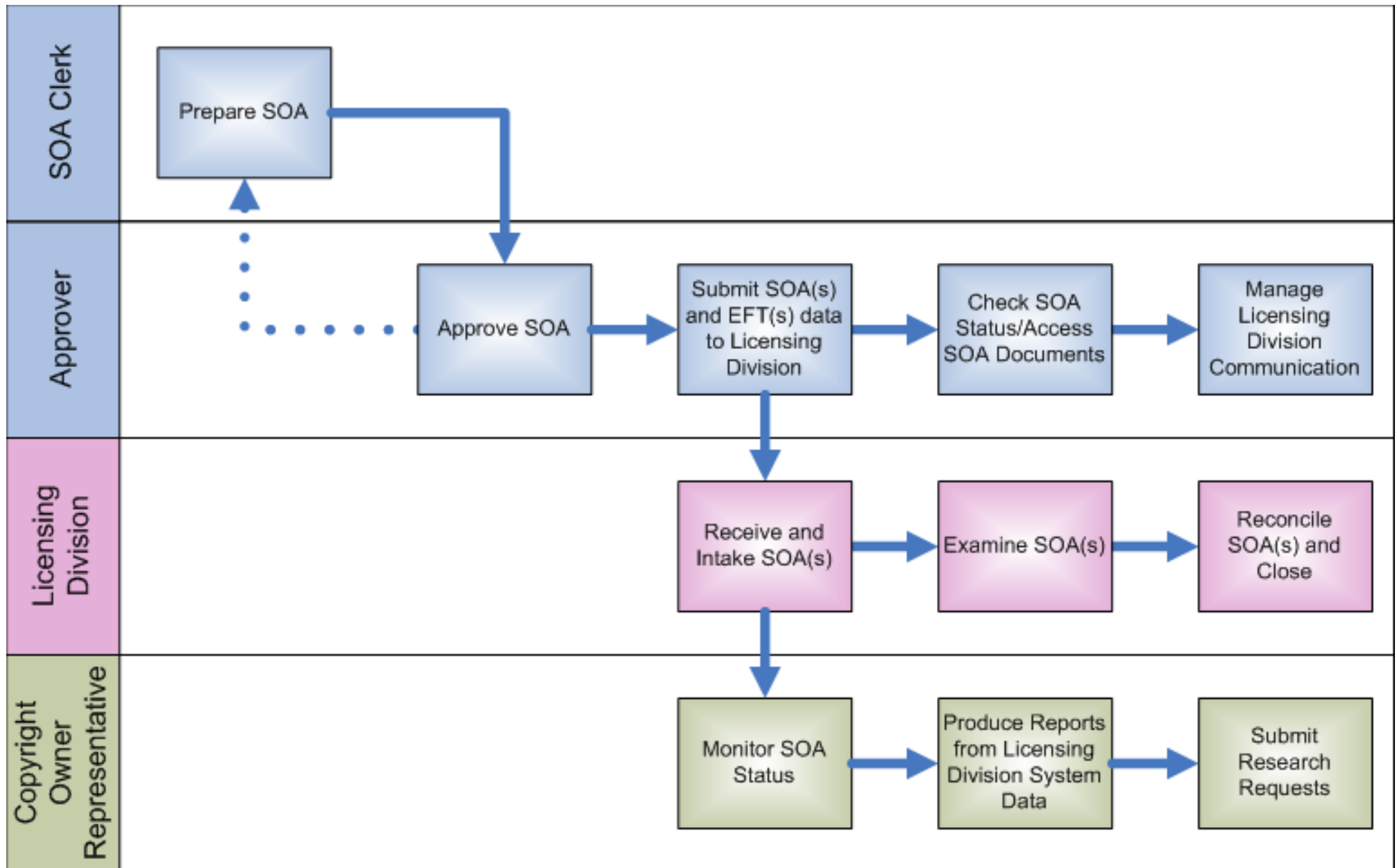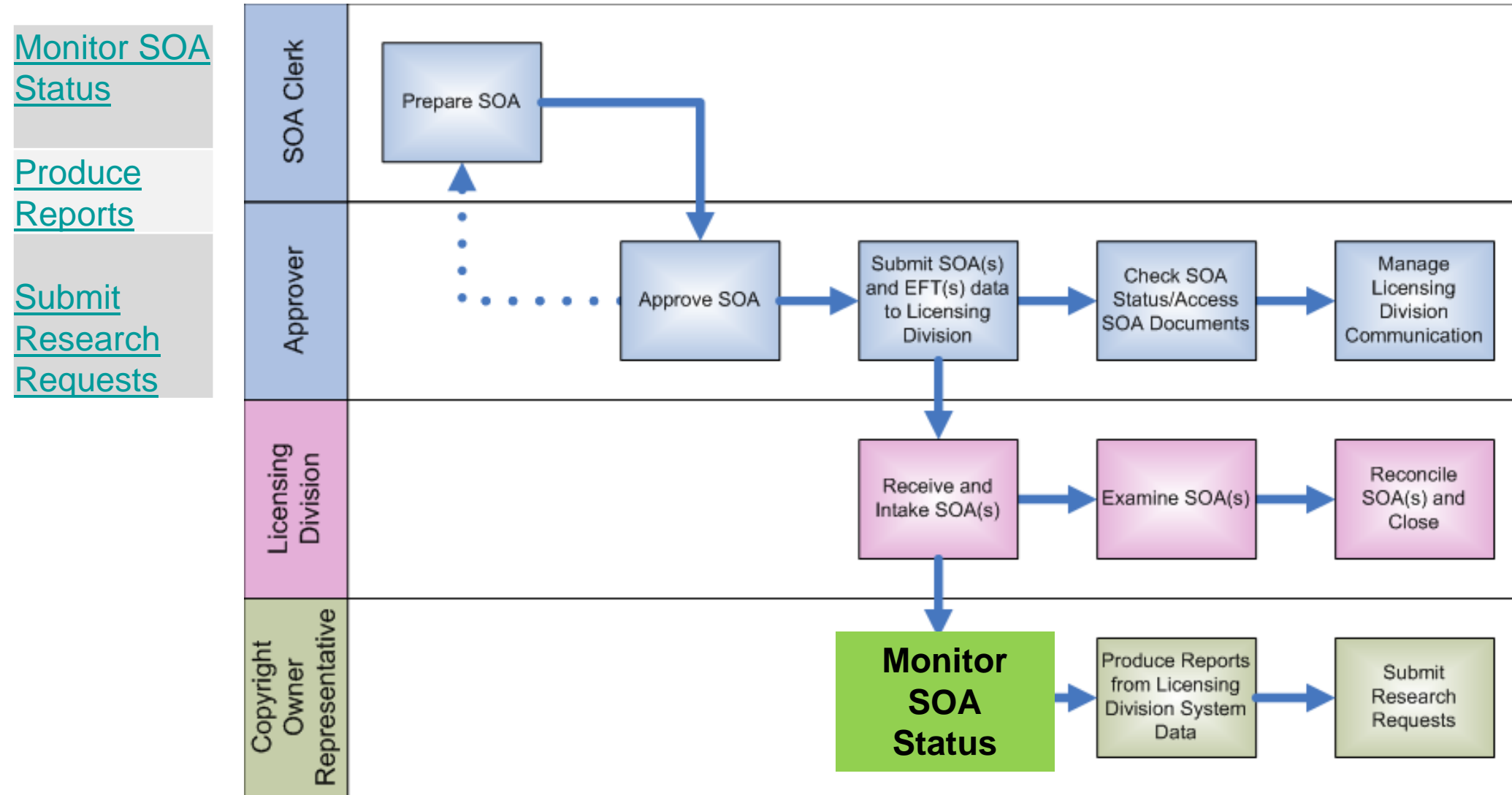
SOA Lifecycle Timeline
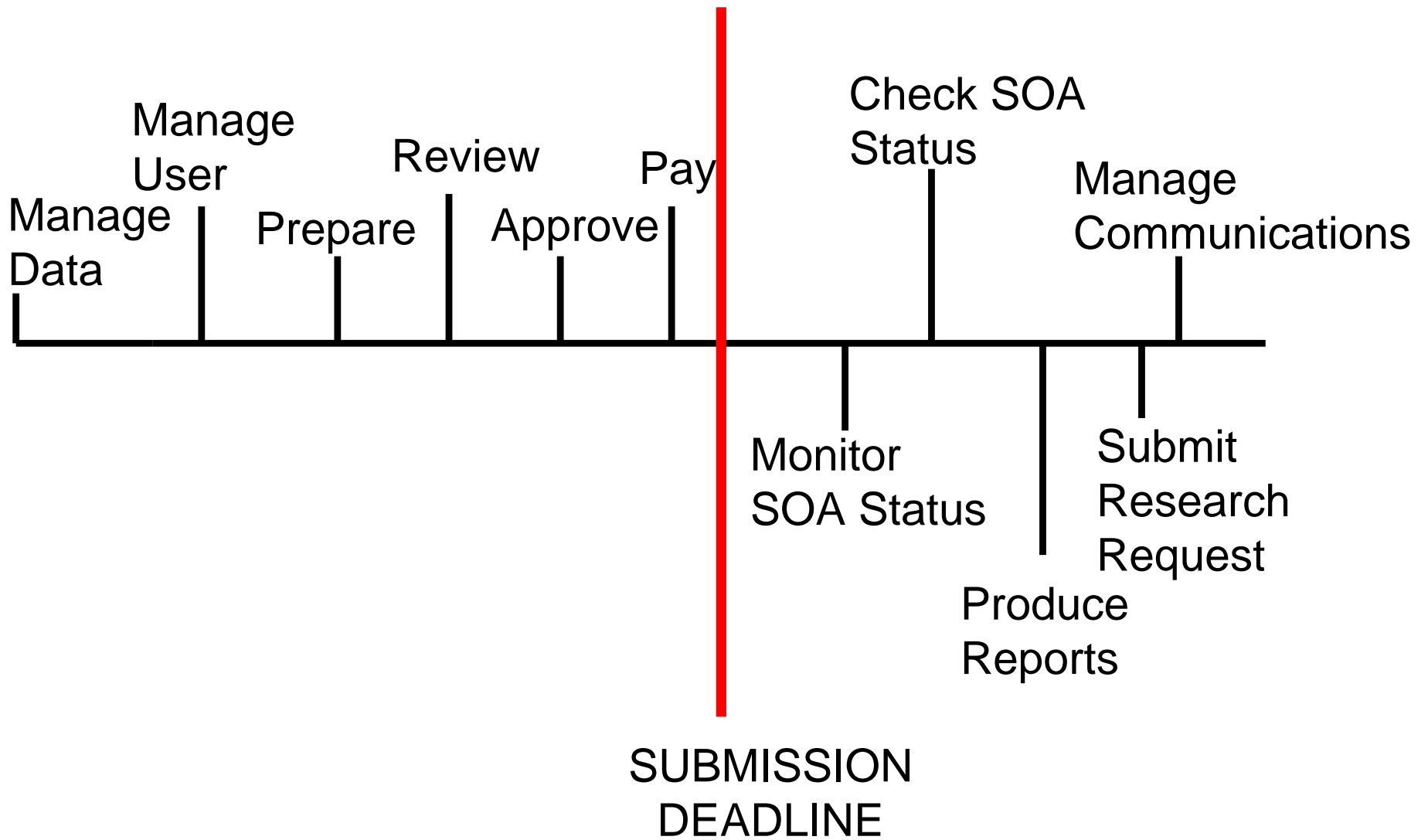
Conceptual To-Be System

Conceptual To-Be System

Monitor SOA Status

Produce Reports

Submit Research Requests
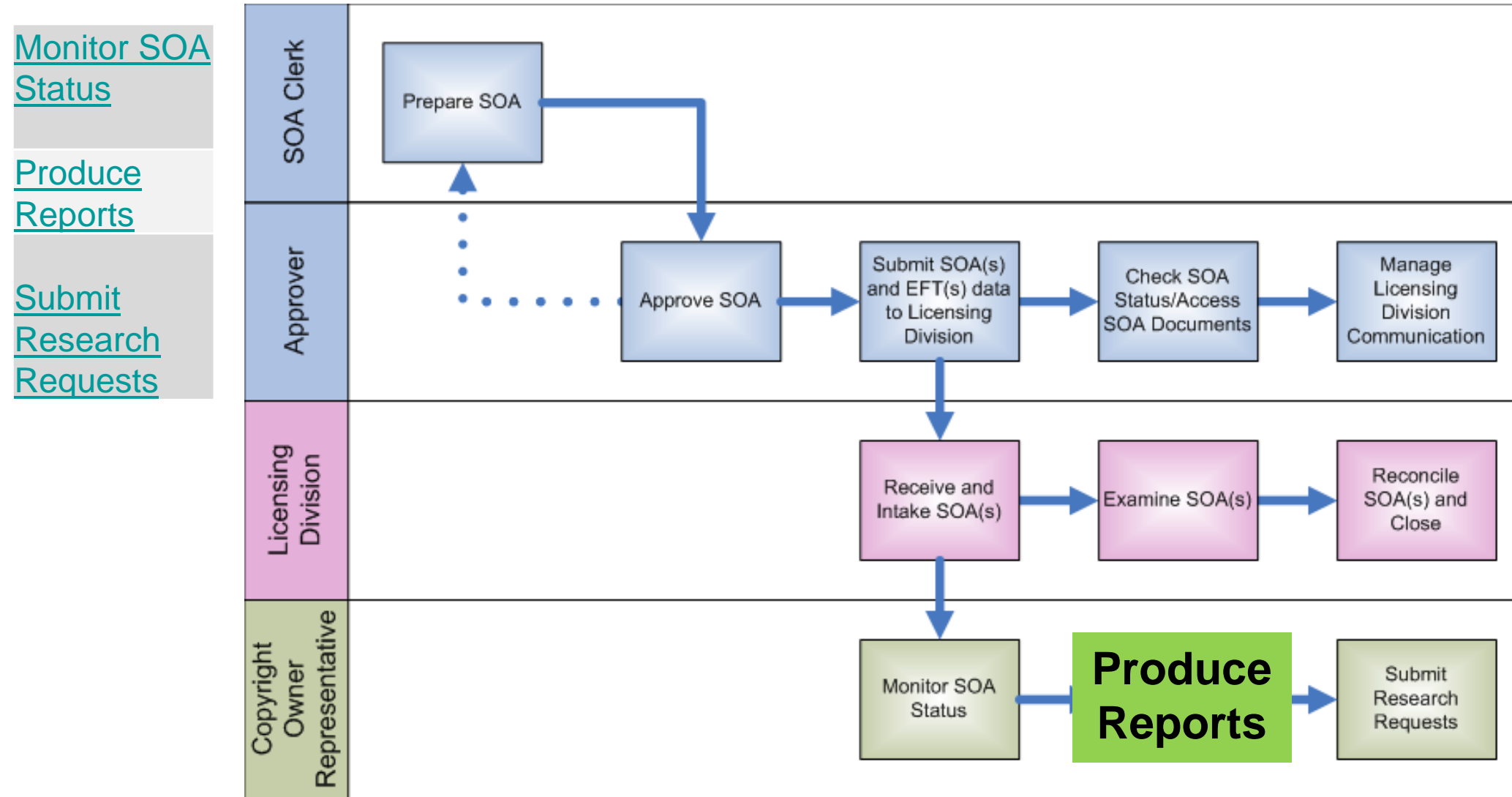
Monitor SOA Status

The system provides information about where the SOA is in the LD examination and/or distribution process

# Conceptual To-Be System

Monitor SOA Status

Produce Reports

Submit Research Requests

SOA Clerk	Prepare SOA				
Approver		Approve SOA	Submit SOA(s) and EFT(s) data to Licensing Division	Check SOA Status/Access SOA Documents	Manage Licensing Division Communication
Licensing Division			Receive and Intake SOA(s)	Examine SOA(s)	Reconcile SOA(s) and Close
Copyright Owner Representative			Monitor SOA Status	**Produce Reports**	Submit Research Requests

Produce Reports

The system provides a number of reporting options, including a data dump so copyright owners can perform their own analysis

14

Conceptual To-Be System
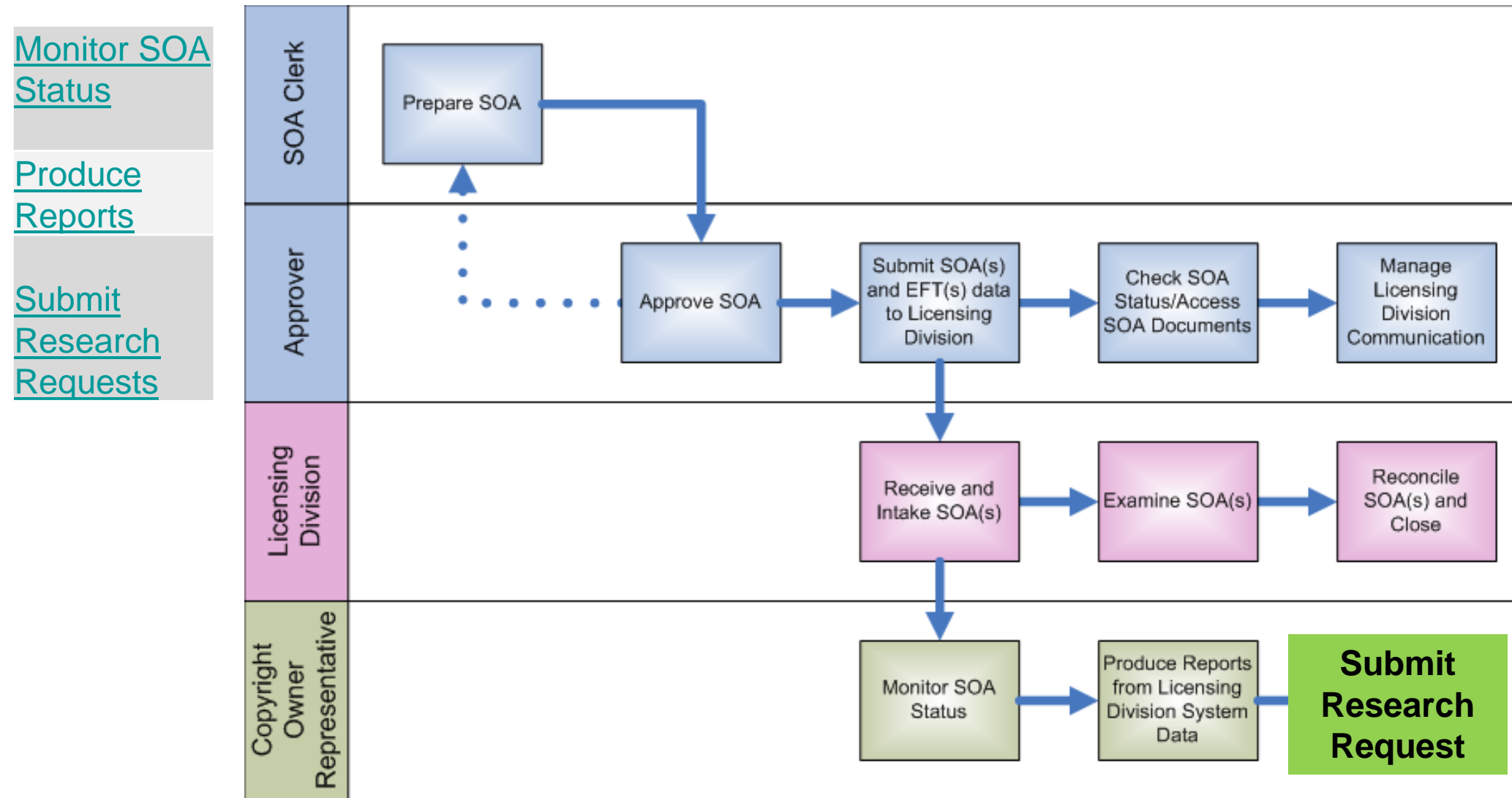
Submit Research Request
Electronic correspondence between LD researchers and copyright owners.

1. LD will offer online customer service. Specific customer service policies are still being developed. We are considering:

    a) Context-sensitive help

    b) FAQ

    c) Searchable knowledge base

    d) Integrated email or electronic messaging

Questions for Owners

1. What changes would Copyright Owners like to see surrounding Copyright Royalty Board ordered distributions?

2. Are the current LD records adequate for the needs of Copyright Owners? What additional reports or analyses would Copyright Owners like to be able to perform on the LD data? Are Copyright Owners interested in trending, comparisons between accounting periods, etc.?

3. What additional information or analysis capabilities would Copyright Owners like to see regarding investments?

What Is A Use Case?

- Business Use Case
  - Describes the business process that is used by its actors (Ex: Examiner) to achieve a goal (e.g., Examine an SOA, Calculate Fees).

- System Use Case
  - Describes a system that automates a business use case, described at the system functionality level (e.g., create SOA) and specifies the function or the service that the system provides for the actor.

- Actors
  - Use case defines interactions of roles with the system to accomplish a goal.
  - Specifies a role played by a person when interacting with the system.

Steps to Create a Use Case

1. Identify activities from the As-Is Mapping / Organizational Development activities.

2. Decompose business activities into discrete use cases.

3. Identify roles (actors) required to accomplish each discrete activity.

4. Select an actor.

5. Define what that actor wants to do on the system.

   – Each interaction between the actor and the system is a use case.

6. For each use case, decide the Normal Flow of Events by actor.

7. For each use case, identify Alternate Flows by actor.

Sample Use Cases

Unique ID	Use Case Name	Use Case Description	Actor(s)
Bus - 1	Submit research request	This use case begins when a copyright owner submits a research request to the LD.	Copyright Owner Representative
Bus - 2	Request DART Access	This use case begins when a copyright owner requests permission to view a copy of a DART SOA. The owner fills out a form and delivers it to the LD.	Copyright Owner Representative
Bus – 3	Produce Report	This use case begins when a copyright owner produces a report of a given set of parameters concerning SOAs and their status, past and present	Copyright Owner Representative

Project Next Steps

- Complete and Validate Use Cases

- Baseline To-Be Use Cases

- Document High Level System Design and Architecture

- Document Report, User Interface, Data Requirements

- Design To-Be System Detailed Functions

- Buy and Configure COTS Product

- Document System Test Scenarios

- Document System Test Cases

- Test To-Be System

Copyright Owners Next Steps

- Share information with Copyright Owners

- Prepare to respond to LoC initiated processes:

  - Notice of Proposed Rule Making

The questions discussed during the Copyright Owners Workshop on January 26, 2011, and the answers to those questions, will be provided under separate slide.

Requirements Notes

The functional and business requirements garnered from the workshop discussions will be provided under separate slide.