



SOA Advanced Technology, IBM Software Group

SOA Governance for Enterprise Architects

The Open Group
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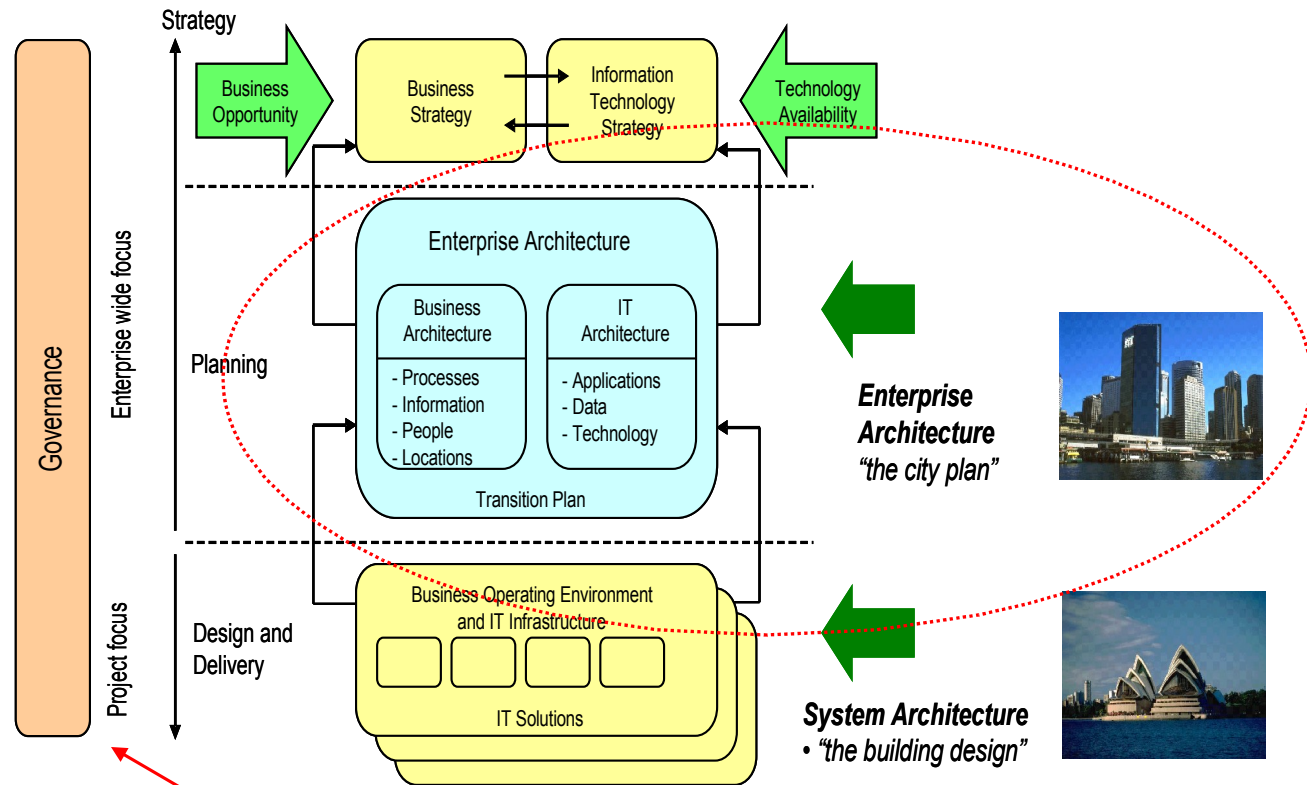
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What we mean by Enterprise Architecture

■ TOGAF says Enterprise Architecture includes:

- Business (or business process) architecture
- Application architecture
- Data architecture
- Technology architecture



Notice – Governance!!

What is SOA – The Open Group Definition *

Service-Oriented Architecture (SOA) is an **architectural style** that supports **service orientation**.

Service orientation is a way of thinking in terms of services and service-based development and the outcomes of services.

A **service**:

- Is a logical representation of a repeatable business activity that has a specified outcome (e.g., check customer credit; provide weather data, consolidate drilling reports)
- Is self-contained
- May be composed of other services
- Is a “black box” to consumers of the service

An **architectural style** is the combination of distinctive features in which architecture is performed or expressed.

The SOA architectural style has the following distinctive features:

- It is based on the design of the services – which mirror real-world business activities – comprising the enterprise (or inter-enterprise) business processes.
- Service representation utilizes business descriptions to provide context (i.e., business process, goal, rule, policy, service interface, and service component) and implements services using service orchestration.
- It places unique requirements on the infrastructure – it is recommended that implementations use open standards to realize interoperability and location transparency.
- Implementations are environment-specific – they are constrained or enabled by context and must be described within that context.
- It requires strong governance of service representation and implementation.
- It requires a “Litmus Test”, which determines a “good service”.

* <http://www.opengroup.org/projects/soa/doc.tpl?CALLER=index.tpl&gdid=10632>

SOA Governance defined*

- **SOA Governance is the application of Enterprise Architecture, IT & Corporate Governance to Service Oriented Architecture**
 - SOA Governance processes focus on governing the service lifecycle, supporting service infrastructure and compliance with the service oriented architecture of the organization

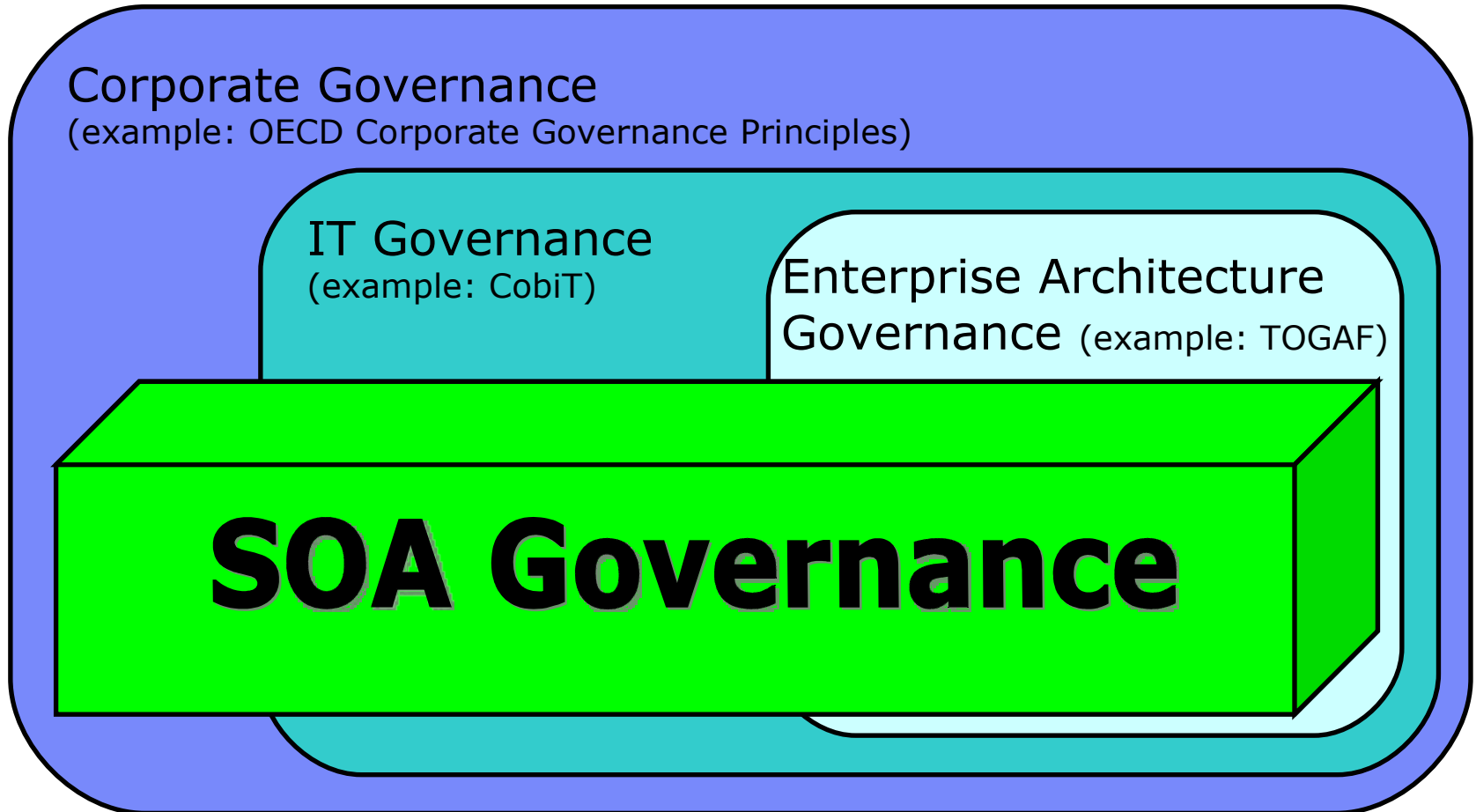
- **Architecture governance is the practice and orientation by which enterprise architectures and other architectures are managed and controlled at an enterprise-wide level.**
 - Source: (TOGAF 8.1.1)

- **IT Governance includes the decision rights, accountability framework and processes, to encourage desirable behavior in the use of IT.**
 - Source: (based on CobiT4.0)

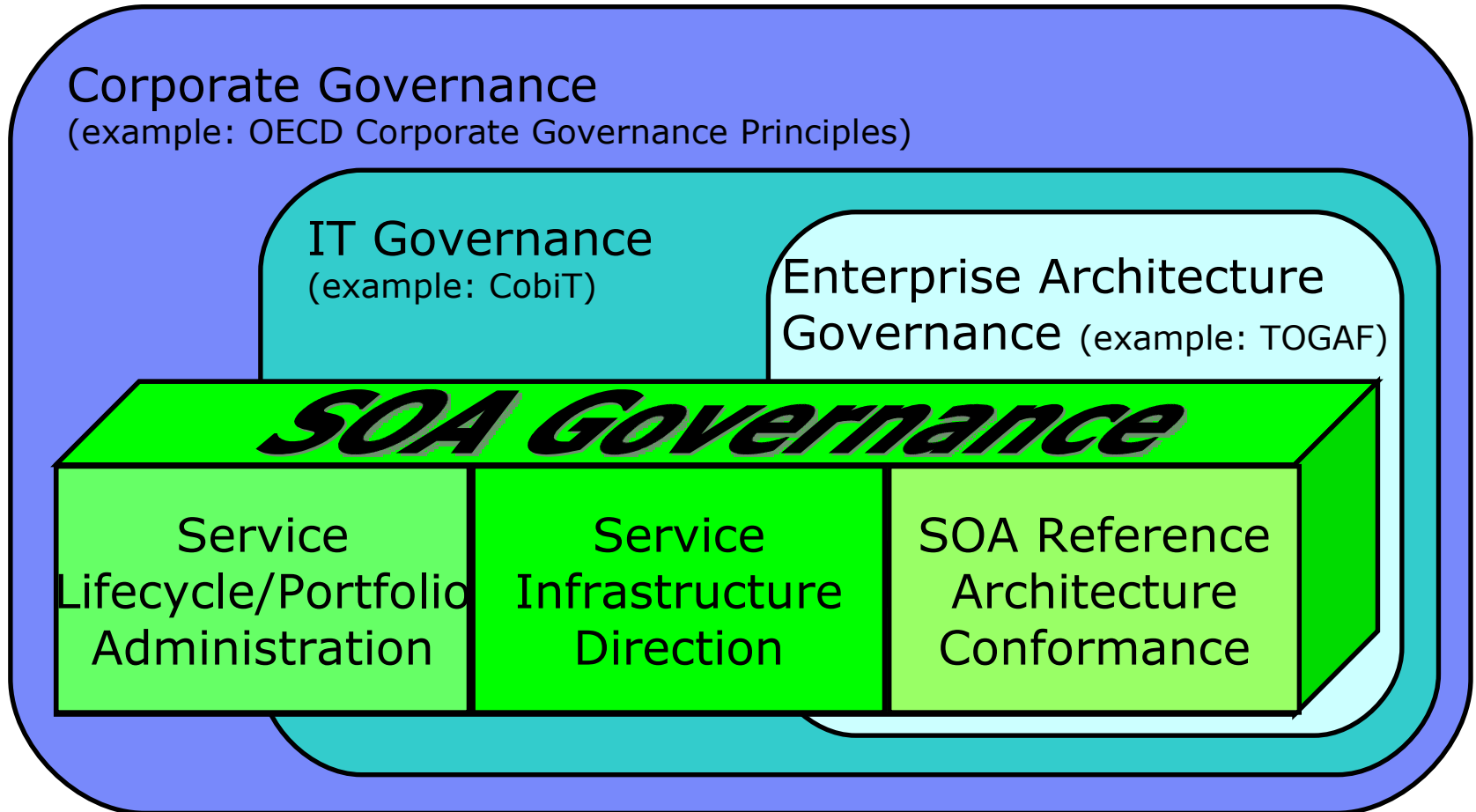
- **Corporate Governance is the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled.**
 - Source: (WikiPedia based on OECD Principles of Corporate Governance)

* TOG SOA Governance team's working definition

The SOA Governance landscape



The SOA Governance landscape



Why SOA Governance matters

Realize business benefits of SOA

- Business process flexibility
- Improved time to market

"Firms with above average IT governance... had more than 20 percent higher profits than firms with poor governance following the same strategy"

Source: Peter Weill and Jeanne W. Ross, Harvard Business School Press 2004

Mitigate business risk and regain control

- Maintaining quality of service
- Ensuring consistency of service

"Effective IT Governance is the single most important predictor of value an organization generates from IT."

Source: Peter Weill, MIT Sloan School of Management's Center for Information Systems Research

Improved team effectiveness

- Measuring the right things
- Communicating clearly between business and IT

Professional investors are willing to pay premiums of 18-26% for stock in firms with high corporate governance.

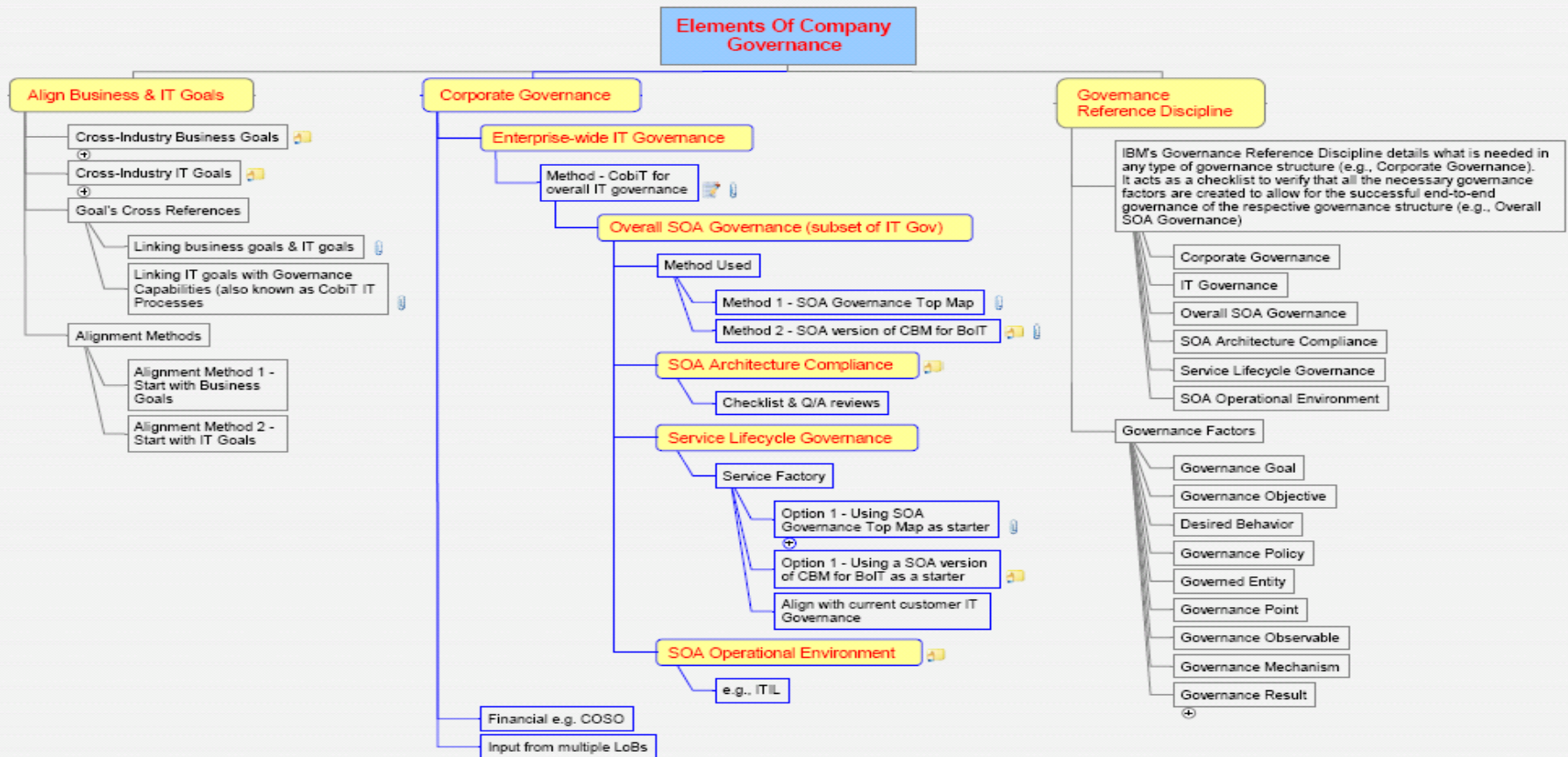
Source: McKinsey Quarterly

As an enterprise architect, why must you care?

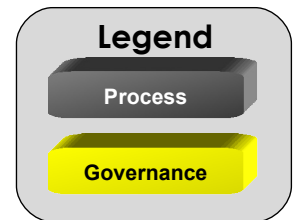
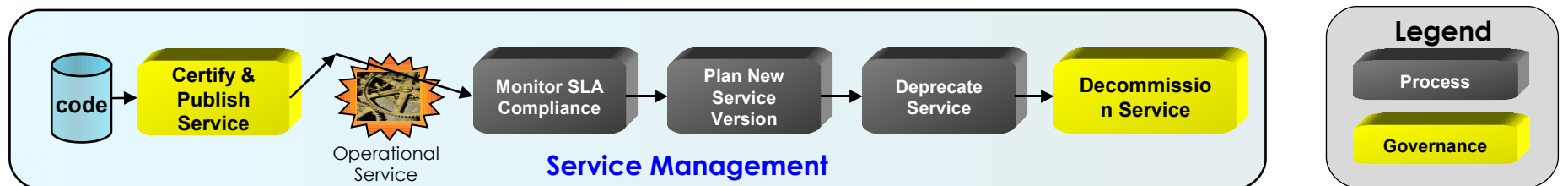
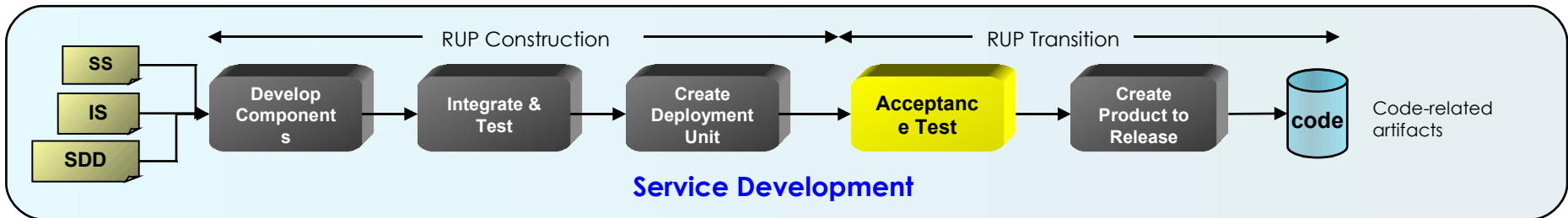
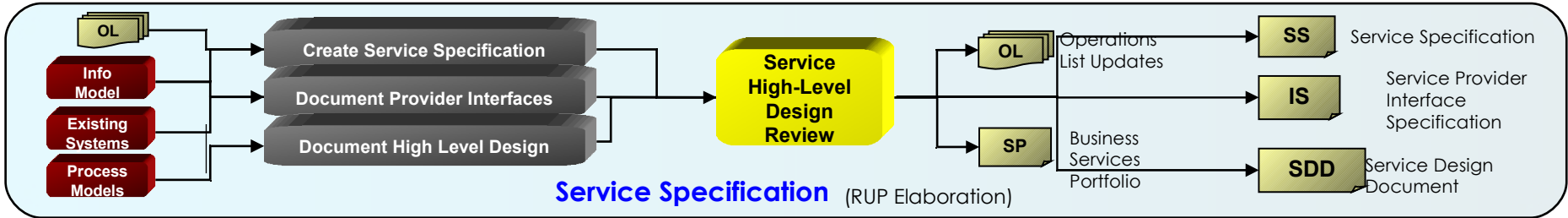
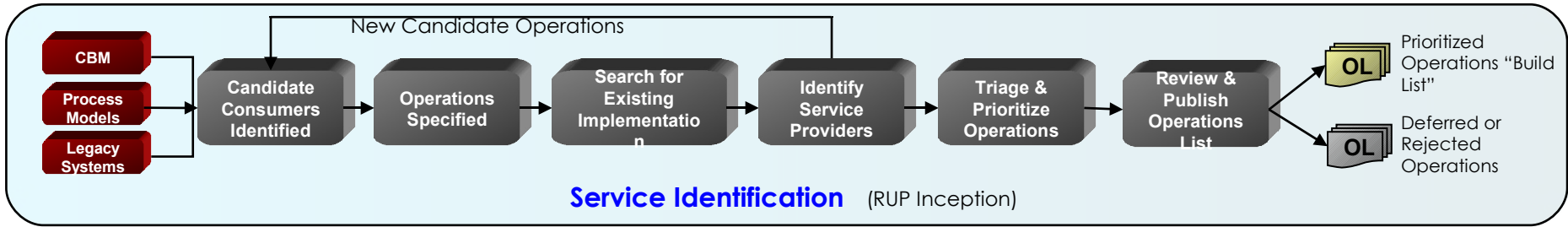
- **You are already doing EA governance**
- **You are already providing oversight around solution designs**
- **You are the probably the connection point between business and IT**
- **You are the technical thought leaders in your companies**
- **So..... You'll be the ones they ask about SOA**
 - And governance is a real key to SOA success!

Now - time for some details about SOA Governance

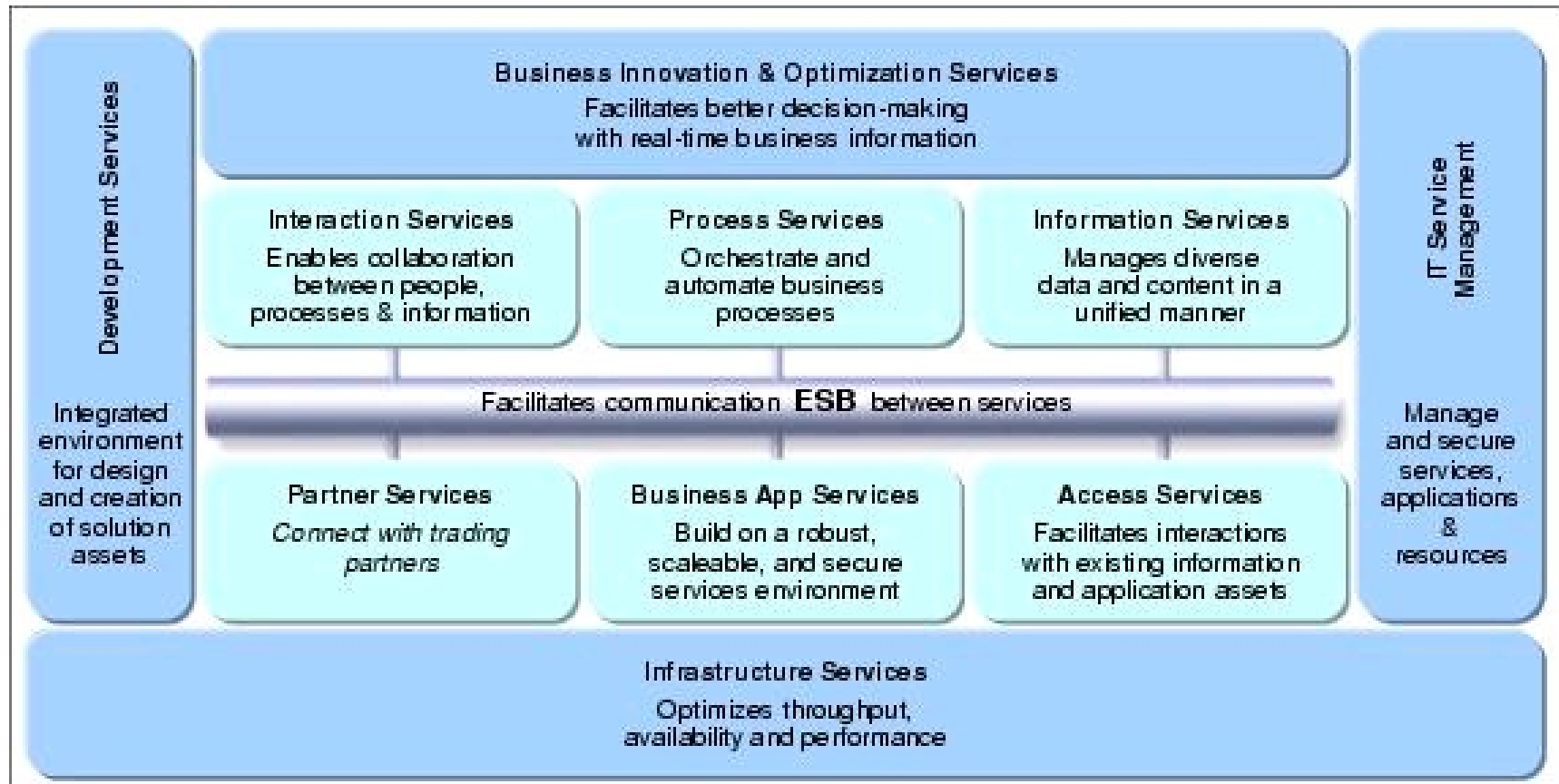
How it all connects – a governance mindmap



The Service Life Cycle in Detail

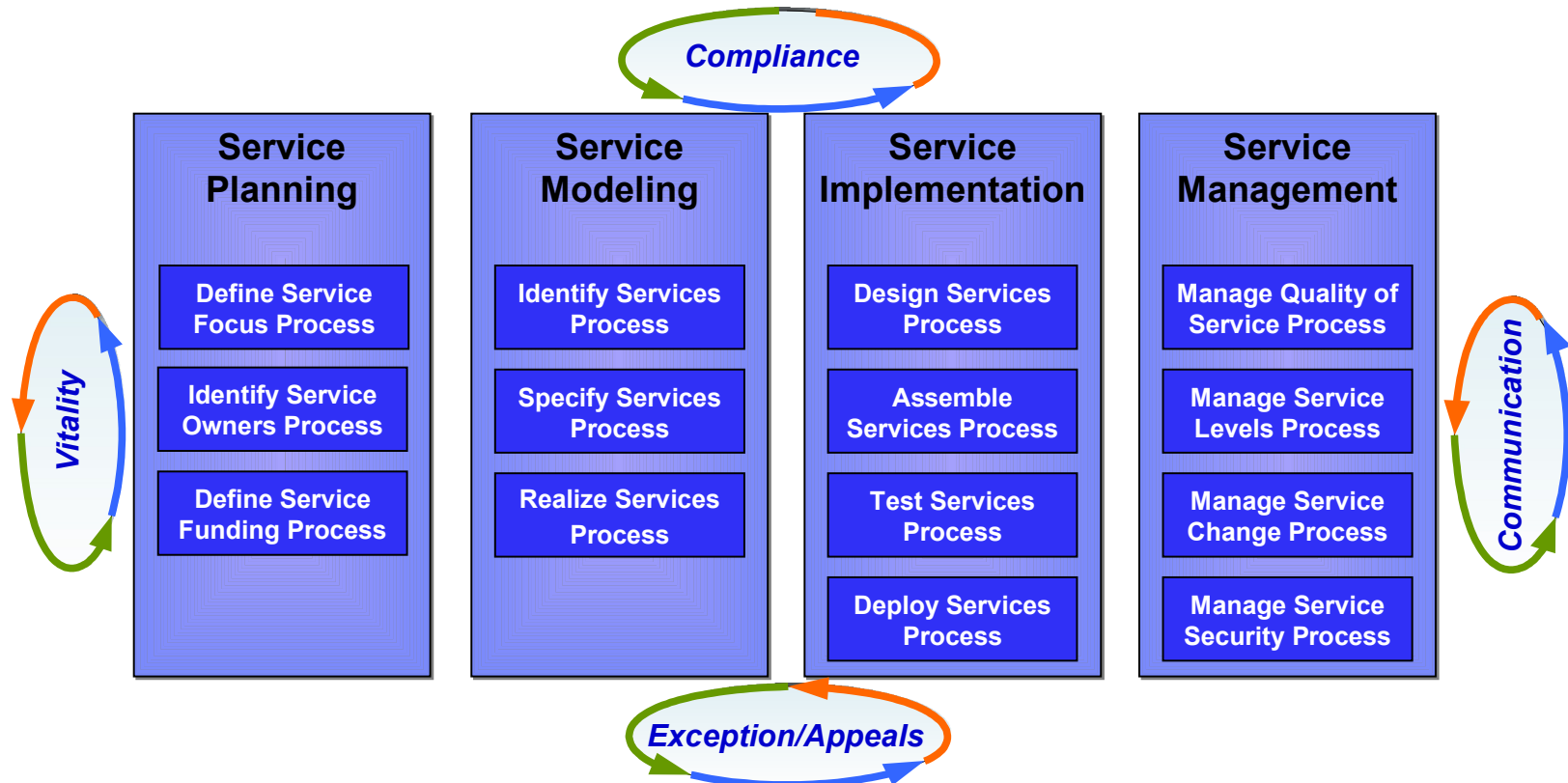


An example of a SOA Reference Architecture *



* <http://publib-b.boulder.ibm.com/Redbooks.nsf/65f0d9cea6e0ab57852569e0007452bb/f86c0f04d19a040585257108006dd764?OpenDocument>

There are 14 Critical Processes that constitute an effective SOA Governance model implementation



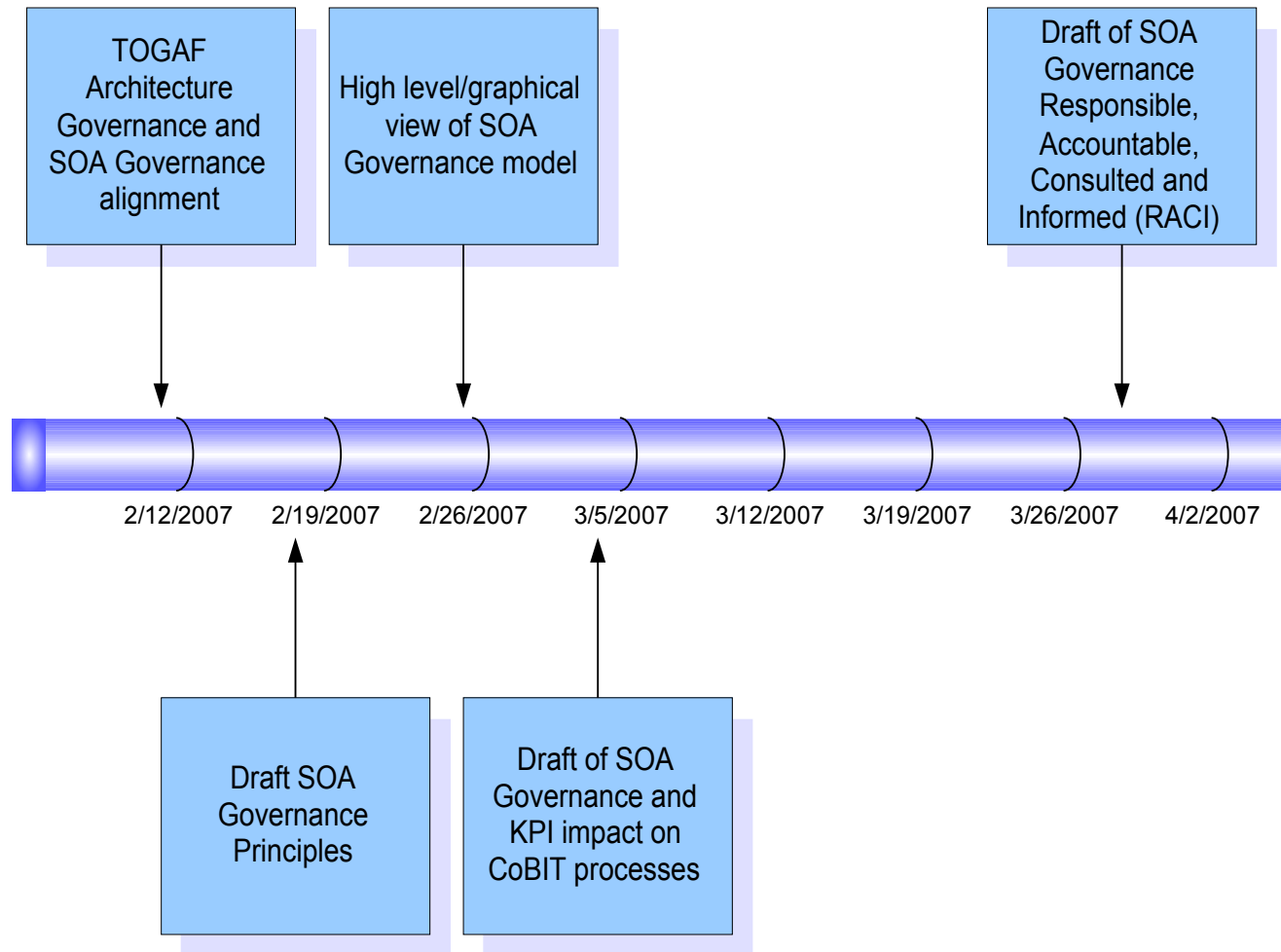
By effectively establishing governance mechanisms in these 14 areas, you can address these common challenges:

- Establishing decision rights
- Defining high value business services
- Managing the lifecycle of assets
- Measuring effectiveness

TOG SOA Governance team's next steps

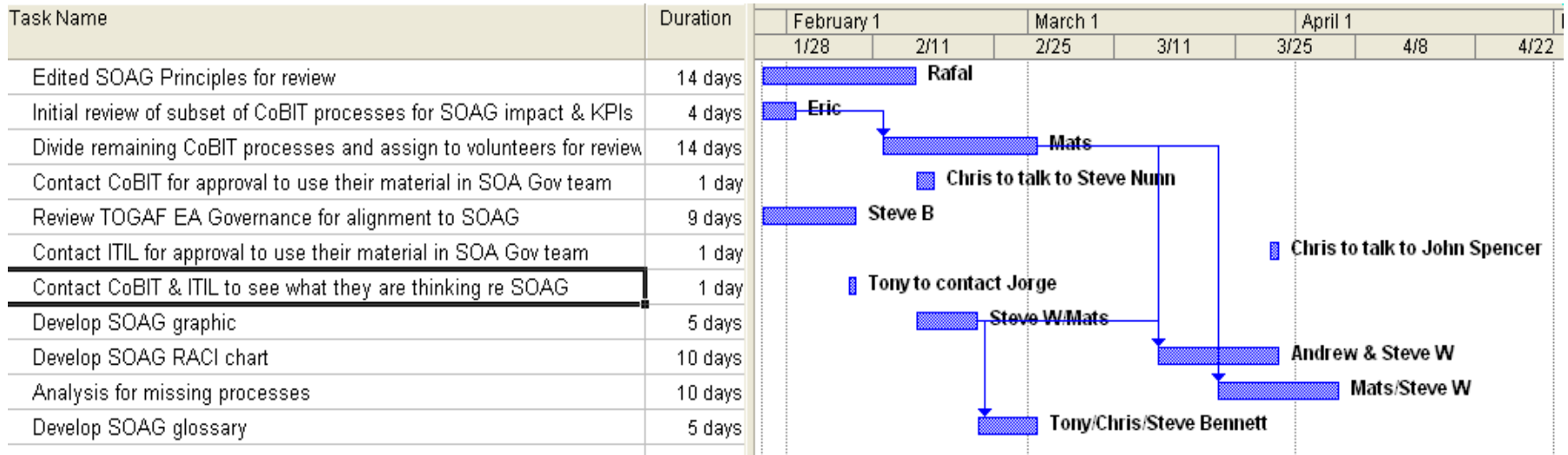
- **Establish SOA Governance Principles**
 - Document in the same format as TOGAF 8.1.1 Principles
- **Establish SOA Governance Reference Model**
 - Based on IT Governance processes from CobiT and establish effects of and considerations particular to SOA solutions on those processes
 - Provide SOA Key Performance Indicators for IT Governance and EA Governance processes
- **Examine impact of SOA Governance on IT processes**
 - Evaluate impact on ITILv2 and/or ITIL refresh

SOA Governance Work Plan Highlights



SOA Governance Work Plan Timeline

- Activities and owners defined for next 90 days:



Summary

- SOA is an architectural style within an Enterprise Architecture
- Getting governance right is a key indicator for SOA success
- Enterprise Architects will be looked to by their organisations to provide advice on SOA and how to govern it
- Now is the time to start getting ready
- Getting involved in The Open Group SOA Working Group and our SOA Governance team is a good way to build your skills and knowledge

Where you can learn more

- **The Open Group SOA Working Group Web site**
 - <http://www.opengroup.org/projects/soa/>
- **IBM's SOA site**
 - <http://www.ibm.com/soa>