



# IT infrastructure (architecture, processes and organisation)

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OIE Collaboration project  
Workshop



OIE Collaborating Centre for epidemiology, training  
and control of emerging avian diseases



OIE Headquarters



# Overview

- IT Architecture
- IT Processes
- Project Management

# Who am I?

Andrea Ponzoni IT manager of IZSVe

Over 20 years of experience on IT and over 10 as IT manager

University degree in Statistics and Master in Digital Law

Certifications ITIL, CISA-ISACA, PRINCE2 & COBIT5

# Why IT ?

Basic idea

GIS services are strongly closed with IT services

But

from 20% to 70% of IT investments do not produce value (cost reduction, increased benefits, higher user satisfaction, better information ...)

Then

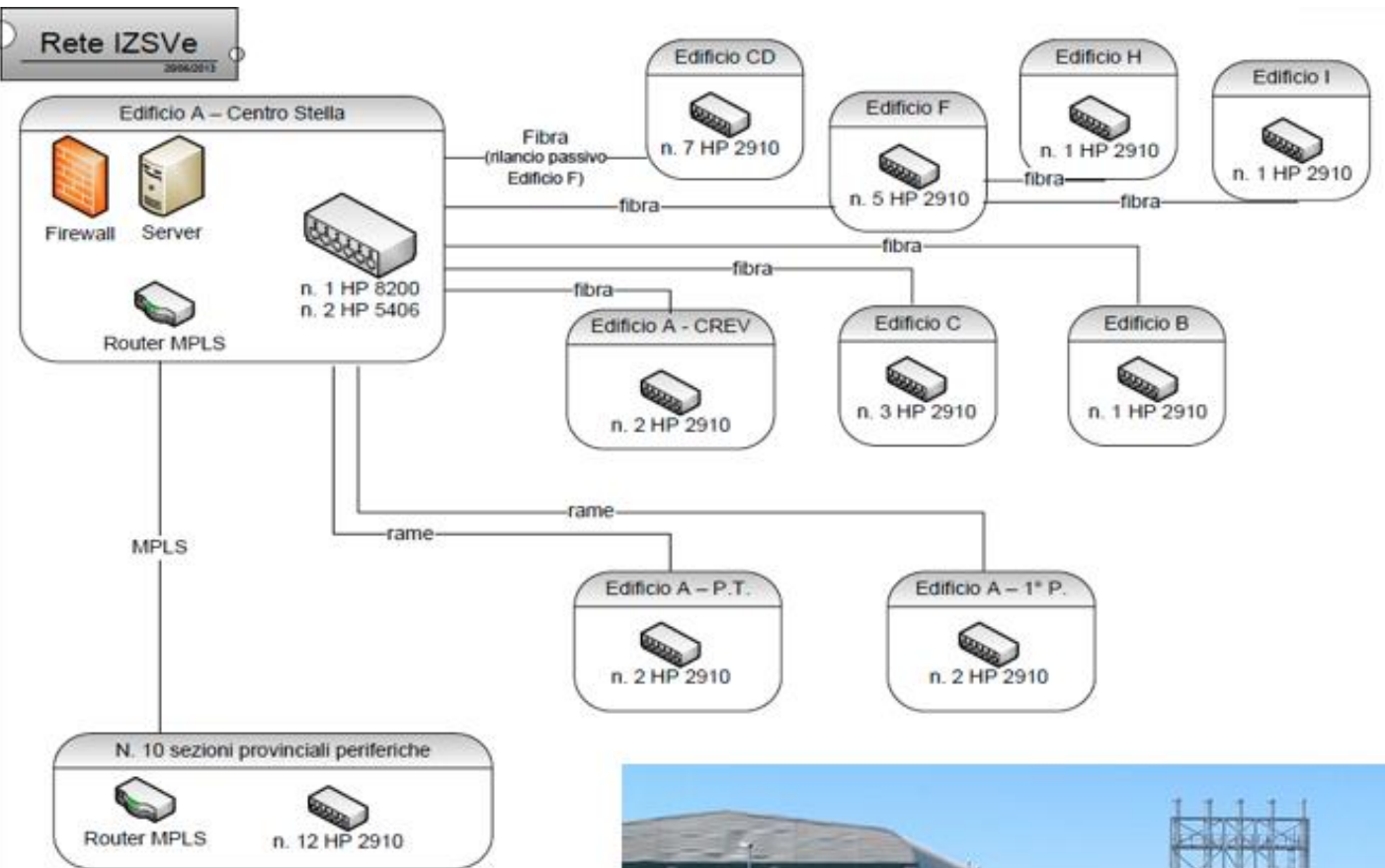
Better if we can apply “best practice” on IT processes as support of GIS services

# IZSVe IT service

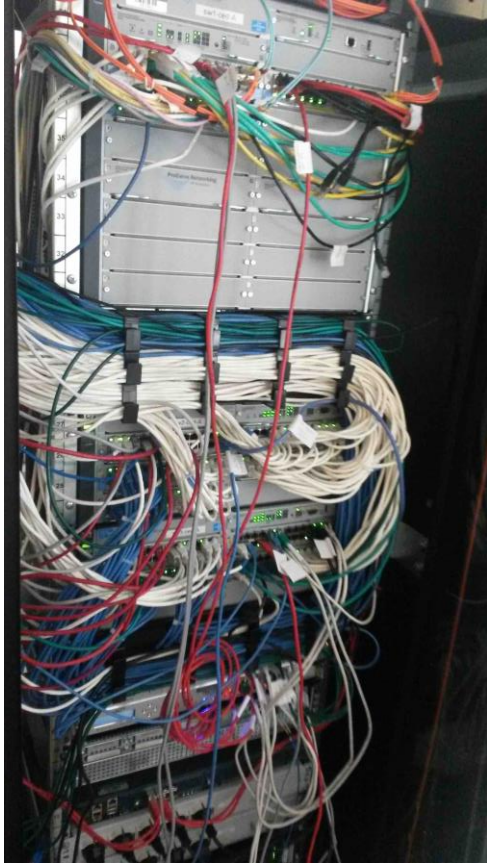
What do we do ?

- manage IT processes
- support IT projects (analysis and project management)
- guarantee IT and information security
- users support (help desk)
- Develop systems (network, hardware, software)
- And many other things

# IZSve infrastructure



# IZSVe infrastructure



Switch rack



Router & f/w rack



servers rack

# IZSVe infrastructure



Server virtualisation technology  
3 host Cisco CS 12 CPU – 196 GB Ram  
1 storage NetApp FAS 2554 - 40 TB  
1 storage NetApp FAS 2040 – 30 TB for buckup

-More then 40 servers (DB, Application, NAS, DMZ for web services and obviously GIS services)



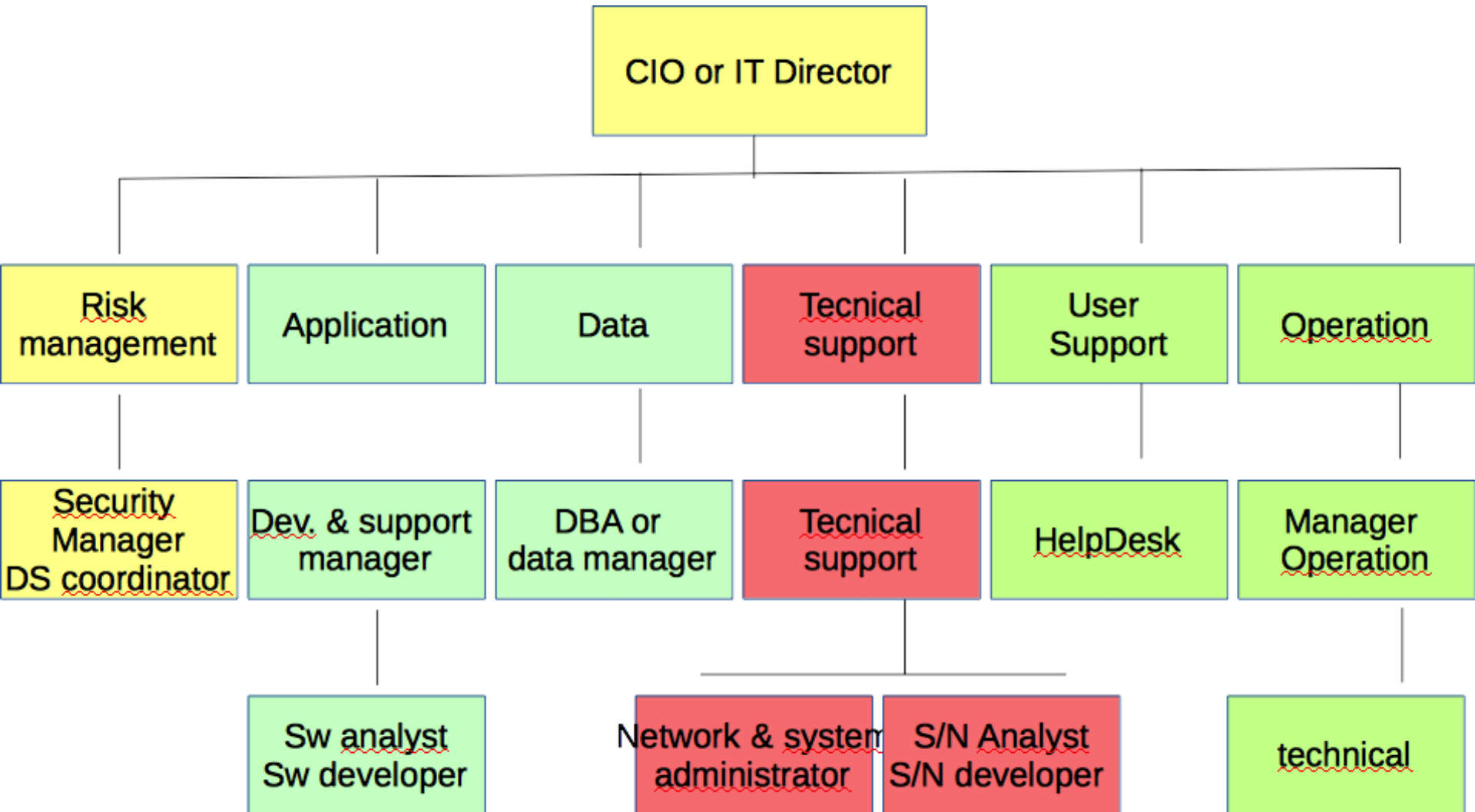
# IZSVe IT service

How many ?

- 1 IT manager (Me)
- 1 system/network administrator senior
- 1 system/network administrator junior
- 3 software manager (LIMS..)
- 2 user support

(we don't make GIS ... only supply IT infrastructure for GIS )

# IZSVe IT service



# How we can do that ?



Why re-invent the wheel?

Our wheels are

- COBIT5/ITIL for IT processes and services
- PRINCE2 for project management

# High risk of failure in IT projects

## War report for a software project

50% over budget

60% are considered a failure by users

90% end later than expected

30% are deleted

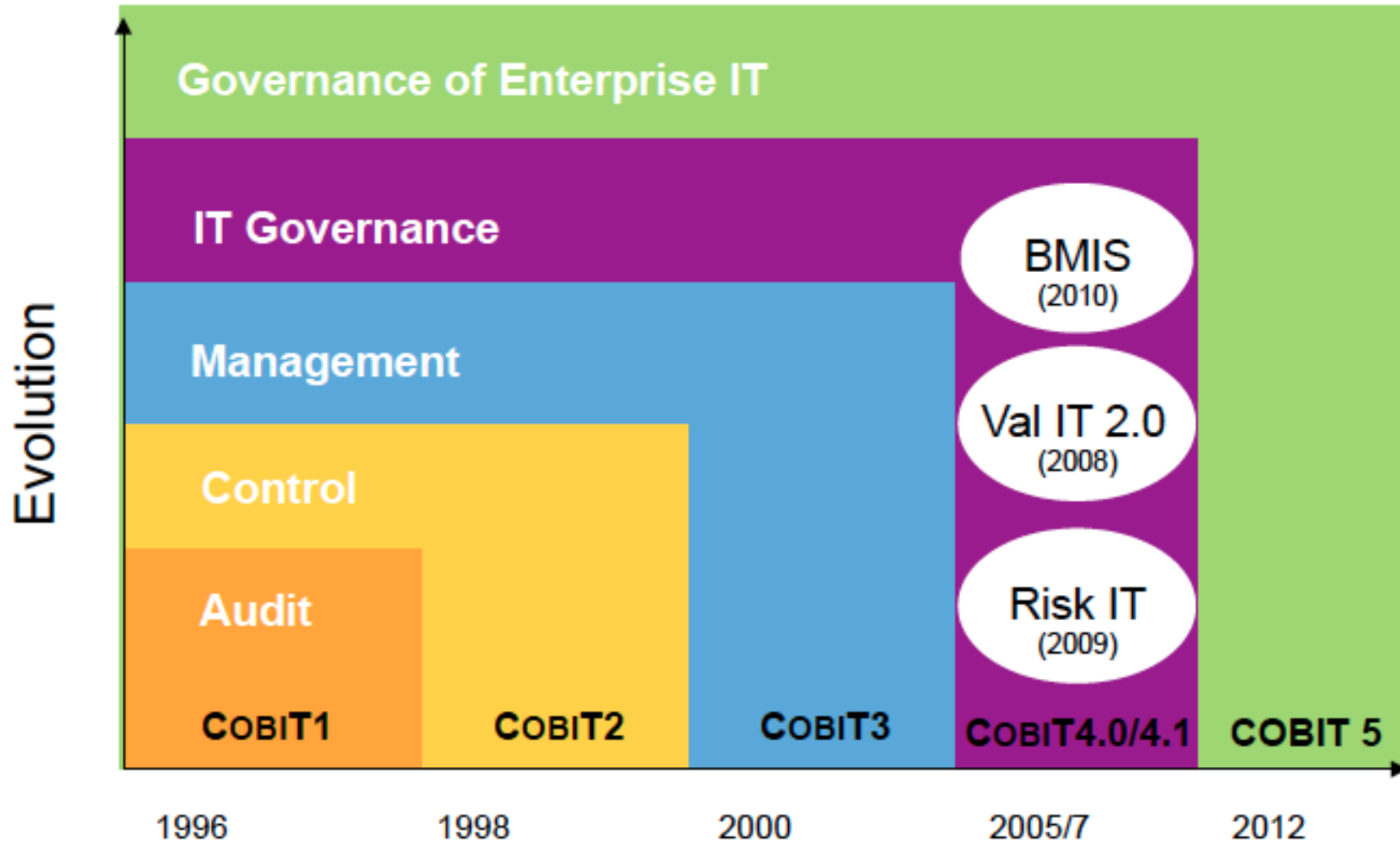
15-20% of software flaws or bugs arrive to end user

50% of costs are used to remove defects detected earlier

# What can help us to reduce failure risk?

- Best practices
  - ITIL for services management
  - COBIT5 for processes government
- ISO (International Standard Organisation)
  - 27000 for information security
  - and others
- project management
  - PRINCE2

# COBIT5



# COBIT5

5 domain = 37 processes

1. Governance – Evaluate, Direct & Monitor
2. Management – Align, Plan & Organise
3. Management – Build, Acquire & Implement
4. Management – Deliver, Service & Support
5. Management – Monitor, Evaluate & Assess

# COBIT5

## Processes for Governance of Enterprise IT

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### Evaluate, Direct and Monitor

EDM01 Ensure Governance Framework Setting and Maintenance  
EDM02 Ensure Benefits Delivery

EDM03 Ensure Risk Optimisation  
EDM04 Ensure Resource Optimisation  
EDM05 Ensure Stakeholder Transparency

### Align, Plan and Organise

APO01 Manage the IT Management Framework  
APO02 Manage Strategy  
APO03 Manage Enterprise Architecture  
APO04 Manage Innovation  
APO05 Manage Portfolio  
APO06 Manage Budget and Costs  
APO07 Manage Human Resources

APO08 Manage Relationships  
APO09 Manage Service Agreements  
APO10 Manage Suppliers  
APO11 Manage Quality  
APO12 Manage Risk  
APO13 Manage Security

### Monitor, Evaluate and Assess

MEA01 Monitor, Evaluate and Assess Performance and Conformance

MEA02 Monitor, Evaluate and Assess the System of Internal Control

MEA03 Monitor, Evaluate and Assess Compliance With External Requirements

### Build, Acquire and Implement

BAI01 Manage Programmes and Projects  
BAI02 Manage Requirements Definition  
BAI03 Manage Solutions Identification and Build  
BAI04 Manage Availability and Capacity  
BAI05 Manage Organisational Change Enablement  
BAI06 Manage Changes

BAI07 Manage Change Acceptance and Transitioning  
BAI08 Manage Knowledge  
BAI09 Manage Assets  
BAI010 Manage Configuration

### Deliver, Service and Support

DSS01 Manage Operations  
DSS02 Manage Service Requests and Incidents  
DSS03 Manage Problems

DSS04 Manage Continuity  
DSS05 Manage Security Services  
DSS06 Manage Business Process Controls

Processes for Management of Enterprise IT



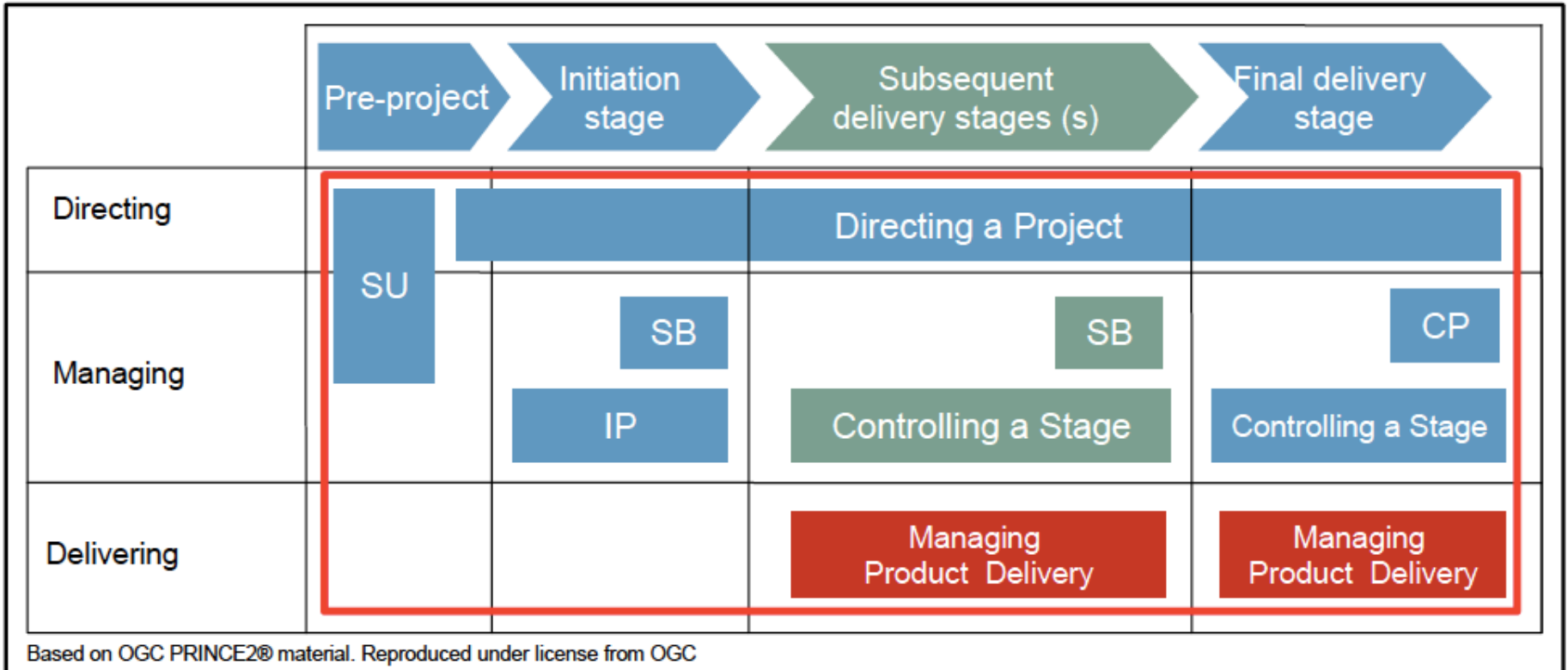
# PRINCE2

## PRoject IN Controlled Environment



- Projects are risky for their very nature
- We can facilitate success adopting a project management approach like PRINCE2

# PRINCE2



**Fig 2.2 PRINCE2 Processes**

# PRINCE2

## Why Use a Project Management Methodology?

PRINCE2 provides benefits to the managers and directors of a project and to an organisation, through the controllable use of resources and the ability to manage business and project risk more effectively.

PRINCE2 embodies established and proven best practice in project management. It is widely recognised and understood, providing a common language for all participants in a project.

PRINCE2 encourages formal recognition of responsibilities within a project and focuses on what a project is to deliver, why, when and for whom.



# Thanks for attention

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