

SAP for Utilities Overview

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Objectives

- At the end of this presentation, you will be able to:
 - Understand SAP for Utilities definitions and components
 - Identify integrations between the Solution and other SAP and non-SAP Systems
 - Review key aspects during the implementation
 - Understand how a system can help reduce operational loss.

Agenda

- Introduction to SAP IS-U/CCS
 - Definitions
 - Modules
 - Integrations
- Key aspects to consider during implementation
- Operational Loss
- Q&A

Introduction to SAP IS-U/CCS

Definitions

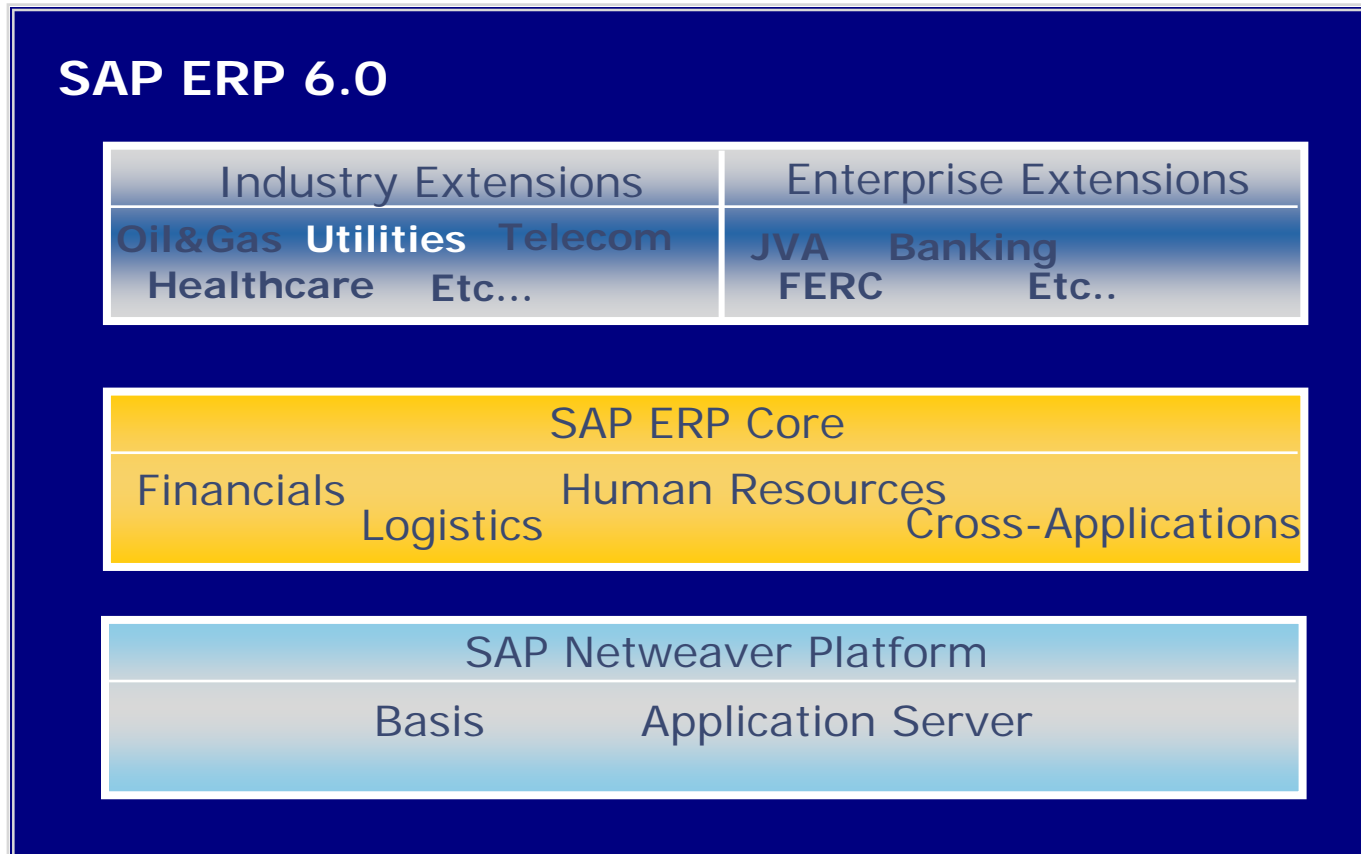
SAP Industry Solution for Utilities companies

- Customer Care System
 - Initially, an Add-on industry solution (last version 4.72)
 - Included in mySAP ERP Edition 2005 (ERP 6.0), as an Industry Extension activated via SAP Switch Framework.
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- Activity Sectors
 - Electricity, Gas, Water, Sewer, Cable TV
 - Capability to create new activity sectors
 - One company -> One or More activity sectors
 - Residential and Non-Residential clients
 - Regulated and Deregulated markets

Introduction to SAP IS-U/CCS

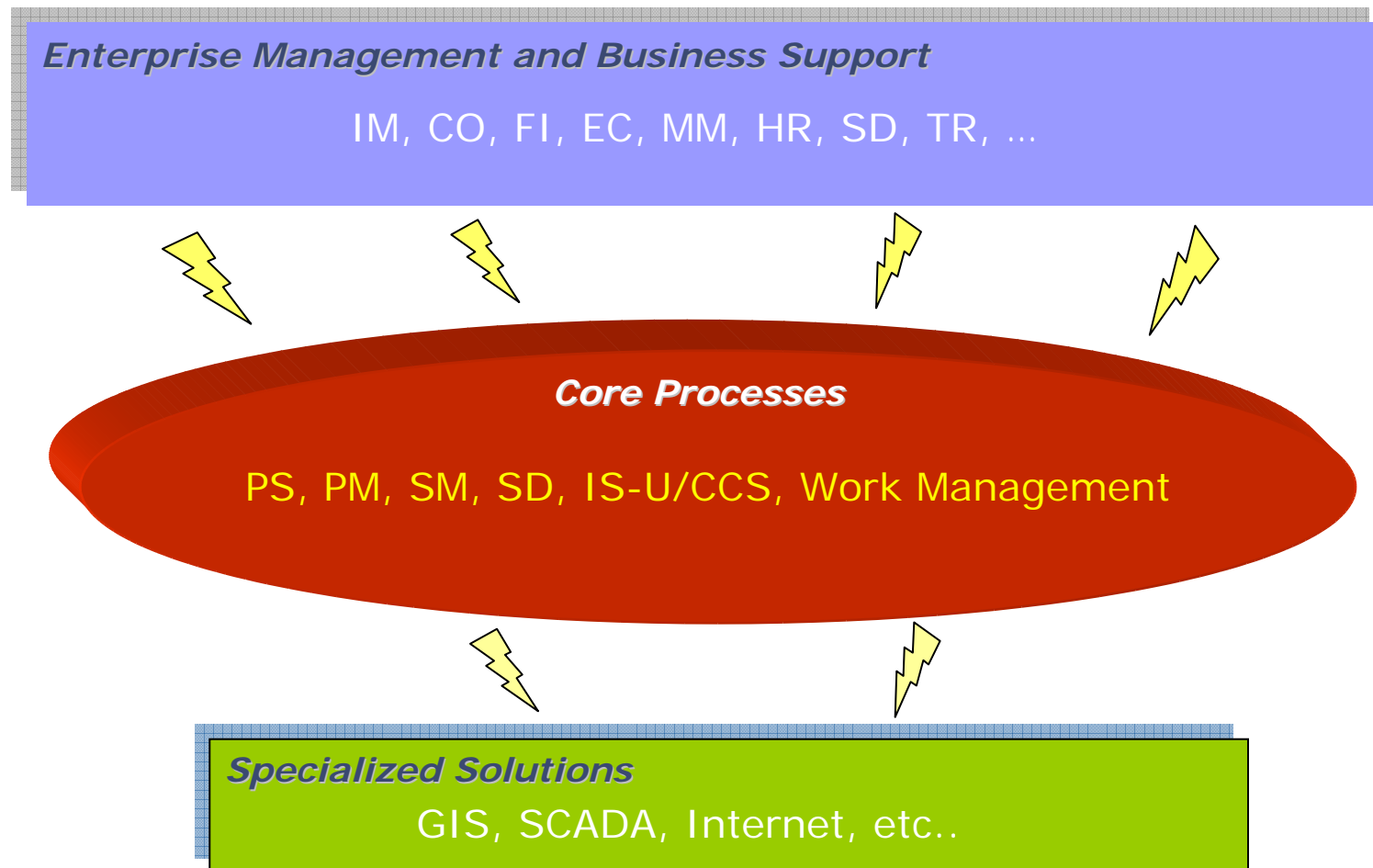
Definitions

IS-U/CCS as part of ERP 6.0



Introduction to SAP IS-U/CCS Integrations

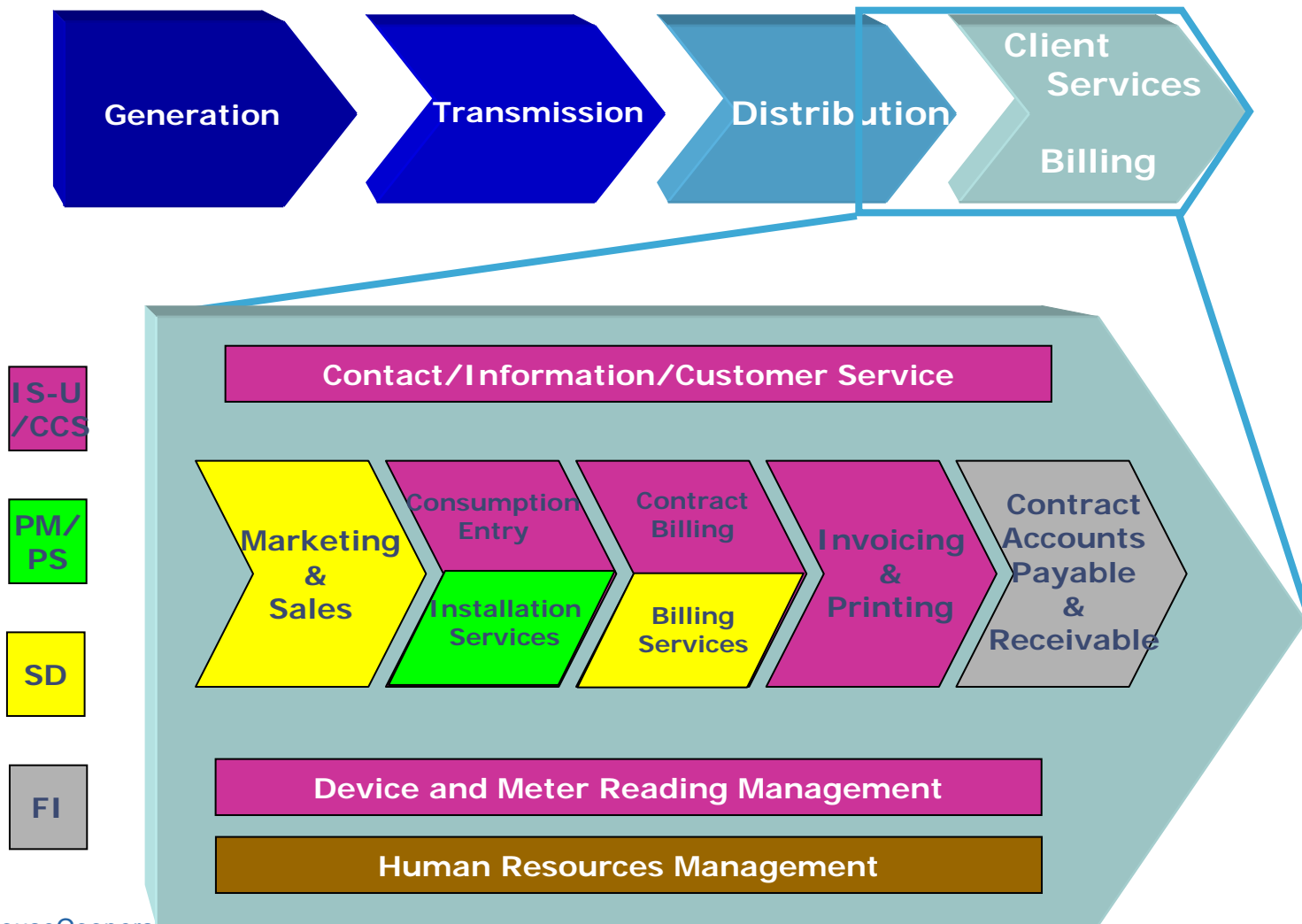
IS-U/CCS as a component in the ERP solution



Introduction to SAP IS-U/CCS

Definitions

Functional Scope

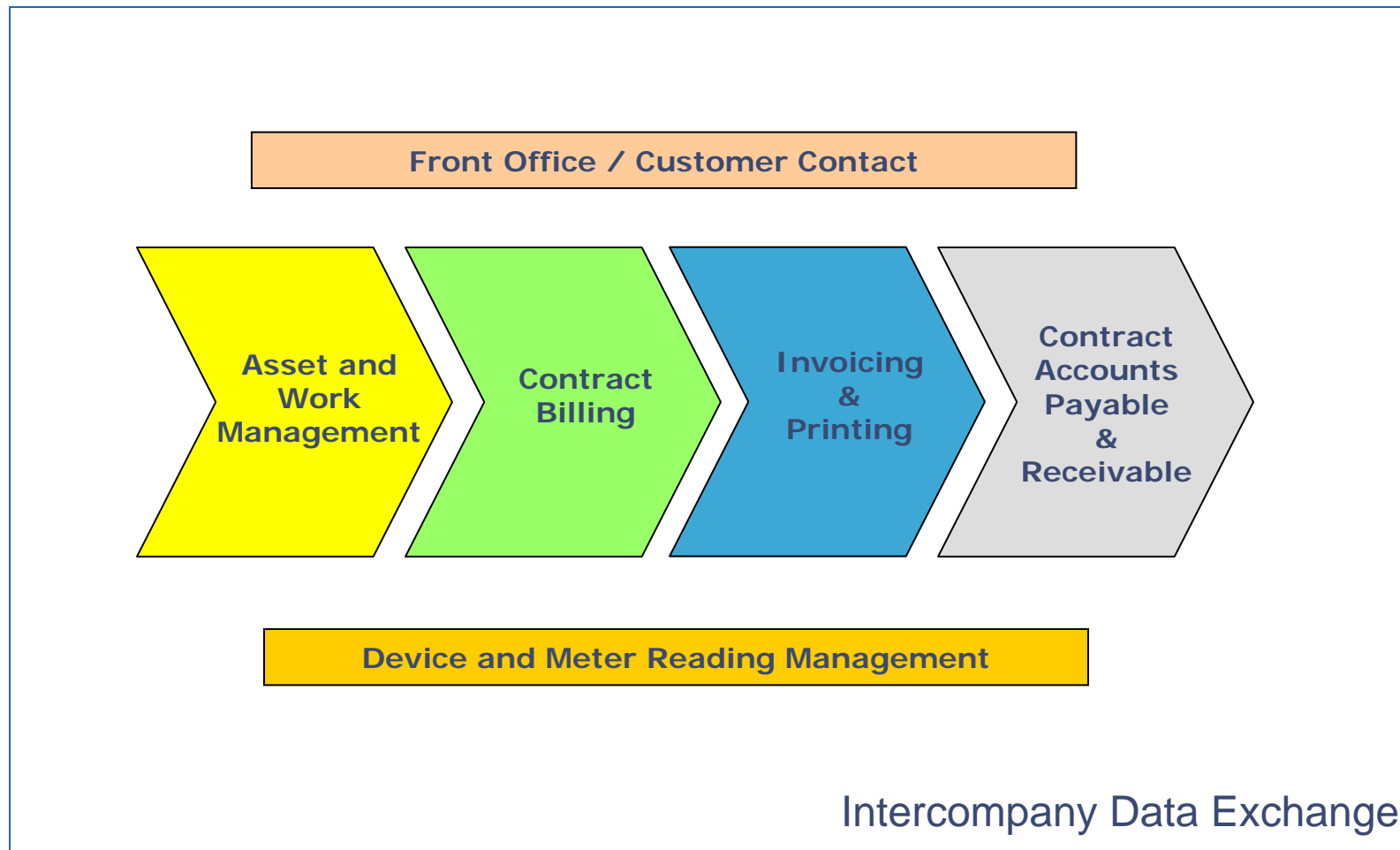


Introduction to SAP IS-U/CCS Modules

IS-U/CCS Modules

- Front Office / Customer Contact
- EDM – Energy Device Management
 - Device Management
 - Meter Reading
 - Energy Data Repository
 - Settlement
- Contract Billing
- Invoicing
- Contract Accounts Receivable and Payable (FI-CA)
- Asset and Work Management
- Intercompany Data Exchange

Introduction to SAP IS-U/CCS Modules



Introduction to SAP IS-U/CCS Modules

Front Office / Customer Contact

- Front Office supports all business processes
- Records all types of contacts between the customer and the utility company
 - In-Person, Internet, Fax, Letter, Phone, e-mail
- Customer contacts can be created
 - Automatically: as part of internal processes (move-in, move-out, etc.)
 - Manually: complaints or inquiries
- Possibility to define classes and activities according to the client
- Can be analyzed using standard reports
- Not a CRM system (no campaign management, no market analysis, no field service sales, etc...)

Introduction to SAP IS-U/CCS Modules

Device and Meter Reading Management

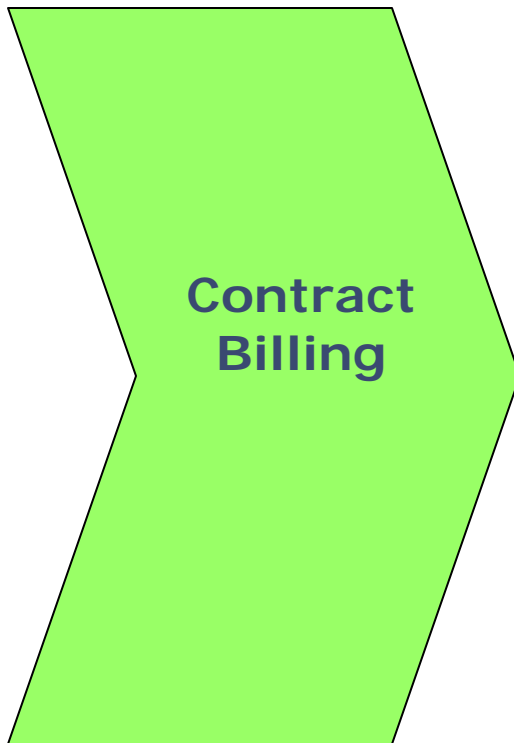
- Key functional area
 - Manages meter and device data
 - Supports entry and management of meter reading results and consumption data
- Device Management
 - Record information for billing, technical installations and inspections and certifications
 - Integrate with PM and MM
- Meter Reading
 - Street Routing and Periodic/Non-Periodic Orders
- Energy Data Repository
- Settlement – interconnection between distributors and suppliers

Introduction to SAP IS-U/CCS Modules



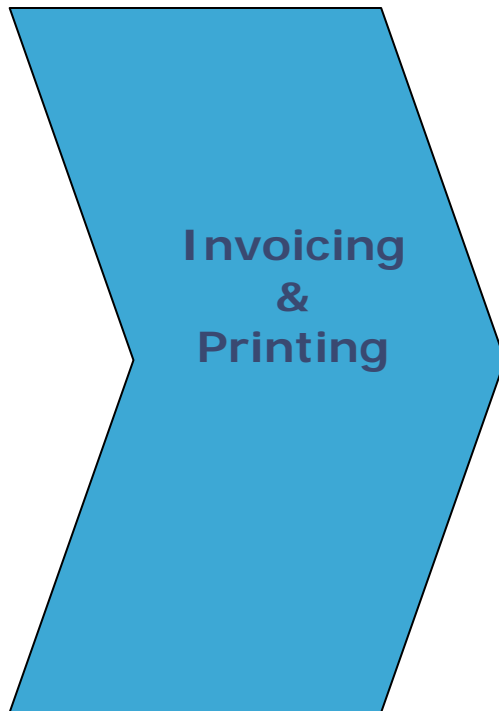
- Map all technical object
- Improve maintenance work
- Check the total cost of installations
 - From purchase through refurbishment, to maintenance
- Offer customer oriented services, schedules services
 - Post services in bills
- Integrate with external systems
 - GIS and NIS

Introduction to SAP IS-U/CCS Modules



- Central component of IS-U solution.
- Basic Functions
 - Residential and non-residential clients with user-defined periods
 - Flexible billing cycles with simulations
 - Cross-contract billing with plausibility checking
 - Parallel processing and monitoring for mass run

Introduction to SAP IS-U/CCS Modules



- Processes bills from different sources
 - mySAP Utilities solution
 - mySAP SD component (installations and sales)
 - External billing systems
- Post documents to FI-CA
- Creates print documents and print bills
- Supports reversals processes
- Manages budget billing plans
- Supports determination and collection of taxes, charges and duties

Introduction to SAP IS-U/CCS Modules



- New component: sub ledger accounting designed to the industry sectors
 - Parallel and Mass processing
 - Relevant objects: Business Partner, Contract Accounts, IS-U contracts
- Key Functions
 - Several payment methods
 - Control Clearing of an Open Document
 - Dunning for due open items
 - Interest calculation and Business Partner evaluation
 - FI-CA documents are summarized before transferred to GL
 - Postings and Reversals / Closing activities

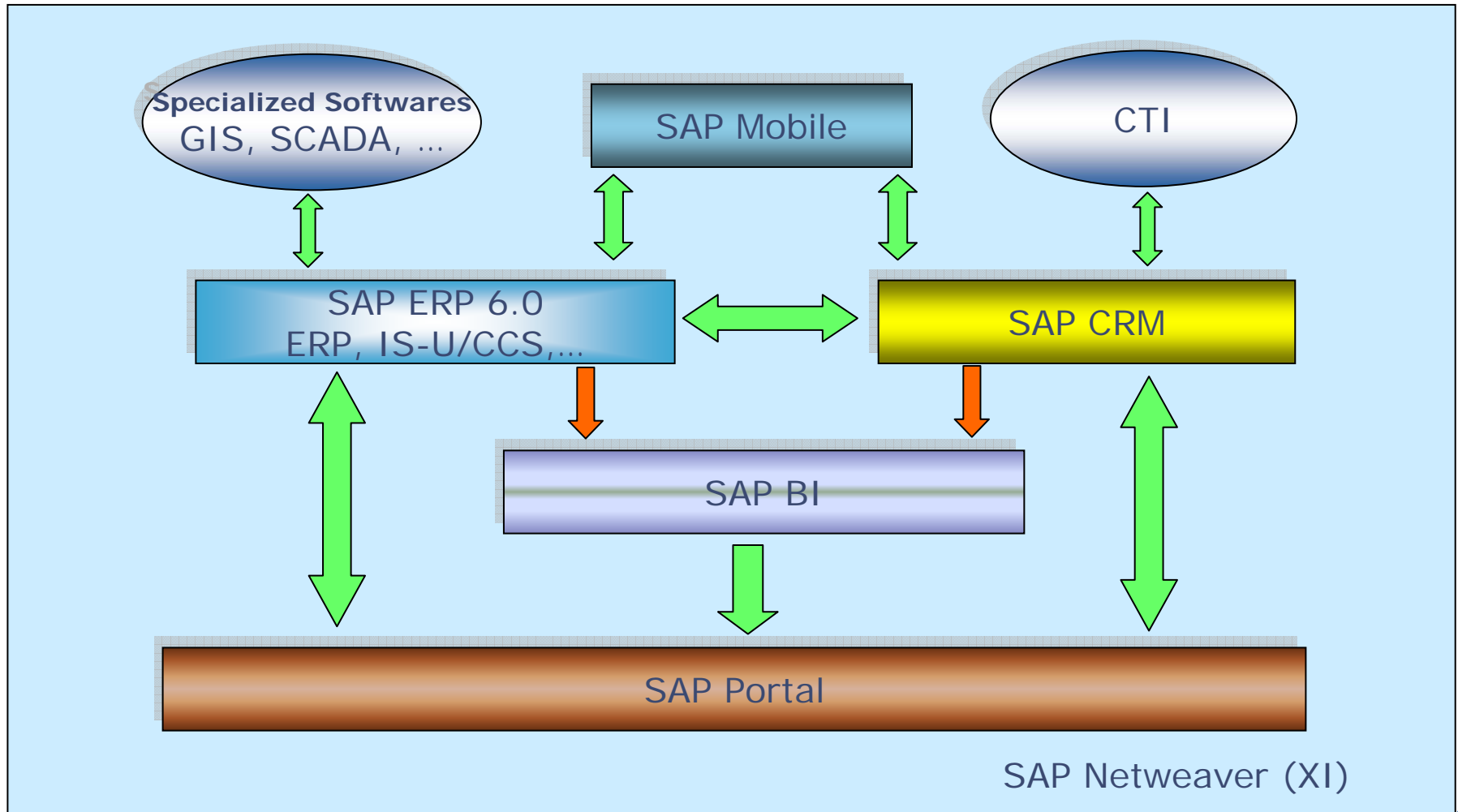
Introduction to SAP IS-U/CCS Modules

Intercompany Data Exchange

- Used in deregulated energy markets
 - Customers are free to switch utilities suppliers
- Administration of deregulation data
 - Points of delivery, Grids, Services and Service Providers
- Processing of data exchange processes
 - Allows to exchange data necessary for business process in deregulated market

Introduction to SAP IS-U/CCS Integrations

Integration with other SAP and non-SAP Solutions (one example)



Key aspects to consider during implementation

Lessons Learned

Typical Timeline

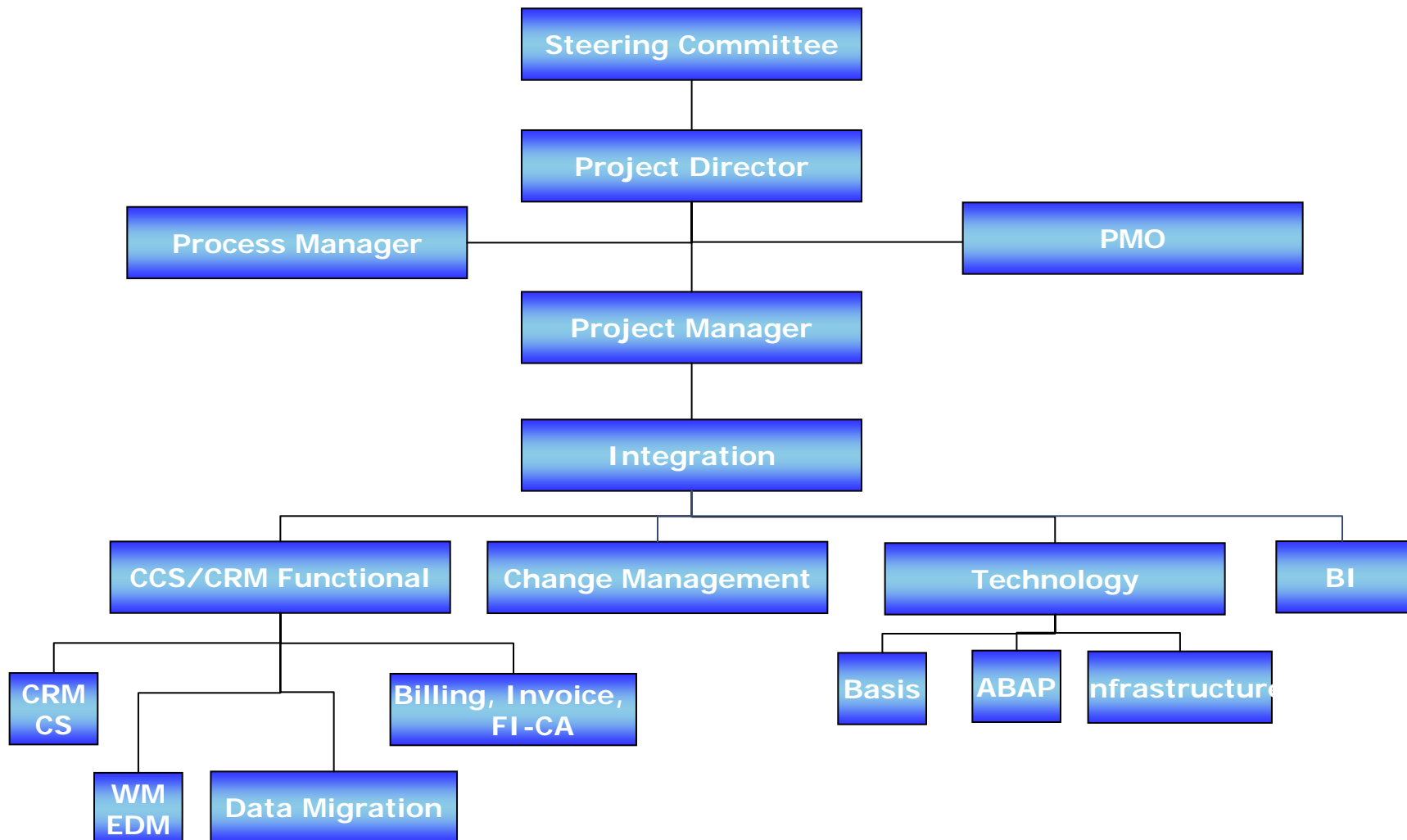
In IS-U/CCS implementations we usually have:

- 2 Go-Lives
 - First go-live as “pilot implementation” for a small area and non-residential customers
 - Second go-live for all residential customers, at least 4 months later
- 2 months support after go-live (minimum)
 - 1st month: migration data
 - 2nd month: new data

Lessons Learned

Roles and Responsibilities

Organizational Structure



Reminders during the project

- Keep track on the integration during the project phases
- Flexibility to change project organizational structure between go-lives
- Scope control – mainly after 1st go-live
- Performance should be considered since the design phase
- Data migration, security profiles, archiving and reports should be addressed by functional teams since the design phase
- Leverage the use of standard SAP
- Test, Test, Test (Data Migration, Stress Test, Batch Test, Unified, Integrated)
- Revise hardware sizing during the project
- Communication and training are crucial

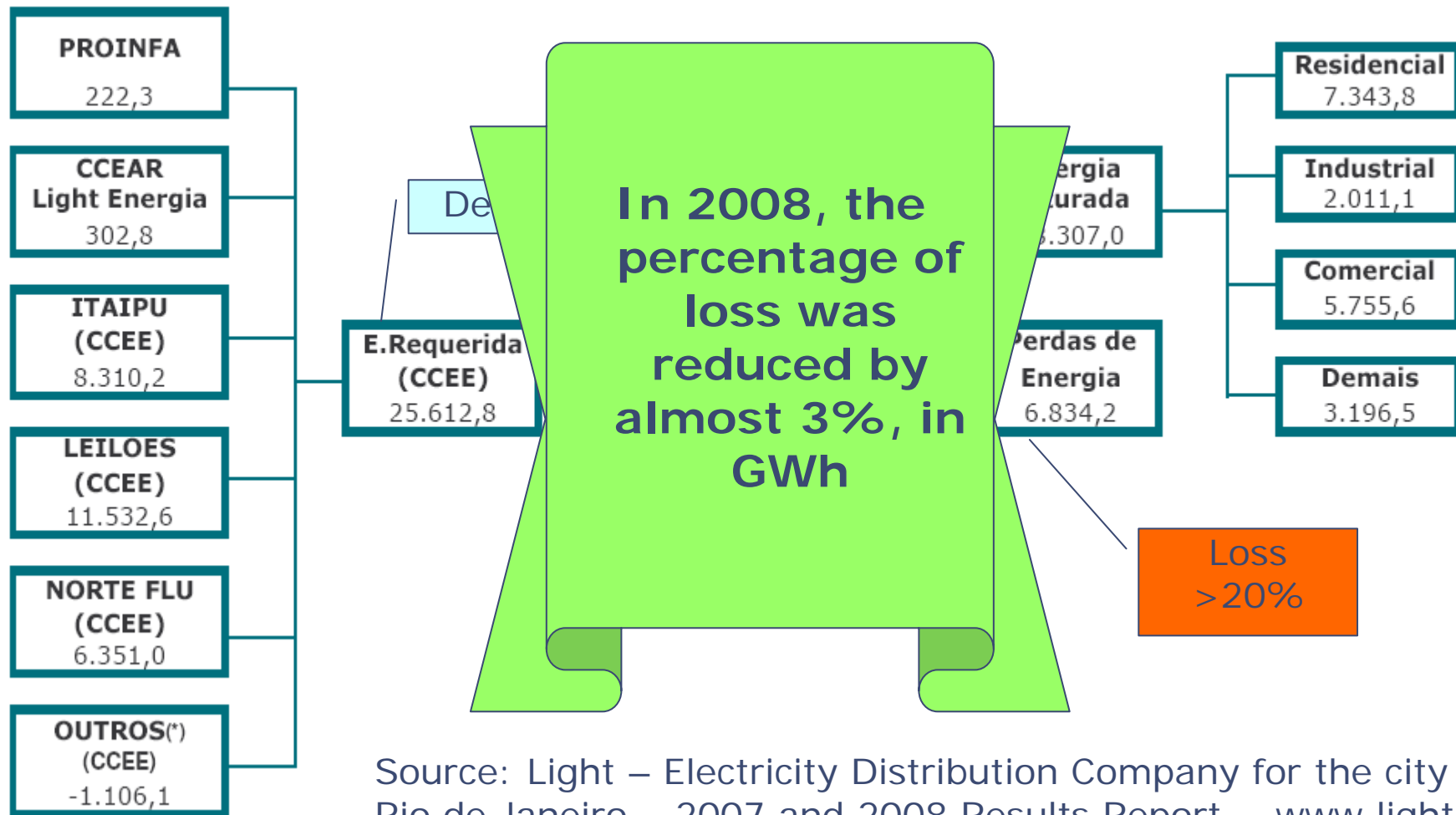
Operational Loss

What can be considered as operational loss?

- Generic denomination
- Energy bought – Energy charged
- Where is the difference
 - Reduce in Accounts Receivable
 - Network improvement
 - Illegal Connections

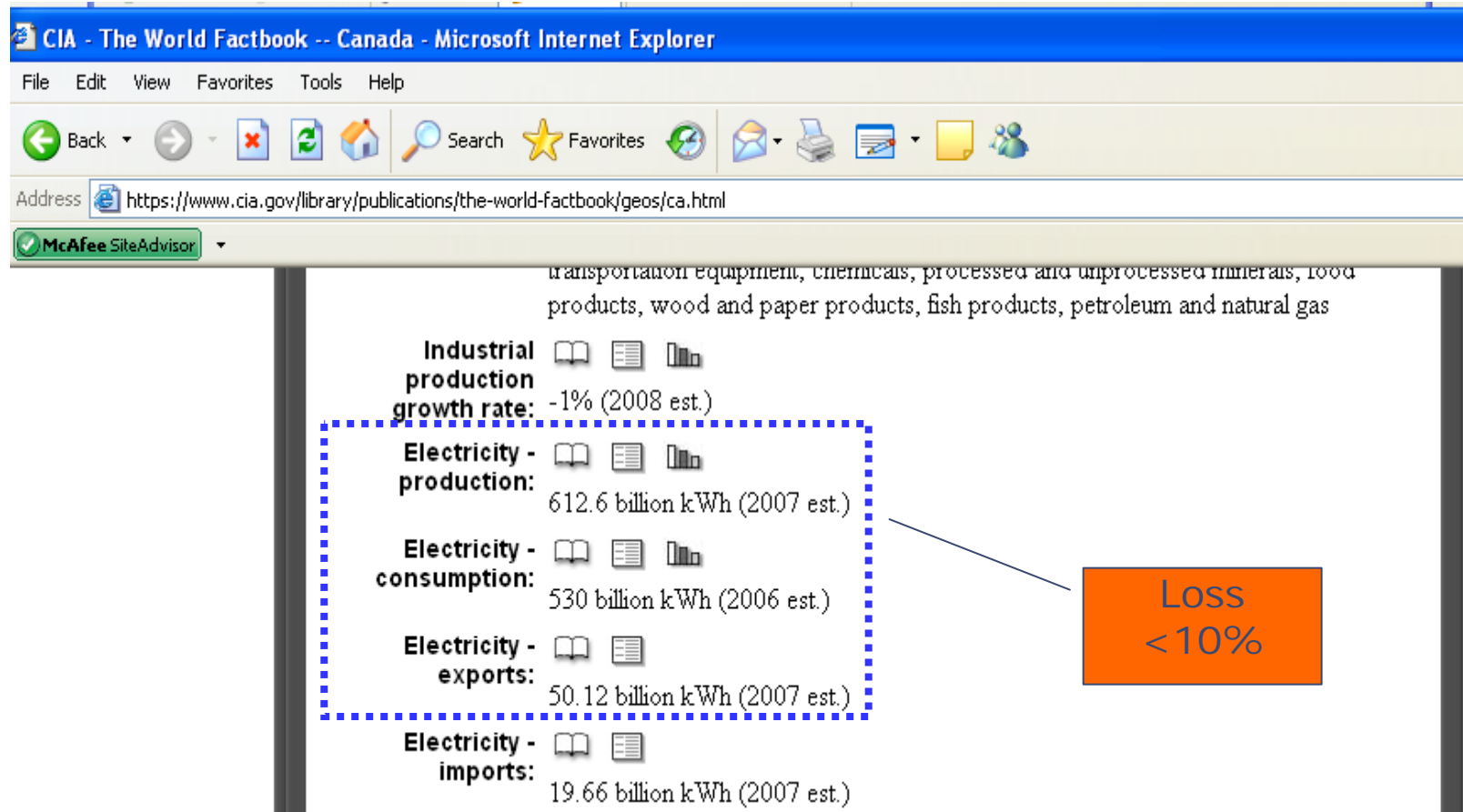
Facts - Brazil

BALANÇO ENERGÉTICO DE DISTRIBUIÇÃO - GWh Posição: janeiro a dezembro de 2007



Source: Light – Electricity Distribution Company for the city of Rio de Janeiro – 2007 and 2008 Results Report - www.light.com.br

Facts - Canada



Source: CIA website – www.cia.gov

How to reduce Loss?

Reduce in Accounts Receivable

- Improve controls
- Increase methods of payments
- Keep close contact with clients

With SAP

- One client has one contract account and multiple contracts
- Multiple methods of payments
- EDI with banks to process receivables
- CRM tools

How to reduce Loss?

Network Improvement

Operational Tasks

- Improve meter reading
- Improve disconnection/reconnection management
- New devices

With SAP

- Every service requires a meter reading
- Reduce lag between physical and system disconnection/reconnection
- Data clean-up and migration tests prior to go-live

Illegal Connections



Illegal Connections



Illegal Connections



Illegal Connections



How to reduce Loss

Illegal Connections


- Education campaigns
- Off-site meter reading
 - Risk Areas (high crime rates)
- Reduce # of self-reconnections

- With SAP
- Identify patterns of consumption, using Business Intelligence
- Develop X-module tool to support campaign
- Improve disconnection/reconnection management

Wrap-up

- Introduction to SAP IS-U/CCS
- Key aspects to consider during implementation
- Operational Losses
- Q&A

Contact

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