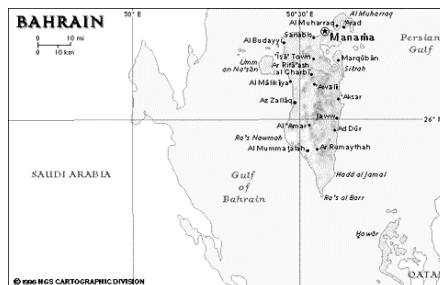


# Software Maintenance in SLA's

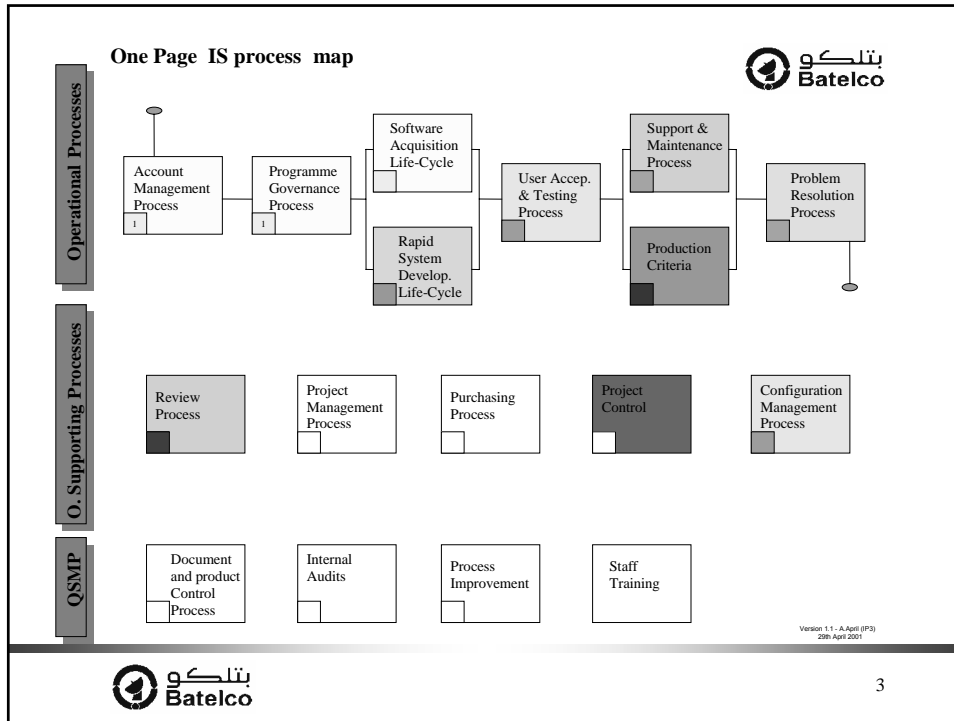
Alain A April      Dhiya Al-Shurougi  
ipq@btc.com.bh      ip@btc.com.bh  
Bahrain Telecommunications Company

FESMA'2001  
May 8-11, Heidelberg

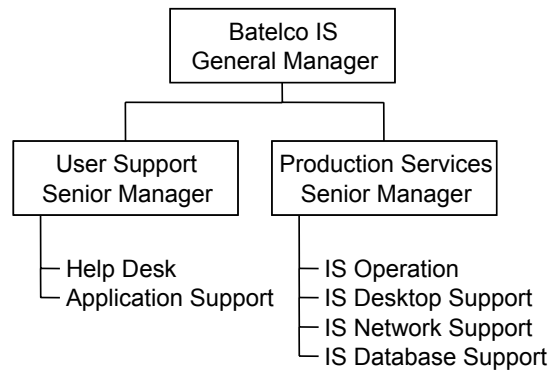
## Batelco    بتلكو



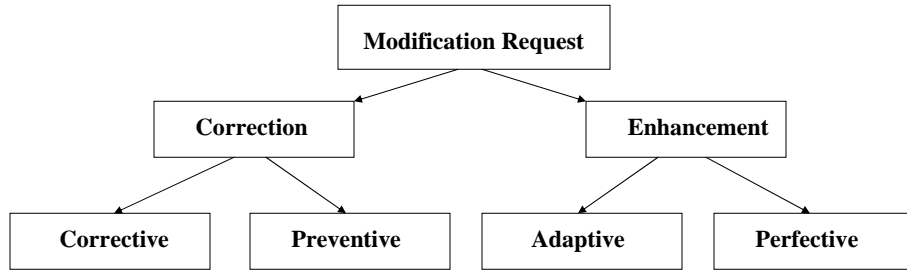
- **Bahrain's Telecommunications**
- 200,000 PSTN lines, 170,000 GSM
- Internet services deployed
- 84% Satisfaction from our Services
- Joint ventures in Kuwait (QualityNet) and Saudi Arabia (Atheer)
- Major Reduction in international call charges (fourth times in three years)
- 225 positions in IS Division



## Our Maintenance & Support Organization

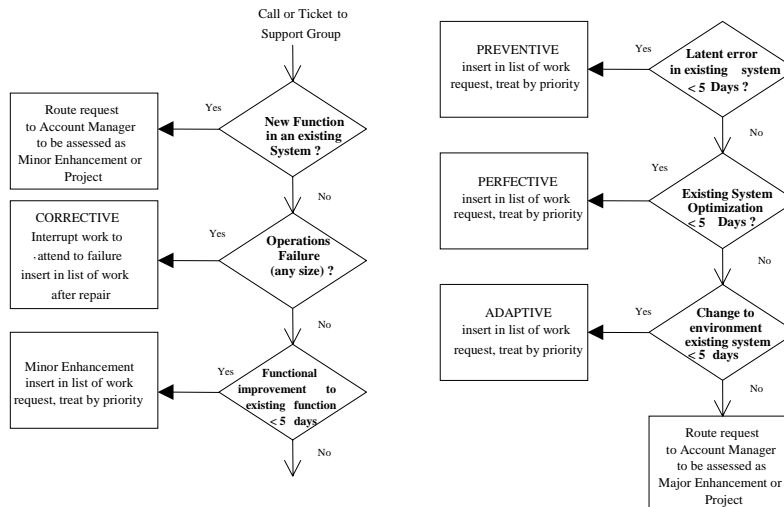


# ISO/IEC 14764 - M&S

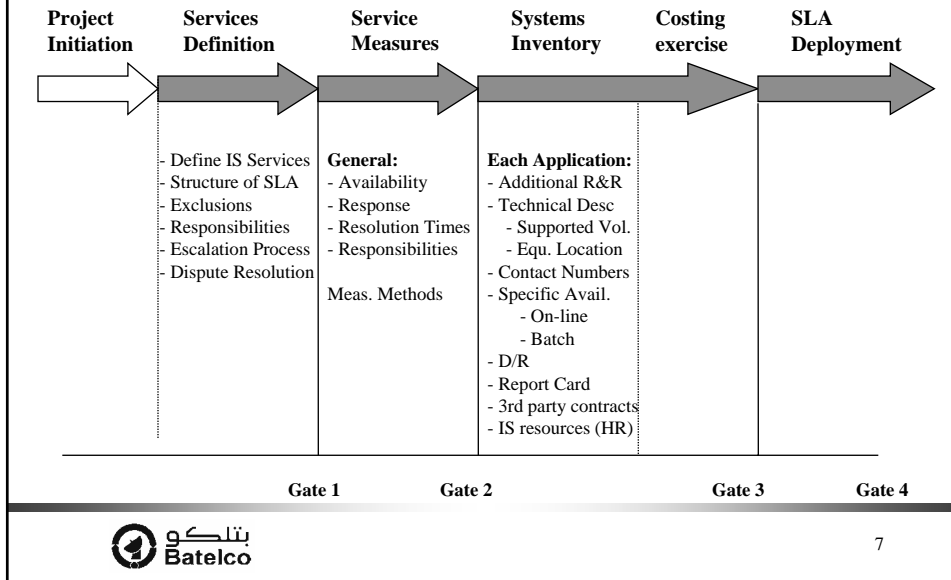


- Modification request come in more or less randomly;
- Modification request are assessed at operational level;
- Maintenance workload not managed with project management techniques;
- The size and complexity can typically be handled by one/two resource;
- Maintenance is user-services-oriented;
- Any production problem will take priority over work in progress.

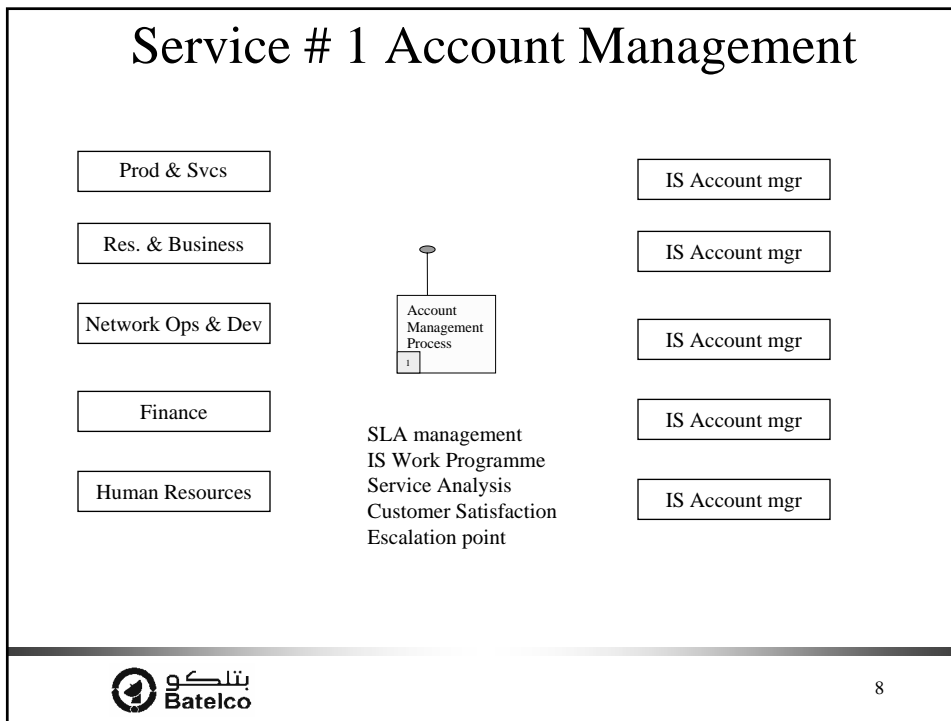
# When is it M&S work ?



# SLA Project



# Service # 1 Account Management



## Service # 2 Application Management

- Change Request Management/Assessment
- Corrective Maintenance
- Preventive, Perfective & Adaptive Maintenance
- Release Planning & Management
- Configuration Management
- Licenses, Escrow and M&S support
- Project Support

## Service #3 Help Desk

- Answer calls and resolve problems on-line
- Record problem information
- Prioritization
- Route calls & follow-up
- Notify customers of system events
- Administer security & access to application

Answer within 3 rings (no hold) 75% of total calls  
Resolution on first call (no referrals) < 15 min 85%

## Service #4 Infrast. & Operations

- Database Systems Dev., Ops, Support & Monitoring  
Availability :Front-Office 99%, Back-Office 96%
- Network Dev., Ops, Support & Monitoring  
Availability WAN & LAN 99%
- Desktop and Messaging Support Services  
Faults by criticality {2h,8h,3d,5d}, New 10d, Moves 3d
- Contingency & Disaster Recovery
- Platform & Base Sftwr. Licenses & Contracts

## Service #5 Problem Management

- Immediate assistance to level1 (help desk)
- Assist level 1 in prioritization
- Analyze fault, recommend fix or work around
- Coordinate, negotiate with third party support
- Support Designers, Maintainers & Account Manager
- Surveillance, trends & preventive actions

## Schedules

- List of customer applications by priorities
- 1 schedule B by application
- Description of the ticketing system used by all
- A generic scales of priority
- An example of our Service Level Report

## Conclusion

- Easy
  - Create the initial SLA template
  - Get each section to describe their services
  - Get a high level measure from each IS section
- Hard
  - Document each application (schedule B)
  - Account Managers buy in to present the SLA
  - Customers not always interested in IS point of views