Model 3c - Reference core competence 'Design and technical setup & configuration of the ERP solution of Candidate'

Subject: Application as Candidate for tender EU-245

Contact information reference		
Name organization customer		CLK Enerjl
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Zip code & City		34403, ISTANBUL TURKEY
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Information reference	
Branche of customer	Turkey
Subcontractor(s)	None
Consortium member(s)	None
Start date	Sep 2014
End date	Sep 2016
Focus area's in scope of ERP solution	Oracle ERP designed for: HCM, SCM, Finance, Projects, EAM **Related scope of TenneT OneERP:** 1. Asset Management 2. New Assets / Plan to Build 3. Maintenance and Preservation 4. Finance 5. Financial planning 6. Procurement 7. Warehousing & Logistics Management 8. Human Capital Management
Number and names of interfaces to other products from other vendors	• ESRI GIS (Linear assets) • ABB Ventyx Mobile Fieldforce (Work scheduling & dispatch) • ABB SCADA (Planning switching) • Oracle Hyperion (Investment planning) • Oracle CC&B (Billing reconciliation) • APLUS ETRM (Energy Trading)
Name of countries in scope	Turkey
Number of employees	20000
Operating model	On Premise
Number of different types of technical interdependent assets in ERP solution	112 types of assets categorized as Station assets, Feeder assets, Line assets, Line equipment assets, Facility and Fleet assets
Was the agreed end-date met ? (Y/N)	Y

| Description including the approach, milestones and the deliverables |
|---|

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Client: Deregulation in Turkey's Electric Market has resulted into formation of several electric utility distribution companies. One of these private utility, CLK Enerji, formed new subsidiaries for Distribution and Retail supply operations in licensed regions. CLK Enerji is Turkey's largest electricity utility group. It comprises four distribution companies and four retailers collectively distributing and selling nearly 46TWh of electricity per year to nearly 10 million customers, representing around one-third of the market.

Background context and Wipro approach:

Solution involved implementation of Oracle E-Business Suite (EBS) ERP modules supporting Human Resources, Finance, Logistics, Procurement, and Projects among other functions. Activities include requirement collection & analysis, Product fitment, Product configuration & customization, Integration development, Testing & Implementation.

Wipro's Solution:

The solution implementation encompasses a comprehensive transformation of the utility's business and IT landscape including Enterprise Architecture services, Business Process Re-engineering and implementation of integrated solution. A simplified overview of the solution is as below.
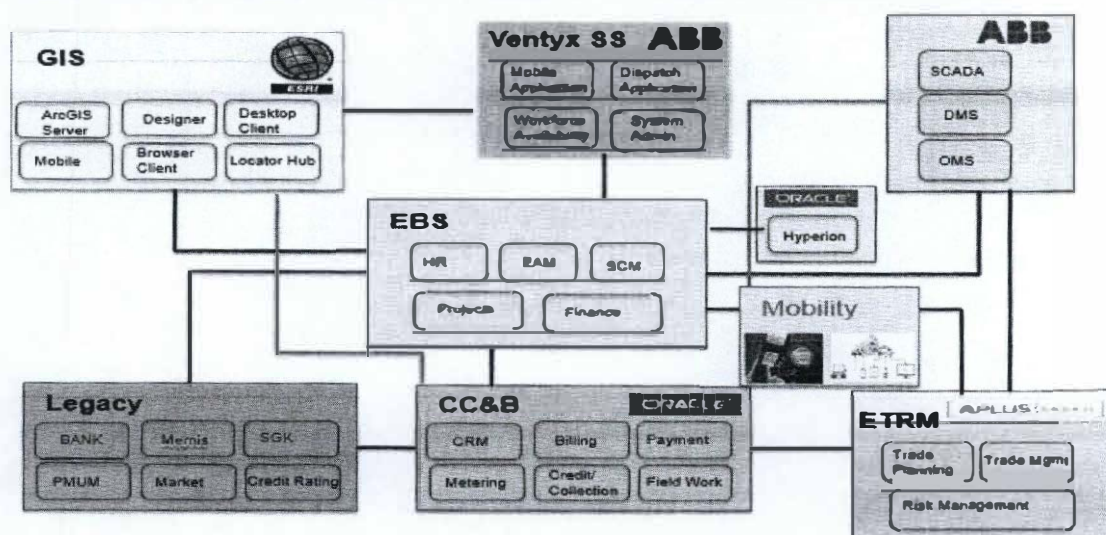
The scope of work included:

- Enterprise Architecture Services
- Review and redesigning of Business Processes
- Implementation of Oracle Enterprise Business Suite (ERP), CC&B and MDM, EAM , ABB Ventyx mobility solution, ABB Network Management Solution and SCADA , ESRI GIS, and APLUS ETRM solution
- Integration of above systems to cater to future state business processes
- Reports and analytics covering operational, reliability and performance analysis
- Data Migration from legacy systems
- Transition and Cut-over management
- Business Change Management
- Program Management

This transformation program was implemented as planned in three releases:

1. Release-1: As part of the first release Common Processes were implemented across all eight companies (4 Distribution & 4 Retail) using Oracle Enterprise Business Suite (EBS)
2. Release-2: In second release, the focus was on Customer and Meter related processes across all eight companies covering solution components like CRM Billing, Metering, Field Operations and Energy Trade and Risk Management Solutions
3. Release-3: Third and final Release focus was Asset and Operations across four distribution companies covering solution components like GIS, EAM, Work Force Scheduling and Mobile solution, SCADA, Outage Management System (OMS) and Distribution Management System (DMS)

In order to manage such a vast project, strong collaboration, project governance, and design principles were designed and implemented. The solution design approach was built on a number of

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principles, including:

- Single integrated design – with a single technical implementation, CLK unifyied the processes and enterprise architecture across its eight operating companies.
- User centriclty – CLK's own users and final customers were put at the center of the process and solution definition for corporate functions, fleld force, retail, and self-service applications.
- Best-flt product – alignment with the overall architecture and best fit for CLK's business requirements were the main criteria driving the selection and integration of indlvidual products, as opposed to a single-vendor end-to-end approach.
- Design principles – wherever possible, products deployed in their out-of-the-box (OOTB) version with minimal customization and integrated using standard components. This delivers benefits in terms of easier and cheaper upgrades, better vendor support, and preservation of industry standards and best practice as embedded in the OOTB functionality.

List of key functionalities implemented:

Release-1	Release-2	Release-3
Human Resource Management	Metering	Enterprise Asset Management
Finance	Meter reading	Work Management
Purchase and Inventory	Meter Data Management	Fleet Management
Projects	Billing	Network Operation
Enterprise Security and	Customer Service	Outage Management
Identity Management	Connections	
Analytics and Reporting		

Key Activities and Deliverables:

Key Activitles	Key Deliverables
Fit-Gap Analysis	• Product to Business processes fit-gap analysis • Business requirements specification documents • MOSCOW analysis

Design	• Conference Room Pilot (CRP) scenarios
	• Application Configuration & Setup documents
	• Functional Requirement Specification (FRS)
	   o Process Maps
	   o To Be Process L1-L5
	• Functional Design Document (FDD)
	• Technical Design Document (TDD)
	• Proof of Concepts & prototypes for work-around and Customizations
	• Application Integration Strategy
	• Application Testing Strategy (Functional, Automation, Performance, Load, Endurance Testing, Regression Test Strategies)

Build	• Instance Strategy • Application Configuration • Conference Room Pilot (CRP) • Data Migration • Customizations development • Interfaces development • Unit Testing
Testing	• Test Strategy, Test Planning • Functional System Testing and E2E Business Process Testing • Customization Testing and Integrations Testing • Reports Validation • UAT Support • Defect Triaging and Test Reporting • Test Closure Summary Reports • Quality Stage Gates and Checklists
User Training	• Classroom Sessions • Train the trainer and End user handholding
Cut-over and Deployment	• Release-wise Appllcation Go-live Strategy • CLK companies wise rollouts

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Production support	• Application warranty support
	• Incident management and ticket resolutions
	• Root cause analysis

Key Activities invoved during Application Design and Testincal Configuration & Setups:

Key Activities	Remarks
Core Setup	• Blue printing
	• Application design and Design validations
	• Conference Rool Pilot (CRP) – repeatetive reviews and feedback sessions (more than 500 design workshops)
	• Application configurations of key Oracle EBS, Oracle CC&B, Oracle EAM applications
Custom objects	• Over 200 integrations within and outside the organization
	• Oracle Fusion middleware and service-oriented architecture
	• Extensive IT-OT integration work including direct interfaces between the SCADA/DMS/OMS system and GIS, work scheduling and filed force mobility, CC&B, MDM, and BI applications
	• Integrated network model, meter/customer mapping, direct outage work assignment, AMI outage event notification, grid analytics, etc.
	• Enterprise performance management portal, single sign-on, and integrated identity and access management across 12 systems leveraging Oracle Identity and Access Management
Data Migration	• Assets, Master data, Open Transactions data
	• Open balances
	• Customers, Meters, Biiiing, Payment and Collections data

The Key benefits derived from the initiative are:

- Uniform processes and single solution across 4 regions will result in better synergy, collaboration and reduced cost of operation
- Automation of Processes will improve productivity: Month end closing time has been reduced from a week to one-day due to availability of data in single system
- Time required to develop all financial reporting has reduced from four days to less than an hour.
- Invoice to payment cycle time is reduced from two weeks to less than two days.
- Automation of Billing and related processes will reduce customer complaints, improve accuracy and collection and impact organization performance in a positive way
- Reduction in energy theft and improvement in Revenue
- Improvement in customer service and targeted retention of customers
- Reduction in operation and maintenance cost
- Better utilization and monitoring of assets, via SCADA, GIS and Asset Management systems, improved Health and Safety.
- Earlier detection of outages by 15 minutes and improvement in reliability performance
- IT-OT Integration to detect quality of energy supply and minimize energy loss
- IT-OT integration between DMS / OMS and ETRM resulting in better forecasting and improved trading operations
- End to end GIS mapping and asset/customer coding will allow single source of truth for all related data, allow visual working and enable next generation of business processes like asset tracking, mobility and network model creation

Candidate certifies that the reference above was delivered in a competent and professional manner and that this statement is truthful and complete.

Name Candidate	Wipro Limited
Name authorized representative	Serhan Othan
Position authorized representative	CIO
Place and date	
Signature	