A Presentation on ASYCUDA World Implementation (AW Technical Side)

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Planned Platforms

NECAS (NEpal Customs Automation System)

Front-End
JAVA
SOClass
Tomcat Web Server

Back-End
Enterprise Edition (Oracle 11g recommended by UNCTAD)
Datacenter and IT Infrastructure

**Primary Datacenter**
- Modular Datacenter at Department of Customs

**Secondary Datacenter (Standby)**
- At Government Integrated Datacenter (GIDC)
- Connection between primary and secondary site through dark fiber.

**Disaster Recovery Side (DR)**
- Plan for DR Site in different seismological region (Bhairhawa, Birgunj or Hetauda (Government))

Server Deployment in Datacenter

**Primary Site**
- AWAP-2 (Production and Redundant)
- AWWS-2 (Production and Redundant)
- AWDB-2 (Production and Redundant) 4 Core Processor — **Load Balancing**
- AWTT, AWTTS-2
- Other servers (Network Management, Email, DNS etc)

**Secondary Site**
- AWAP-1
- AWWS-1
- AWDB-1

**Branch**
- Firewall/Router
- Switch
Strategy to maintain and sustain the communication infrastructure for the centralized implementation

- Dual Connectivity (From Different ISPs)—10/10 Mbps in major offices
- Centralized Management for Intranet
- Separate VLAN for text data and Video (IP camera traffic)
- All Devices located in High Availability (HA) Mode
- Alternative Power Supply (Generator, UPS)
Sub-systems within customs

- Requirement of Separate Modules within AW for full automation in customs administration.
- Plan to develop sub-modules within AW
  - Revenue Loss Process
  - Temporary Vehicle (Entry/Exit)
  - Module for PCA process
  - Auction Management etc
- Sub-Modules will be developed within ASYCUDA world (With same technology)

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Plan for interfacing /integrating with other government agencies,

- At initial phase, interface with Banks (Any Branch Payment)
- Later, with other agencies through NNSW project (55 stakeholders (9 majors) have been identified)

Risks and Challenges

- Lack of Specialized (High Skilled) Manpower
- Retaining of IT professional
- Management of Recurring Cost
- Reliability of Network Connectivity
- Ownership of Revenue staffs towards system
Planned Activities for mitigation of risks

- Increase IT manpower in Department
- Plan to build specialized human power in each field (Programming, DB, N/W, operation)
- Performance Based Incentive System
- Massive Training to IT and other functional staffs

Thanks