



**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)

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## 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))

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## 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)

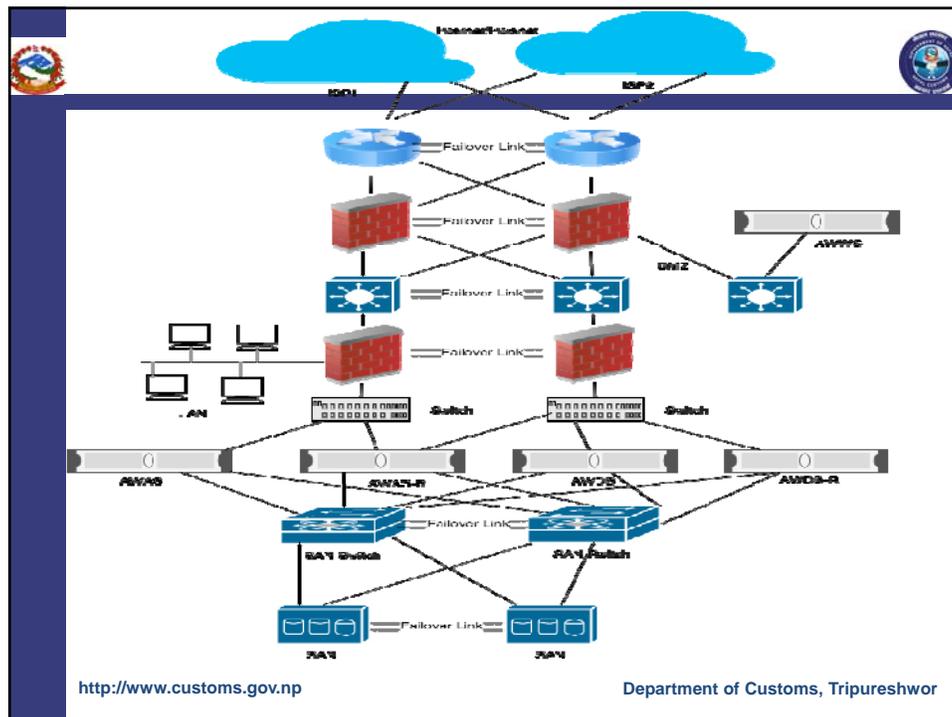
**Secondary Site**

- ✓ AWAP-1
- ✓ AWWS- 1
- ✓ AWDB-1

**Branch**

- ✓ Firewall/Router
- ✓ Switch

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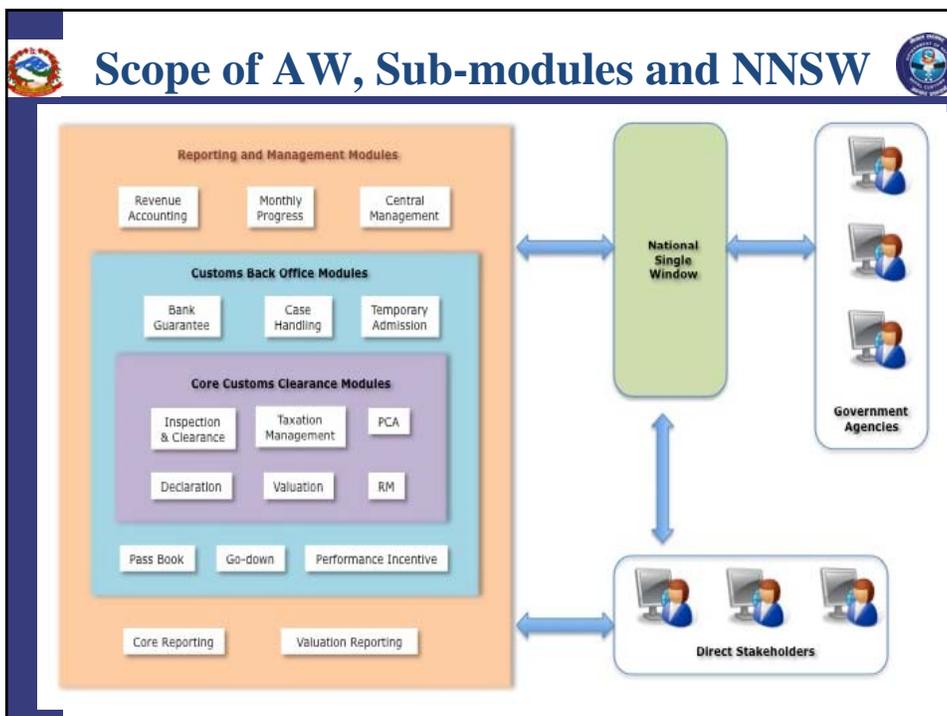
### Strategy to maintain and sustain the communication infrastructure for the centralized implementation

- ✓ 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)

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 **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

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### 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

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## Thanks

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