

# **FALLBACK PROCEDURES FOR SYSTEM BREAKDOWN**

**PORT KLANG**



# FALLBACK PROCEDURES (PKA)

## eDCFZ System

### 1. POWER FAILURE

- Uninterruptable Power supply unit (UPS) in PKA server room will be activated.
- The UPS system is supported by generator sets with automatic start mode.

### 2. NETWORK FAILURE

- PKA Data Centre is connected to Telekom Malaysia through Metro-E fibre-based.
- Secondary connection to Data Recovery Centre (DRC)
- If failure unrectified within 4 hours, system can be accessed through DRC.



# FALLBACK PROCEDURES (PKA) eDCFZ System

## 3. SYSTEM FAILURE

- PKA will send an official notice to Careline
- Careline will disseminate information to all parties concerned on the breakdown.
- FZ Procedure
  - ❖ Agent will request to load the container/goods prior any declaration to PKA
  - ❖ PKA will instruct agent to apply via form/email with relevant details
  - ❖ PKA will inform terminal to load container/goods

## 4. HARDWARE FAILURE

- Servers with redundant units—cluster system.
- Server mirroring concept.
- If failure unrectified within 4 hours, system can be accessed through Data Recovery Centre (DRC), located in Cyberjaya.



# FALLBACK PROCEDURES (PKA)

## eDCFZ System

### 3. SYSTEM FAILURE

- DG Procedure
  - ❖ Agent will submit declaration manually
  - ❖ Approval will be given at the print out hardcopy. Agent can submit by fax, email or attend to PKA
  - ❖ PKA will endorse at the hardcopy. Manual registration no will be given
  - ❖ 1 copy will be faxed/email to terminal
- Agent will submit electronically once system is recovered
- Daily auto back to local server

### 4. HARDWARE FAILURE

- Servers with redundant units—cluster system.
- Server mirroring concept.
- If failure unrectified within 4 hours, system can be accessed through Data Recovery Centre (DRC), located in Cyberjaya.



# FALLBACK PROCEDURES (NORTHPORT)

## Terminal Operating System / Kontrak 2

### 1. POWER FAILURE

- Power sources are from TNB's two separate power substations.
- Data centres are equipped with uninterruptable power supply unit (UPS).
- The UPS system is supported by dual power generator sets with automatic start mode.

### 2. NETWORK FAILURE

- The data centres are connected to Telekom Malaysia through Metro-E fibre-based.
- Secondary TM connection via wireless through microwave.



# FALLBACK PROCEDURES (NORTHPORT)

## Terminal Operating System / Kontrak 2

### 3. SYSTEM FAILURE

- Daily backup to local data centre and remote storage.
- Systems are co-located in two data centres with 2 km apart.

### 4. HARDWARE FAILURE

- Servers with redundant units—cluster system.
- Disk storage with redundant units-Redundant Array of Independent Disks (RAID).
- Network switches with redundant units.



# FALLBACK PROCEDURES (WESTPORTS)

## Terminal Operating System / eTerminal Plus

### 1. POWER FAILURE

- Redundant power lines from TNB (electrical).
- Generator set to supply power in case a blackout occurs (Tower block and CT 4).
- Uninterruptable Power supply unit (UPS) system for each server, PCs in all data centres.

### 2. NETWORK FAILURE

- Data centres are connected with multiple internet service providers such as NTT, P1, Unifi and Telekom Malaysia via different connectivities i.e. wireless, fibre, etc.



# FALLBACK PROCEDURES (WESTPORTS)

## Terminal Operating System / eTerminal Plus

### 3. SYSTEM FAILURE

- Redundant data centre in two different locations one at our Tower block and other at CT 4 operations building.
- Automated daily backup of all servers in each of our data centres to a remote storage.

### 4. HARDWARE FAILURE

- High availability of internal communication equipment :- walkie talkie, wireless devices and handheld devices for internal port use.
- Redundant Array of Independent Disks (RAID) configuration implemented for all data storages.



**THANK YOU**

