IOH Spesific MOP

«titlemop»

|  |  |  |  |
| --- | --- | --- | --- |
| **Prepared by:** | **Aktortifan Ridno Prabu Pratama (AWX1014609)** | **Date:** | **«predate»** |
| **Reviewer:** | **Aris (AWX544314)** | **Date:** | **«predate»** |
| **Approver:** | **Goh Kok King**  **(G00493149)** | **Date:** | **«predate»** |



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# Description of Change

## Description of Site

Upgrade NE Software Version from V100R011C10SPC300 TO V100R019C10SPC210

**Network Topology:**

|  |  |
| --- | --- |
| **NCE Network topology diagram** |  |
| **Key features and business** | The key features involved in this change NE SOFTWARE VERSION |

**Remote access information: customer agree remote access. The authorization will provided at operation date.**  **Remote Access via VPN**



## Purpose and Requirements

**Change Purpose**: Upgrade NE Software Version from V100R011C10SPC230 TO V100R019C10SPC210

**Change scope:** Change 1NE RTN 950A in JABODETABEK area

**Change time:** **«date»** – **«date»**, **«time»** (All day from 00:00 – 23:59, follow customer approval CR) Description of Change and Change Influence

- To resolve the slowness of NCE-T data for generating MW link report.

**NE version update information**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO. | NE ID | NE TYPE | QTY | Current Version | Target Version |
| 1 | NCE (10.70.17.147) | NCE-T | 1 | V100R019C00SPC6033 | V100R019C00SPC6033 |
| 2 | 100171\_Tole Iskandar Sukmajaya IDU4 | RTN950A | 1 | V100R011C10SPC230 | V100R019C00SPC210 |

**Service influence**

|  |  |  |  |
| --- | --- | --- | --- |
| **DUID** | **Qty** | **Dependency List** | **Data Source** |
| «duid» | «qty» | «list» | «source» |

# Preparations for Change

## Composition of Change Team and Responsibility of Team Members

### Change Team of Huawei Company（Customer）

|  |  |  |
| --- | --- | --- |
| Name | Responsibility | Telephone No. |
| Argidinata | H3I Operation | 08992393335 |
| Bayu Rendro | H3I TBM JABO3 | +62 899-9333-364 |

### Huawei On-site Change Team

|  |  |  |
| --- | --- | --- |
| **Name** | **Responsibility** | **Telephone No.** |
| Goh Kok King (g00493149) | Owner for change | +62 897-3607-326 |
| Ajia Leonardo (a00598938) | Team Member | +62 813-6217-4917 |
| Samuel Teguh (WX281796) | Team Member | +62 895-3035-7149 |
| Imar Prasetiono (i00262076) | Team Member | +62 896-3002-1008 |
| Saeful Fadli WX813785 | Team Member | +6289635328746 |
| Amran Rosadi WX826183 | Team Member | +628983906128 |
| Suherman WX999953 | Team Member | +62 821-2175-6082 |
| Sigit Wibowo WX903307 | Team Member | +62 817-293-888 |

### Huawei Remote support Team (Optional)

|  |  |  |
| --- | --- | --- |
| Name | Responsibility | Telephone No. |
| Zhangling z00380621 | Escalation from microwave side | 081219748518 |

## Remote Access + Platform & Software Access

| **Type** | **Preparation status** | **Owner** |
| --- | --- | --- |
| **NCE-T\*** | Prepare 2 remote access solutions to customer network  Main solution 1: VPN using Fixed Broadband  Backup solution 2: VPN using Mobile Broadband | Aris/AWX544314  Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Pahruroji WX903309  Amran Rosadi WX826183  Abdul Rosyid WX684665  Suherman WX999953  Alfian Bayu Nur Aji WX1114445 |
| **Communication backup\***  *（essential for high risk change* | Back up your phone and SIM cards of other carriers.(+6281373842958) | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 |
| Version software | Optix RTN980- V100R11C01SPC200.  Optix RTN950 V100R011C00SPC500  Optix RTN950A  V100R011C00SPC230 | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 |
| Test tools | NCE | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 |

## Check of Equipment Running

| No. | Check Item | Check result or steps |
| --- | --- | --- |
| 1 | Alarm on RTN | Query and monitor by using NCE server MML Command “browse current alarm”. Check result : **No alarm** impact service |
| 2 | KPI Performance Link and BTS Status | Query performance link analysis and coordination with regional Network Performance Management team. |
| 3 | hardware operation status | Query and monitor by using NCE server. Check result : **Board No alarm** |
| 4 | Radio Link Performance (ES, SES & UAS) | Query performance link analysis and coordination with regional Network Performance Management team. Check result : No Issue |

## Change Risks and Countermeasures

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Main Issues and Risks Description** | **Possibility** | **Impact** | **Countermeasure** |
| 1 | Service Interruption | Low | low | if the service interrupted more than 1 hour , we have on-site support |
| 2 | Data Lost | Low | low | Data already backed-up in server NCE |
| 3 | NE out of management | Low | low | We have on-site support |

## Check before Change

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Preparations Before Change** | **Owner** | **Completion Date** |
| 1 | Readiness of Operation team(including no limit: customer/change team/relate vendor team/monitoring team/verification team) | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before activity |
| 2 | Readiness of Implementation Solution (Including no limit: activity solution/verify solution/rollback solution) | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before activity |
| 3 | Readiness of Solution verify in test bed(For High Risk Implementation solution) | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before activity |
| 4 | Readiness of Solution Review | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before activity |
| 5 | Readiness of remote log-in environment | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953Suherman WX999953 | 1 day before activity |
| 6 | Readiness of Site Enter Permit(If relate) | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before activity |
| 7 | Explain MOP to customer | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | NA |
| 8 | Get 3 approval of RFC | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before activity |
| 9 | Confirm test solution with customer | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before activity |
| 10 | Send email notification of operation to customer | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 3 hours before Activity |
| 11 | Get operation user account permission from customer | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 1 day before Activity |

If no, input **NA** here \

# Operation Steps for Change

## Overall Description of Change Steps

|  |  |  |
| --- | --- | --- |
| **No.** | **Main steps** | **Operation time** |
| 1 | Preparation | 12:00 – 13:00 (subject to CR) |
| 2 | Operation | 13:00 – 15:00 (subject to CR) |
| 3 | Verification | 15:00 – 16:00 (subject to CR) |
| 4 | Rollback | 16:00 – 17:00 (subject to CR) |
| 5 | Complete | 17:00 (subject to CR) |

## Operation Steps for Change

1. RO check the alarm before the execution
2. Coordinates with NOC & TOC before starting to execute
3. Backup NCE database

Implementation Step

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Change Step** | **Operation** | **Implementation Person** | **Time** |
| 1. | *NE data backup* | *Confirm the data backup has been done successfully* | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 11:00-11:30 (subject to CR) |
| 2. | *Alarms & Check link status* | *Confirm the NE alarms has no abnormal alarm & Check link status and RMON before operation* | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 11:30-12:00 (subject to CR) |
| 3. | *Backup and Create TASK NE Upgrade Version* | *Log in NCE server , Backup and Create TASK NE Upgrade Version site Backup and Create TASK NE Upgrade Version* | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 12:00-12:30 (subject to CR) |
| 4 | *Running task Upgrade NE Version* | *Running task Upgrade NE Version from V100R011C10SPC300 TO V100R019C10SPC200* | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 13:00-13:30 (subject to CR) |

## Test and Verification

Describe in details how the test is conducted, specify the owner of each test item and test items, record detailed test processes .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Test Item** | **Operation Method** | **Owner** | **Time** |
| 1 | Check link status | Check whether the service is OK. | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 13:30-13:45 (subject to CR) |
| 2 | Check the running status of NE | Check the running status of the equipment and whether new alarms are generated. | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 13:45-14:00 (subject to CR) |
| 3 | Data compare | Collect key performance data of the entire network and compare it with the data collected before the upgrade | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 14:00-14:45 (subject to CR) |
| 4 | Confirm the service again. | Check the service | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 14:45-15:00 (subject to CR) |

## Solution for Changeback In the Case of Failure

### Definition of Change Failure

| **Changeback time** | 16:00-17:00 (subject to CR) |
| --- | --- |
| **Changeback decision maker** | Huawei: **TD Zhangling 00380621**  Customer: **Ernest, Widi, Bayu Rendro** |
| Rollback condition | 1. Link down.  2. Service not normal.  3. Link cannot monitor on NCE. |

### Changeback Steps

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No**. | **Change back Steps** | **Operation content** | **Owner** | **Time** |
| 1 | Rollback NE Software Version | Log in via WebCT rollback NE software version from *V100R019C10SPC200 to V100R011C10SPC230* | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 16:00 - 16:30 (subject to CR) |

### Change back flow (optional)

NA

### Equipment Status Check (optional)

NA

### Tests after Changeback

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Test Item** | **Operation Method** | **Owner** | **Time** |
| 1 | Service test | Check the NE's service :   * Microwave Link Interface, check the traffic * E-LAN service -> advance attribute, check the service, and check the self-learn mac address | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 16:30-16:45 (subject to CR) |
| 2 | Alarm | Check the NE clear from alarms or same as before execution | Samuel Teguh S WX281796  Sigit Wibowo WX903307  Saeful Fadli WX813785  Amran Rosadi WX826183  Suherman WX999953 | 16:45-17:00 (subject to CR) |

### Changeback Risk Analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Main Issues and Risks Description\*** | **Possibility** | **Impact** | **Countermeasure** |
| 1 | Rollback Failed | Low | Middle | If cannot solve problem, contact with GTAC hotline |
| 2 | After rollback, the NE still loss management | Low | Middle | Create a new DCN link for this NE.  Go to site to recover the DCN port |
| 3 | NE OM down | Low | Middle | There is on-site support |

## Change of Spare Parts and Emergency Workstation (optional)

N/A

# Work after Change

## Observation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Observation Item | Observation method | Owner | Observation Time |
| 1. | Alarm | Check current alarm status, make sure alarm clear (or same condition with before)` | Ajia Leonardo (a00598938),  Imar Prasetiono (i00262076), | 17:00 – 23:00 (subject to CR) |
| 2. | Query MW Port Capacity Utilization Report | Check the port capacity has been clear from congestion or not | Ajia Leonardo (a00598938),  Imar Prasetiono (i00262076), | 17:00 – 23:00 (subject to CR) |
| 3 | Radio/WL Performance | Check the radio/WL performance, send out the report and then coordination to Regional NPM team to monitor and share the performance result from their side | NPM team | 17:00 – 23:00 (subject to CR) |

## 

## Provision of Materials (optional)

NA

## Provision of Software (optional)

NA

## Training (Optional)

NA

## Matters Needing Attention (Optional)

NA