|  |
| --- |
| 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

**Network Topology:**

|  |  |
| --- | --- |
| **NCE Network topology diagram** |  |
| **Key features and business** | Reposition MW antenna into H3I reserved area  Repointing MW antenna |

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

**Remote Access via VPN**



## Purpose and Requirements

|  |  |
| --- | --- |
| **Change purpose\*** | Solve issue installation antenna not match with approved Colo Aplication |
| **Change scope\*** | Reposition mw antenna **«linknum»** link(s) under **«region»** area |
| **Change time\*** | **«date»** To **«date»**, **«time»** (All day from 00:00 – 23:59, follow customer approval CR) |

## Description of Change and Change Influence

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO. | NE ID | NE TYPE | QTY | Current Version | Target Version |
| 1 | NCE (10.70.17.147) | NCE-T | 1 | V100R019C00SPC603 | V100R019C00SPC603 |



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.** |
| Rian Ikbal | H3I Planning | 089618888805 |
| Argidinata | H3I Operation | 08992393335 |
| Bayu Rendro | H3I TBM JABO3 | 08999333364 |
| Ernest | H3I TBM JABO1 | 08982293334 |
| Widi | H3I TBM JABO2 | 089688100017 |

### 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 |
| Aris WX544314 | Team Member | +62 8990098546 |
| Deden 00738162 | Team member | +62-8121064874 |
| Samuel Teguh (WX281796) | Team Member | +62 895-3035-7149 |
| Imar Prasetiono (i00262076) | Team Member | +62 896-3002-1008 |
| Arwan Rianto WX912663 | Team Member | +6281212670311 |
| Miki Priyanto WX684662 | Team Member | +6282177587757 |
| Saeful Fadli WX813785 | Team Member | +6289635328746 |
| Pahruroji WX903309 | Team Member | +6287773101536 |
| Dedi Kusuma WX684663 | Team Member | +6281286527001 |
| Novel Akbar WX819421 | Team Member | +6289637356535 |
| Amran Rosadi WX826183 | Team Member | +628983906128 |
| Abdul Rosyid WX684665 | Team Member | +6281216960391 |
| Nizar Muchtar WX684664 | Team Member | +62817818414 |
| Berto Pasaribu WX922005 | Team Member | +6282150274902 |
| Suherman WX999953 | Team Member | +6281214451181 |
| Sigit Wibowo WX903307 | Team Member | +62817293888 |

### Huawei Remote support Team (Optional)

|  |  |  |
| --- | --- | --- |
| **Name** | **Responsibility** | **Telephone No.** |
| Zhangling z00380621 | Escalation from microwave side | 081219748518 |
| Cheiw Cheong Loon c00742069 | Team member | +6281314862000 |

## Remote Access + Platform & Software Access

|  |  |  |
| --- | --- | --- |
| **Item** | **Preparation status** | **Owner** |
| Remote access solution | Prepare 2 remote access solutions to customer network  Main solution 1: VPN using Fixed Broadband  Backup solution 2: VPN using Mobile Broadband | Aris / AWX544314 / 08990098546  Samuel/WX281796  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953 |

## Check of Equipment Running

| No. | Check Items | Check result or steps\* |
| --- | --- | --- |
| 1 | Alarm Check | Query and monitor by using NCE server MML Command “browse current alarm”. Check result : **No alarm** |
| 2 | Hardware operation status | Query and monitor by using NCE server. Check result : **Board No alarm** |

## Change Risks and Countermeasures

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Main Issues and Risks Description** | **Countermeasure** | **Possibility** | **Impact** |
| 1 | MW NE down | Onsite do troubleshooting | Low | Low |
| 2 | NEs Checklist & Network Problems Avoid Issue & Precautions  Checking | Link Performance before | Low | Low |
| 3 | Remote Connection Abnormal | 1. If the remote connection cannot restore within 30 minutes , Standby engineer in NOC will hold/postpone the activity  2. If NOC remote connection abnormal, notice customer / MS for troubleshooting. | Low | Low |

## 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) | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 2 | Readiness of Implementation Solution (Including no limit: activity solution/verify solution/rollback solution) | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 3 | Readiness of Solution verify in test bed(For High Risk Implementation solution) | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 4 | Readiness of Solution Review | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 5 | Readiness of remote log-in environment | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 6 | Readiness of Site Enter Permit(If relate) | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 7 | Explain MOP to customer | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | NA |
| 8 | Get 3 approval of RFC | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 9 | Confirm test solution with customer | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 10 | Send email notification of operation to customer | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 3 hours before Activity |
| 11 | Get operation user account permission from customer | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 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

I. Preparation Step

1. Check the alarm before the execution
2. Coordinates with NOC & TOC before startingto execute

II. Implementation Step

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Change Step** | **Operation** | **Implementation Person** | **Time** |
| 1 | Backup NE database | 1. Backup and export NE database on NCE 2. Log in View Weblct by team on site for capture current configuration, RSL, alarm, etc. | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953  HW Team partner On site | 12:00-13:00 (subject to CR) |
| 2 | MW antenna reposition | 1. Reposition MW antenna base on Pictorial Report from Tower provider into 3M windows reservation area for MW antenna H3I 2. Repointing MW antenna NE FE until RSL Value match with Link budget | HW Team partner On site supervision by MW HW RSC, Region team. | 13:00-15:00 (subject to CR) |
| 3 | Configuration | 1. Log in into NCE server , Check alarm , Current RSL NE FE. 2. Log in into WEBLCT with monitor user , Check alarm , Current RSL NE FE. | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953  Team on site | 15:00-15:15 (subject to CR) |

\*Note:

## 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 | Alarm Status | Check the current alarm is clear in Browse Current Alarm NCE or Web LCT | Aris WX544314  Samuel Teguh S  WX281796  Deden 00738162  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953 | 15:15-15:30(Subject to CR) |
| 2 | Service | Check the running status of the link such as  1. Transmission & Receiving Rate > Ethernet Interface > Advance Attributes  2. MAC ARP > E-LAN Service > Self Learning MAC Address | Aris wx544314  Samuel Teguh S WX281796  Deden 00738162  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953 | 15:30-16:00 (Subject to CR) |

## Solution for Changeback In the Case of Failure

### Definition of Change Failure

|  |  |
| --- | --- |
| **Changeback time\*** | **16:00 – 17:00** A.M (subject to CR) |
| **Changeback decision maker\*** | Huawei: TD (Zhangling z00380621)  Customer: Bayu Rendro (H3I TBM JABO3), Ernest (H3I TBM JABO1), Widi (H3I TBM JABO2) |
| **Trigger condition\*** | A change failure shall be recognized by duty engineer if the following major problems cannot be resolved before 02:00 a.m. (within the stipulated period of time) and back-off operations shall be finished. The executor will rollback if:  DCR & CSSR degrade more than 10%  Loss monitor  New board fault alarm |

### Changeback Steps

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Change back Steps | Operation Content | Time Required | Owner |
| 1. | Rollback Configure MW Antenna positon | Rollback MW antenna position into existing position, repointing NE FE until RSL get value as before | 16:00 – 16:30 (subject to CR) | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953 |
| 2. | Verification after Rollback MW link Configuration | Check RSL link In Microwave Link Configurtion menu and Check microwave Rate/throughput, Choose Interface Management > Ethernet Interface > Advance Attributes | 16:30 - 17:00 (subject to CR) | Aris WX544314  Deden 00738162  Samuel Teguh S  WX281796  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953 |

### Change back flow (optional)

NA

### Equipment Status Check (optional)

NA

### Tests after Changeback

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Operation Item/Check Item** | **Operation Method** | **Owner** | **Time** |
| 1 | Check the current Alarms, service and status of the NEs | Check for reporting of any new alarms related to the NE and the status. | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953 | 17:00-17:45 (Subject to CR) |
| 2. | Alarm | Check NE clear from alarms | Aris WX544314  Deden 00738162  Samuel Teguh S WX281796  Sigit Wibowo WX903307  Arwan Rianto WX912663  Miki Priyanto WX684662  Saeful Fadli WX813785  Pahruroji WX903309  Dedi Kusuma WX684663  Novel A WX819421  Amran R WX826183  Abdul Rosyid WX684665  Nizar M WX684664  Berto Mando P WX922005  Suherman WX999953 | 17:45-18:00 (Subject to CR) |

### Changeback Risk Analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Main Issues and Risks Description\*** | **Possibility** | **Impact** | **Countermeasure** |
| 1 | Rollback Failed | Low | Low | If cannot solve problem, contact with GTAC hotline |
| 2 | After rollback, all BTS dependency still work abnormal | Low | Low | Check Vlan Validation in Existing Link.  Go to site to do Troubleshooting |

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

\*How to you get the spare part to replace faulty hardware during implementation.

# Work after Change

## Observation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Observation Item | Observation method | Tools | Owner | Observation Time |
| 1 | Observation for any service interruption after activity | Check services on client side, report to Huawei if any service problem after activity  Use NCE tools | NCE | RO+MS | After Activity Finished,  18:00-23:00 (subject to CR) |
| 2 | Check alarm related to NMS | Analyze NE alarm | NCE | RO+MS | After Activity Finished  18:00-23:00 (subject to CR) |

## Provision of Materials (optional)

NA

## Provision of Software (optional)

NA

## Training (Optional)

NA

## Matters Needing Attention (Optional)

NA