|  |
| --- |
| IOH Spesific MOP  HW\_TX\_Change Frequency JABO 3 Area W05\_batch 2 (4 Feb) |
| 附件1-16K |
| |  |  |  |  | | --- | --- | --- | --- | | **Prepared by:** | **Aktortifan Ridno Prabu Pratama (AWX1014609)** | **Date:** | **February 03, 2022** | | **Reviewer:** | **Aris (AWX544314)** | **Date:** | **February 03, 2022** | | **Approver:** | **Goh Kok King**  **(G00493149)** | **Date:** | **February 03, 2022** | |

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# Description of Change

## Description of Site

|  |  |
| --- | --- |
| **NCE Network topology diagram** |  |
| **Key features and business** | Change Frequency : change existing frequency follow ISR  Features : Interference test, performance link test |

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

## 

## Purpose and Requirements

|  |  |
| --- | --- |
| **Change purpose\*** | Change frequency follow ISR for avoid link shutdown by BALMON |
| **Change scope\*** | Change frequency follow ISR **3** link(s) in **JABO 3** area |
| **Change time\*** | **04 February 2022** To **04 February 2022**, **00.00 -04.00** (All day from 00:00 – 23:59, follow customer approval CR) |

## Description of Change and Change Influence

NE VERSION UPDATE INFORMATION

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO. | NE ID | NE TYPE | QTY | Current Version | Target Version |
| 1 | NCE (10.70.17.147) | NCE-T | 1 | V100R019C00SPC630 | V100R019C00SPC630 |



Service influence

|  |  |  |  |
| --- | --- | --- | --- |
| **DUID** | **Qty** | **Dependency List** | **Data Source** |
| 100610\_100314MRP322 | 10 | 103800,281550,103875,281628,103790,095664,100875,282020,281148,100610 | E2E Conet |
| 280636\_280225MRN003 | 3 | 281660,281661,280636 | E2E Conet |
| 280599\_100390MN322 | 5 | 281748,280588,280479,281941,280599 | E2E Conet |

# Preparations for Change

## Composition of Change Team and Responsibility of Team Members

### 2.1.1 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 |

### 2.1.2 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 |
| 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 |

### 2.1.3 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 * HW RSC Integrator * Deden 738162 |

## 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 Link down | Remote and Onsite do trouble shooting | Low | High |
| 2 | Traffic abnormal or main KPI counter degraded | Remote do trouble shooting | Low | High |

## 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) | Deden 00738162  Aris WX544314  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) | Deden 00738162  Aris WX544314  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) | Deden 00738162  Aris WX544314  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 4 | Readiness of Solution Review | Deden 00738162  Aris WX544314  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 | Deden 00738162  Aris WX544314  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) | Deden 00738162  Aris WX544314  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 7 | Explain MOP to customer | Deden 00738162  Aris WX544314  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | NA |
| 8 | Get 3 approval of RFC | Deden 00738162  Aris WX544314  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before activity |
| 9 | Confirm test solution with customer | Deden 00738162  Aris WX544314  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 | Deden 00738162  Aris WX544314  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 | Deden 00738162  Aris WX544314  Samuel Teguh S WX281796  Goh Kok King g00493149  Ajia Leonardo a00598938  Imar Prasetiono 00262076 | 1 day before Activity |

# Operation Steps for Change

## Operation Steps for Change

### Overall Description of Change Steps

| **No.** | **Main steps** | **Operation time** |
| --- | --- | --- |
| *1* | *Preparation* | *23:00-00:00* |
| *2* | *Operation* | *00:00-02:00* |
| *3* | *Verification* | *02:00-03:00* |
| *4* | *Rollback* | *03:00-04:00* |
| *5* | *Complete* | *04:00* |

### Operation Steps for Change

### Preparation Step

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

### Implementation Step

|  |  |  |  |
| --- | --- | --- | --- |
| Content | Time | PIC | Remark |
| 1. Backup NE database and capture existing configuration via WebCT on site | 23:00-00:00 | * Aris AWX544314 * Deden 738162 * 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 |  |
| 1. Log in NCE server change current frequency RTN Link follow ISR channel 2. Log in NCE server check interference and RSL | 00:00-02:00 | * Aris AWX544314 * Deden 738162 * 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 |  |
| 1. Check current traffic all impacted sites after done activity, call NOC, TOC for Check alarm, service/traffic | 03:00-03:30 | * Aris AWX544314 * Deden 738162 * 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 |  |

## 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.** | **Operation Item/Test 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 AWX544314 * Deden 738162 * 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 | 03:00-03:10 |
| 2. | Check BTS Service Work | * Call NOC, TOC for check all BTS dependency sites * Coordination with HW BSS team | * Aris AWX544314 * Deden 738162 * 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 | 03:30-04:00 |

## Solution for Change back In the Case of Failure

### Definition of Change Failure

A change failure shall be recognized if the following major problems cannot be resolved before 04:00 A.M. (within the stipulated period of time) and back-off operations shall be finished.

|  |  |
| --- | --- |
| **Change back time\*** | **03:00 – 04:00 A.M** |
| **Change back decision maker\*** | HUAWEI: TD (qinjiarong), Customer: Ernest (Jabo1), Widi (Jabo2), Bayu rendro (Jabo-3) |
| **Change back condition\*** | A change failure shall be recognized by duty engineer if the following major problems cannot be resolved before 16:00 p.m. (within the stipulated period of time) and back-off operations shall be finished. The executor will rollback if:  (1) Loss monitor of NE\_FE  (2) Link found alarm impact to service  (3) BTS service work abnormally |

### Change back Steps

**Change back Steps**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.\*** | **Change back Steps\*** | **Operation content\*** | **Owner\*** | **Time\*** |
| 1 | * Check alarm , RSL and link traffic utilization | Log in to NE | * Aris AWX544314 * Deden 738162 * 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 | 03:00-03:10 |
| 2 | * Log in NCE server change back current frequency RTN Link to existing frequency. | Log in to NE | * Aris AWX544314 * Deden 738162 * 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 | 03:10-03:50 |
| 3 | * Check RSL, alarm and Check current traffic all impacted sites after done rollback activity | Log in to NE | * Aris AWX544314 * Deden 738162 * 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 | 03:50-04:00 |
| 4 | * Call NOC, TOC for status all dependency sites |  | * Aris AWX544314 * Deden 738162 * 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 | 04:00-04:10 |

### Change back flow (optional)

NA

### Equipment Status Check (optional)

NA

### Tests after Change back

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 AWX544314/08990098546 * HW RSC integrator * Deden 738162 | 16:00-17:00 |
| 2. | Check all dependency sites | Call NOC, TOC for check all BTS dependency sites | * Aris * AWX544314/08990098546 * HW RSC integrator * Deden 738162 | 16:00-17:00 |

### Change back 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. |

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

NA

# 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,  16:00-16:30 next day |
| 2 | Check alarm related to NMS | Analyze NE alarm | NCE | RO+MS | After Activity Finished  16:00-16:30 next day |

## Provision of Materials (optional)

NA

## Provision of Software (optional)

NA

## Training (Optional)

NA

## Matters Needing Attention (Optional)

RFC No. :