|  |  |
| --- | --- |
| **ANEXO N** | **RECURSOS DE RED Y SISTEMAS** |

**ANEXO N1: TIPOS & ELEMENTOS DE RED INCLUIDOS EN LOS SISTEMAS OSS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Domain** | **Subnet level** | **Equipment type** | **Model** | **Supplier** | **Network manager** | **Network manager version** | **Quantity** |
| Fixed Net | Access NGN | UA | UA-5000 | Huawei | N2000 | R012 | 29 |
| Fixed Net | Core NGN | Soft Switch | SOFTXV3 | Huawei | N2000 | R012 | 2 |
| Fixed Net | Core NGN | MGW | UMG8900 | Huawei | N2000 | R012 | 3 |
| Fixed Net | Core NGN | MGW | UMG8900 MINI | Huawei | N2000 | R012 | 16 |
| Fixed Net | Core NGN | Session Border Controller | SE2300 | Huawei | N2000 | R012 | 2 |
| Fixed Net | Core NGN | Signalling Gateway | SG7000 | Huawei | N2000 | R012 | 2 |
| IP Net | Agregation IP | DSLAM | DMAX-1120 | AFC | SNMP | - | 1 |
| IP Net | Agregation IP | DSLAM | 6260 | Cisco | SNMP | - | 14 |
| IP Net | Agregation IP | Router | 7206VXR | Cisco | SNMP | - | 1 |
| IP Net | Agregation IP | Router | 7206VXR | Cisco | SNMP | - | 1 |
| IP Net | Agregation IP | CAPWAP | AIR-LAP1262N-A-K9 | Cisco | Cisco WCS | 7,0,220,0 | 28 |
| IP Net | Agregation IP | Switch | Cisco Catalyst 2970 | Cisco | Cisco Prime Network 3.9 | 3,9 | 1 |
| IP Net | Agregation IP | Switch | Cisco Catalyst 3560 | Cisco | Cisco Prime Network 3.9 | 3,9 | 1 |
| IP Net | Agregation IP | Switch | Cisco ME-3400 | Cisco | Cisco Prime Network 3.9 | 3,9 | 183 |
| IP Net | Agregation IP | Router | Cisco MWR2941 | Cisco | Cisco Prime Network 3.9 | 3,9 | 9 |
| IP Net | Agregation IP | Switch | Cisco Nexus 7010 Switch | Cisco | Cisco Prime Network 3.9 | 3,9 | 5 |
| IP Net | Agregation IP | Router | Cisco 7606 | Cisco | Cisco Prime Network 3.9 | 3,9 | 17 |
| IP Net | Agregation IP | Router | Cisco 7609 | Cisco | Cisco Prime Network 3.9 | 3,9 | 3 |
| IP Net | Agregation IP | Router | Cisco 1000 | Cisco | Cisco Prime Network 3.9 | 3,9 | 3 |
| IP Net | Agregation IP | Switch | ME-C3750-24TE | Cisco | SNMP | - | 1 |
| IP Net | Agregation IP | Router | RSP16 (R7000A) | Cisco | SNMP | - | 1 |
| IP Net | Agregation IP | Router | UAC-6400 | Cisco | SNMP | - | 5 |
| IP Net | Agregation IP | Switch | WS-C2950T-24 | Cisco | SNMP | - | 1 |
| IP Net | Agregation IP | Switch | WS-C2960-24TT-L | Cisco | SNMP | - | 1 |
| IP Net | Agregation IP | Switch | WS-C3548-XL | Cisco | SNMP | - | 1 |
| IP Net | Agregation IP | Switch | WS-C3750G-24TS-1U | Cisco | Cisco Prime Network 3.9 | 3,9 | 1 |
| IP Net | Agregation IP | DSLAM | UA-5000 | Huawei | N2000 V200R011 | - | 50 |
| IP Net | Agregation IP | DSLAM | RAPTOR-100 | Zhone | SNMP | - | 14 |
| IP Net | Agregation IP | DSLAM | RAPTOR-319 | Zhone | SNMP | - | 15 |
| IP Net | Agregation IP | DSLAM | RAPTOR-719 | Zhone | SNMP | - | 78 |
| IP Net | Core IP | Router | Cisco ASR1013 | Cisco | Cisco Prime Network 3.9 | 3,9 | 20 |
| IP Net | Core IP | Router | Cisco ASR9000 | Cisco | Cisco Prime Network 3.9 | 3,9 | 100 |
| IP Net | Core IP | Router | Cisco 7206VXR | Cisco | Cisco Prime Network 3.9 | 3,9 | 12 |
| IP Net | Core IP | Router | Cisco CRS-1 4S | Cisco | Cisco Prime Network 3.9 | 3,9 | 12 |
| IP Net | Core IP | Router | Cisco CRS-8 | Cisco | Cisco Prime Network 3.9 | 3,9 | 12 |
| IP Net | Core IP | Router | Cisco SCE 2020 | Cisco | Cisco Prime Network 3.9 | 3,9 | 10 |
| IP Net | Core IP | Router | Cisco 12010K | Cisco | Cisco Prime Network 3.9 | 3,9 | 6 |
| IP Net | Core IP | Router | Cisco 7609 | Cisco | Cisco Prime Network 3.9 | 3,9 | 3 |
| IP Net | Core IP | Router | Cisco 12410 | Cisco | Cisco Prime Network 3.9 | 3,9 | 4 |
| IP Net | Core IP | Router | Cisco MWR2941 | Cisco | Cisco Prime Network 3.9 | 3,9 | 6 |
| IP Net | Core IP | Router | Cisco Nexus 7010 Switch | Cisco | Cisco Prime Network 3.9 | 3,9 | 5 |
| IP Net | Core IP | Router | Cisco ASR 901 TDM | Cisco | Cisco Prime Network 3.9 | 3,9 | 30 |
| IP Net | Core IP | Router | Cisco ME-3400E | Cisco | Cisco Prime Network 3.9 | 3,9 | 1000 |
| IP Net | Core IP | Router | Cisco 7606 | Cisco | Cisco Prime Network 3.9 | 3,9 | 8 |
| IP Net | Core IP | Router | Cisco ASR 903 | Cisco | Cisco Prime Network 3.9 | 3,9 | 23 |
| IP Net | Core IP | Router | Cisco Nexus 5000 | Cisco | Cisco Prime Network 3.9 | 3,9 | 12 |
| IP Net | Core IP | Router | Cisco Nexus 2000 | Cisco | Cisco Prime Network 3.9 | 3,9 | 20 |
| IP Net | Core IP | Router | Cisco ASR 9020 | Cisco | Cisco Prime Network 3.9 | 3,9 | 150 |
| IP Net | Core IP | Router | Cisco 12000 | Cisco | Cisco Prime Network 3.9 | 3,9 | 7 |
| IP Net | Core IP | Router | NE40-X8 | Huawei | T2000 | - | 10 |
| IP Net | Core IP | Router | ERX-1440 | Juniper | SNMP | - | 2 |
| Mobile Net | Core CS | MGW | - | Ericsson | OSS | R10, R13 | 3 |
| Mobile Net | Core CS | MSC-Server | - | Ericsson | OSS | R10, R13 | 3 |
| Mobile Net | Core CS | MGW | MGW R14B | Ericsson | OSS | R10, R13 | 3 |
| Mobile Net | Core CS | MSC-Server | MSC Server R13A (APZ 212 60) | Ericsson | OSS | R10, R13 | 3 |
| Mobile Net | Core CS | MGW | - | Huawei | U2000 | R11, R13 | 3 |
| Mobile Net | Core CS | MSC-Server | - | Huawei | U2000 | R11, R13 | 3 |
| Mobile Net | Core CS | HSS | HSS9860 | Huawei | U2000 | R11,R13 | 2 |
| Mobile Net | Core CS | EIR | UEIR | Huawei | U2000 | R11,R13 | 2 |
| Mobile Net | Core CS | MSC-Server | MSOFTX3000 | Huawei | U2000 | R11,R13 | 3 |
| Mobile Net | Core CS | MGW | UMG8900 | Huawei | U2000 | R11,R13 | 3 |
| Mobile Net | Core CS | MGW | - | ZTE | Net Numen | V12 | 1 |
| Mobile Net | Core CS | MSC-Server | - | ZTE | Net Numen | V12 | 1 |
| Mobile Net | Core CS | MGW | ZMGW31 (ZXUN-MGW) | ZTE | Net Numen | V12 | 1 |
| Mobile Net | Core CS | MSC-Server | ZMSS1 (ZXWN-CS) | ZTE | Net Numen | V12 | 1 |
| Mobile Net | Core PS | CHARGING GATEWAY | ATCA | Huawei | IGWB | iGWBV300R002C27SCP114 | 2 |
| Mobile Net | Core PS | UGW | - | Huawei | M2000 | R11, R13 | 1 |
| Mobile Net | Core PS | FIREWALL | Eudemon 1000E | Huawei | M2000 | R11,R13 | 2 |
| Mobile Net | Core PS | FIREWALL | Eudemon 10E | Huawei | M2000 | R11,R13 | 2 |
| Mobile Net | Core PS | GGSN | GGSN9811 V8 | Huawei | M2000 | R11,R13 | 1 |
| Mobile Net | Core PS | GGSN | GGSN9811 V9 | Huawei | M2000 | R11,R13 | 1 |
| Mobile Net | Core PS | Switch EPC | S9303 | Huawei | M2000 | R11,R13 | 2 |
| Mobile Net | Core PS | Switch TCT | S9303 | Huawei | M2000 | R11,R13 | 2 |
| Mobile Net | Core PS | DNS | Servidor SUNW,Netra-T5220 | Huawei | SSH | Sun Sparc SUNW,Netra-T5220 | 2 |
| Mobile Net | Core PS | SGSN | SGSN 9810 CPCI | Huawei | M2000 | R11,R13 | 1 |
| Mobile Net | Core PS | SGSN | SGSN9810 V9 ATCA | Huawei | M2000 | R11,R13 | 1 |
| Mobile Net | Core PS | SGW/PGW EPC | UGW9811 | Huawei | M2000 | R11,R13 | 1 |
| Mobile Net | Core PS | PCRF | UPCC | Huawei | M2000 | R11,R13 | 2 |
| Mobile Net | Core PS | MME EPC | USN9810 | Huawei | M2000 | R11,R13 | 1 |
| Mobile Net | Core PS | CHARGING GATEWAY server CBBA 1 | Sun Server with Windows OS | Huawei | IGWB | iGWBV300R001C25B002 | 2 |
| Mobile Net | Core PS | CHARGING GATEWAY | ATCA | ZTE | LMT | 2.6.18-164.el5PAE | 2 |
| Mobile Net | Core PS | PCRF | - | ZTE | Net Numen | V12 | 1 |
| Mobile Net | Core PS | DNS | ATCA | ZTE | SSH | 2.6.18-164.el5PAE | 2 |
| Mobile Net | Core PS | SGSN | UMAC | ZTE | Net Numen | V12 | 1 |
| Mobile Net | Core PS | GGSN | xGW | ZTE | Net Numen | V12 | 1 |
| Mobile Net | eUTRAN | eNode-B | RBS6601 | Ericsson | OSS RC |  | 292 |
| Mobile Net | eUTRAN | eNode-B | DBS3900 | Huawei | M2000 | R10, R13 | 392 |
| Mobile Net | GERAN | BTS | BTS3012 | HUAWEI | U2000 | R13 | 58 |
| Mobile Net | GERAN | BTS | BTS3012A | HUAWEI | U2001 | R14 | 22 |
| Mobile Net | GERAN | BTS | BTS3012AE | HUAWEI | U2002 | R15 | 182 |
| Mobile Net | GERAN | BTS | BTS312 | HUAWEI | U2003 | R16 | 4 |
| Mobile Net | GERAN | BTS | BTS3900E GSM | HUAWEI |  |  | 96 |
| Mobile Net | GERAN | BTS | DBS3900 GSM | HUAWEI |  |  | 1414 |
| Mobile Net | GERAN | BTS | eGBTS | HUAWEI |  |  | 416 |
| Mobile Net | GERAN | BTS | RBS2102 | Ericsson | OSS RC | R13 | 28 |
| Mobile Net | GERAN | BTS | RBS2106 | Ericsson | OSS RC | R10, R13 | 172 |
| Mobile Net | GERAN | BTS | RBTS 2310 | VNL | OMC-VNL | 13.3.3.001 | 11 |
| Mobile Net | GERAN | BTS | RBS2202 | Ericsson | OSS RC | R14 | 68 |
| Mobile Net | GERAN | BTS | RBS2206 | Ericsson | OSS RC | R15 | 100 |
| Mobile Net | GERAN | BTS | RBS2308 | Ericsson | OSS RC | R16 | 26 |
| Mobile Net | GERAN | BTS | RBS2409 | Ericsson | OSS RC | R17 | 6 |
| Mobile Net | GERAN | BTS | RBS6101 | Ericsson | OSS RC | R18 | 22 |
| Mobile Net | GERAN | BTS | RBS6301 | Ericsson | OSS RC |  | 33 |
| Mobile Net | GERAN | BTS | RBS6601 | Ericsson | OSS RC |  | 164 |
| Mobile Net | UTRAN | Node-B | BS8900 | ZTE | NetNumen | V12 | 172 |
| Mobile Net | UTRAN | Node-B | BS8900A | ZTE | NetNumen | V13 | 202 |
| Mobile Net | UTRAN | Node-B | BS8906 | ZTE | NetNumen | V13 | 8 |
| Mobile Net | UTRAN | Node-B | BTS3902E | Huawei | M2000 | R10, R13 | 472 |
| Mobile Net | UTRAN | Node-B | DBS3900 | Huawei | M2000 | R10, R13 | 1600 |
| Mobile Net | UTRAN | Node-B | DBS3900 | Huawei | M2000 | R10, R13 | 1326 |
| Mobile Net | UTRAN | Node-B | RBS6301 | Ericsson | OSS RC |  | 2 |
| Mobile Net | UTRAN | Node-B | RBS6501 | Ericsson | OSS RC |  | 142 |
| Mobile Net | UTRAN | Node-B | RBS6601 | Ericsson | OSS RC |  | 388 |
| Mobile Net | UTRAN | RNC | ZXWRRNC | ZTE | Net Numen |  | 6 |
| Mobile Net | VAS | IVR-GSM PREPAGO | Hp Proliant | CyT | ML150G6 |  | 5 |
| Mobile Net | VAS | IVR-MARKETING | Hp Proliant | CyT | ML150G6 |  | 2 |
| Mobile Net | VAS | IVR-VOICE MAIL | Hp Proliant | CyT | ML370G5 |  | 2 |
| Mobile Net | VAS | OTA OSG | Sun Fire X4170 | Gemalto | T2000 |  | 2 |
| Mobile Net | VAS | OTA Web | Sun Fire X4170 | Gemalto | T2000 |  | 2 |
| Mobile Net | VAS | OTA Server | Sun Fire X4270 | Gemalto | T2000 |  | 2 |
| Mobile Net | VAS | RBT APP Server | Hp Proliant | Multibox | DL380P |  | 2 |
| Mobile Net | VAS | RBT DB | Hp Proliant | Multibox | DL360P |  | 2 |
| Mobile Net | VAS | RBT IVR | Hp Proliant | Multibox | DL360P |  | 1 |
| Mobile Net | VAS | RBT power XMS | Hp Proliant | Multibox | DL380P |  | 2 |
| Mobile Net | VAS | RBT WEB/WAP | Hp Proliant | Multibox | DL360P |  | 1 |
| Mobile Net | VAS | SMPP Router 1 | ProLiant DL360 G5 | Sendatel |  |  | 1 |
| Mobile Net | VAS | SMPP Router 2 | ProLiant DL360 G5 | Sendatel |  |  | 1 |
| Transport Net | Optic Access | SDH through optic fiber |  | Marconi | - | - | 68 |
| Transport Net | Radio Access | ATM Multiplexer | 747 | Alcatel | Alcatel 5620 Net management | 6,1 | 10 |
| Transport Net | Radio Access | TDM Multiplexer | 3600 | Alcatel | Alcatel 5620 Net management | 6,1 | 20 |
| Transport Net | Radio Access | TDM Multiplexer | 3612 | Alcatel | Alcatel 5620 Net management | 6,1 | 10 |
| Transport Net | Radio Access | TDM Multiplexer | 3630 | Alcatel | Alcatel 5620 Net management | 6,1 | 30 |
| Transport Net | Radio Access | TDM Multiplexer | 3645 | Alcatel | Alcatel 5620 Net management | 6,1 | 20 |
| Transport Net | Radio Access | Radio equipment | IP10G | Ceragon | - | - | 1000 |
| Transport Net | Radio Access | Radio equipment | Long haul | Ceragon | - | - | 30 |
| Transport Net | Radio Access | Radio equipment | MINI-LINK TN | Ericsson | (SoEM)- IPTNMS-P | R14 | 400 |
| Transport Net | Radio Access | Radio equipment | Trafic Node HC | Ericsson | - | - | 20 |
| Transport Net | Radio Access | Radio equipment | RTN620 | Huawei | T2000 | - | 2000 |
| Transport Net | Radio Access | Radio equipment | NL 294, NL 295 | Nera | LCT | - | 30 |
| Transport Net | Radio Access | Radio equipment | SRT 1c | Siemens | LCT | - | 50 |
| Transport Net | Radio Access | Radio equipment | - | SAF | - | - | 400 |
| Transport Net | Radio Access | Radio equipment | RADWIN 2000 PTP | RADWIN | RNMS | - | 2000 |
| Transport Net | Radio Access | Radio equipment | RADWIN 5000 MTP | RADWIN | RNMS | - | 2000 |
| Transport Net | Radio Access | Radio equipment | - | ZTE | - | - | 100 |
| Transport Net | Satelital Access | HUB | Gilat | Gilat | ISNMS | V2.24.18 Build 4 | 1 |
| Transport Net | Satelital Access | HUB | Shiron | Shiron | IBUILDER | V IDX 3.0.0.0 | 1 |
| Transport Net | Satelital Access | HUB | Idirect-x | Idirect-x | NMSBROWSER | ABOUT.NMS V.16.5.5.201 | 1 |
| Transport Net | Satelital Access | HUB | STM | STM | DAMA10000 |  | 1 |
| Transport Net | Satelital Access | HUB | Satlink | Satlink | NMS | - | 1 |
| Transport Net | Satelital Access | HUB | Hughes | Hughes | NMS | - | 1 |
| Transport Net | Satelital Access | MODEMs | DOMSAT y SCPC | COMTECH EFDATA | NMS | - | 100 |
| Transport Net | Trunking | SDH through optic fiber | u SDM1 | ECI Telecom | - | - | 81 |
| Transport Net | Trunking | DWDM  Wavelength  Multiplexer | BWS1600G OTM | Huawei | T2000 | - | 95 |
| Transport Net | Trunking | DWDM Optical applifier | DWDM BWS1600G OLA | Huawei | T2000 | - | 21 |
| Transport Net | Trunking | SDH through optic fiber | OptiX 155/622H(Metro 1000) | Huawei | T2000 | - | 32 |
| Transport Net | Trunking | SDH through optic fiber | OptiX OSN 1500B/1500A | Huawei | T2000 | - | 8 |
| Transport Net | Trunking | SDH through optic fiber | OptiX OSN 2500 | Huawei | T2000 | - | 22 |
| Transport Net | Trunking | SDH through optic fiber | OptiX OSN 3500 | Huawei | T2000 | - | 83 |
| Transport Net | Trunking | SDH through optic fiber | OptiX OSN 7500 | Huawei | T2000 | - | 4 |
| Transport Net | Trunking | SDH through optic fiber | SLD 16, SLR 16 | Siemens | - | - | 26 |
| Transport Net | Trunking | SDH through optic fiber | SMA 1/4 | Siemens | - | - | 12 |
| FTTX Net | Trunking | OLT (optical Line Terminal) | C300ZXA10 | ZTE | NetNumen |  | 300 |
| FTTX Net | Trunking | OLT (optical Line Terminal) | MA5600T | Huawei | U2000 | - | 300 |
| Mobile Net | GERAN | BSC | ZX10iBSC | ZTE | Net Numen |  | 6 |
| Mobile Net | UTRAN | RNC | EVO RNC | ERICSSON | OSS |  | 6 |
| Mobile Net | UTRAN | RNC | BSC6900 | Huawei | U2000 |  | 14 |
| Mobile Net | UTRAN | RNC | BSC6910 | Huawei | U2000 |  | 10 |
| Mobile Net | GERAN | BSC | BSC6900 | Huawei | U2000 |  | 14 |
| Mobile Net | GERAN | BSC | AXE 212 APZ | Ericsson | OSS RC | R18 | 8 |
| TI | Core Datacenter | Core LAN Switch | 12900 | HP | SNMP | v2,v3 | 8 |
| TI | Datacenter | Switch | 5900 | HP | SNMP | v2,v3 | 4 |
| TI | Datacenter | Storage | VSP | Hitachi | SNMP | v2,v3 | 1 |
| TI | Datacenter | Storage | VNX7500 | EMC | SNMP | v2,v3 | 1 |
| TI | Datacenter | Storage | VNX5500 | EMC | SNMP | v2,v3 | 1 |
| TI | Datacenter | Storage Area Network Switch | MDS9506 | Cisco | SNMP | v2,v3 | 2 |
| TI | Datacenter | Storage Area Network Switch | MDS9148 | Cisco | SNMP | v2,v3 | 4 |
| TI | Datacenter | Storage Area Network Switch | Nexus 5K | Cisco | SNMP | v2,v3 | 4 |
| TI | Datacenter | LAN Switch | Nexus 2K | Cisco | SNMP | v2,v3 | 6 |
| TI | Datacenter | Solución de respaldos corporativa | BLc6000 | HP | SNMP | v2,v3 | 1 |
| TI | Datacenter | Servidores de Aplicación | A llegar |  |  |  |  |
| TI | Datacenter | Servidores de Base de datos | A llegar |  |  |  |  |
| Transport Net | Trunking | Router | SmartEdge1200 | RedBack (ERICSSON) | - | - | 2 |
| Transport Net | Trunking | Router | SmartEdge600 | RedBack (ERICSSON) |  | - | 4 |
| Transport Net | Trunking | Switch | Extreme 48T | Extreme |  | - | 6 |

**ANEXO N2: DETALLE DE KPI’s CONFIGURADOS PARA ENTEL**

| **Servicio/Tecnología** | **Indicador/Reporte** | **Descripción** |
| --- | --- | --- |
| CIE MOvil | KPIs ATT | KPIs asociados a la RAR202 que se presenta a la ATT Accesibilidad/Drop CAll /Dispnibilidad |
| CIE FIJA | KPIs ATT | KPIs asociados a la RAR203 que se presenta a la ATT Congestión/ Completicidad |
| CIE PPIH/SMSC | Completicidad | En base a llamadas y sms’s |
| Business Objects | KPIS RAN/CORE | Redes GSM HSPA LTE |
| U2000 | KPIs Red Movil |  |

**ANEXO N3: SERVICIOS A INCLUIRSE FUERZA DE TRABAJO**

| **Servicios** | **Detalles** |
| --- | --- |
| FFTX | Instalaciones nuevas y mantenimiento correctivo de servicios Linea Entel , VozIp , ADSL , IPTV, VPN, TRONCAL SIP |
| LTE | Instalaciones nuevas y mantenimiento correctivo de servicios Datos y Voz |
| TV Sat | Instalaciones nuevas y mantenimiento correctivo de servicios IPTV |
| Servicios Especiales | Instalaciones nuevas y mantenimiento correctivo de servicios Multicontact , OnLine |
| ADSL/Wimax | Instalaciones nuevas y mantenimiento correctivo de servicios ADSL |
| PUNTOS ENTEL | Instalaciones nuevas y mantenimiento correctivo de servicios Movil, Fijo ,Satelital |
| Mant. Radio Bases | Mantenimiento Preventivo,correctivo e implementaciones nuevas de estaciones GSM,UMTS,LTE |
| Mant. Radio enlaces | Mantenimiento Preventivo,correctivo e implementaciones nuevas de equipos de radio e IP. |
| Multiacceso Rural | Telefonía Publica |
| Mentenimeinto de red Satelital | Mantenimiento Preventivo,correctivo e implementaciones nuevas de equipos de redes satelitales. |
| PEX/inalambrico | Mantenimiento Preventivo,correctivo e implementaciones nuevas de PEX. |
| Mantenimiento FO | Mantenimiento Preventivo,correctivo e implementaciones nuevas de equipos de FO. |
| Telecentros | Mantenimiento Preventivo y correctivo de equipos de acceso de radio e IP. |
| Telesalud | Mantenimiento Preventivo y correctivo de equipos de acceso de radio e IP. |
| Mant. Rutinario Planta Interna | Traeas de mantenimiento preventivo y rutinario, dsitribución de cara de trabajo de los equipos responsables de la administración de Centrales de equipos COre planta interna BacBone Ip, conmutación, etc. |

**ANEXO N4: ELEMENTOS DE RED QUE GENERAN DATOS DE USO**

| **Plataforma** | **Sistema** |
| --- | --- |
| U2000 | FTTX, Movil GSM, UMTS, LTE |
| Netnumen | FTTX |
| Cisco PRIME | BB IP |
| T2000 | Radio FO |
| CAS | TV |
| Imonitor | Idirect |
| (Imonitor) | Shiron |
| U2000 | Fibra OPtica |
| (Sky) | Gilat |
| OSS/ENIQ | Movil GSM, UMTS, LTE |
| Netnumen | Movil GSM, UMTS, LTE |
| Citrix |  |

**ANEXO N5: RECURSOS A INCLUIRSE EN EL INVENTARIO**

|  |  |
| --- | --- |
| **Sistemas** | |
| **Domain** | **Subnet level** |
| Inventario de Red | Inventario de redes por tecnología (Telefonía Móvil GSM, UMTS, LTE) de las , interconexiones y dependencias de impacto, de las redes descritas en el ANEXO 2 y sus respectivas tipologías |
| Inventario de elementos de red gestionados NE’s |
| INventario de DOminios de Red |
| Inventario de interconexiones FIsicas |
| Inventario de interconexiones Lógicas |
| Inventario de HW SW y equipamiento | Inventario de gabinetes (De los NEs mencionados) |
| Inventario de Racks (De los NEs mencionados |
| Inventario de Tarjetas (De los NEs mencionados) |
| Inventario de Puertos (De los NEs mencionados) |
| Inventario de Protocolos de red (Señalización, Gestión, Enrutamiento IP) |
| Inventario de recursos lógicos | Parametros de configuración de elementos de Red (Especificaciones de recurso) |
| Inventario de recursos lógicos |
| Inventario de Ubicaciones | Inventario de áreas geográficas (provincias, departamentos) |
| Inventario de Lugares Locales “Sitios” (Ubicaciones, salas de equipos, indoor, outdoor, etc.) |
| Inventario de Equipamiento Auxiliar | Inventario de equipamiento de sistemas de  energía (UPSs, generadores, bancos de baterías, etc.) y su ubicación. |
| Inventario de Torres e infraestructura |
| Inventario de Sistemas de Aire acondicionado |

**ANEXO N6: FLUJOS DEFINIDOS EN LOS SISTEMAS DE PROVISION Y FUERZA DE TRABAJO**

| **Servicio** | **Descripcion Servicio** | **Flujo** |
| --- | --- | --- |
| LE | Linea Entel | Factibilidad de Instalación |
| LE | Linea Entel | Factibilidad de Traslado |
| LE | Linea Entel | Instalacion/Traslado LE local |
| LE | Linea Entel | Instalacion/Traslado LE Urbana |
| LE | Linea Entel | Instalación/Traslado LE Rural |
| LE | Linea Entel | Instalación/Traslado Areas No Atendidas |
| LE | Linea Entel | Instalación/Traslado Acceso Satelital |
| LE | Linea Entel | Retiro LE local |
| LE | Linea Entel | Retiro LE Urbana |
| LE | Linea Entel | Retiro LE Rural |
| LE | Linea Entel | Retiro Acceso Satelital |
| LE | Linea Entel | Retiro Areas No Atendidas |
| LE | Linea Entel | Factibilidad de Servicios Suplementarios |
| LE | Linea Entel | Cambio de Instancia |
| LE | Linea Entel | Cambio de Plan |
| TP | Teléfonos públicos | Factibilidad Instalacion |
| TP | Teléfonos públicos | Factibilidad traslado TP |
| TP | Teléfonos públicos | Instalacion/Traslado TP Urbana |
| TP | Teléfonos públicos | Instalación/Traslado TP Rural |
| TP | Teléfonos públicos | Instalación/Traslado Areas No Atendidas |
| TP | Teléfonos públicos | Instalacion/traslado TPChip |
| TP | Teléfonos públicos | Instalacion,Reubicacion y Retiro MIR |
| TP | Teléfonos públicos | Retiro TP Urbana |
| TP | Teléfonos públicos | Retiro TP MAR |
| TP | Teléfonos públicos | Retiro TP ANA |
| TP | Teléfonos públicos | Trabajos Adicionales TP |
| TP | Teléfonos públicos | Cambio de AccesoTP |
| TP | Teléfonos públicos | Bloqueo temporal desbloqueo |
| TPU | TPU | Factibilidad de Instalación |
| TPU | TPU | Factibilidad de Traslado |
| TPU | TPU | Instalación/Traslado TPU Rural |
| TPU | TPU | Retiro TPU Rural |
| TPU | TPU | Instalación/Traslado Areas No Atendidas |
| TPU | TPU | Retiro Areas No Atendidas |
| TPU | TPU | Instalación/Traslado Acceso Satelital  - MIR |
| TPU | TPU | Retiro Acceso Satelital  - MIR |
| TPU | TPU | Instalacion TPU VSAT IP |
| TPU | TPU | Traslado TPU VSAT IP |
| TPU | TPU | Retiro TPU VSAT IP |
| TPU | TPU | Hab/Deshab servicio suplementarios |
| TPU | TPU | Cambio de Instancia |
| PE | Punto Entel/CAD | Factibilidad Instalación |
| PE | Punto Entel/CAD | Instalacion |
| PE | Punto Entel/CAD | Retiro |
| PE | Punto Entel/CAD | subflujo Hab/Desh Corhal |
| PE | Punto Entel/CAD | Instalacion GSM-TDMA |
| PE | Punto Entel/CAD | Factibilidad Traslado |
| PE | Punto Entel/CAD | Cambio Instancia |
| PE | Punto Entel/CAD | Retiro Movil TDMA-GSM |
| PE | Punto Entel/CAD | Traslado |
| PE\_VSAT\_IP | Punto Entel VSAT IP | Factibilidad |
| PE\_VSAT\_IP | Punto Entel VSAT IP | Cancelacion Factibilidad de instalacion |
| PE\_VSAT\_IP | Punto Entel VSAT IP | Instalacion PE VSAT IP |
| PE\_VSAT\_IP | Punto Entel VSAT IP | Retiro PE VSAT IP |
| PE\_VSAT\_IP | Punto Entel VSAT IP | Traslado PE VSAT IP |
| PE\_VSAT\_IP | Punto Entel VSAT IP | factibilidad\_traslado |
| 800 | Toll-free / 901 | Instalacion |
| 800 | Toll-free / 901 | Retiro |
| ITFS | Toll-Free Internacional | Provision de Paquetes |
| ITFS | Toll-Free Internacional | Retiro de Paquetes |
| AQUIE | Aqui Entel | Instalacion Aqui Entel |
| AQUIE | Aqui Entel | Retiro Aqui Entel |
| ROM | Roaming | Provision, Cambio, y Baja Servicio |
| WEB | Espacio Web | Provision, Cambio, y Baja Servicio |
| MAIL | Correo electrónico | Provision, Cambio, y Baja Servicio |
| DIUP | Internet Dialup | Provision, Cambio, y Baja Servicio |
| WIFI | Internet WIFI | Instalacion & Certificacion |
| WIFI | Internet WIFI | traslado |
| WIFI | Internet WIFI | Retiros WIFI |
| WIFI | Internet WIFI | Cambio Plan e Instacia WIFI |
| WIFI | Internet WIFI | gestionar\_retiro\_de\_equipo |
| MULT | MultiContact | Servicios Multicontact |
| ADSL | Internet ADSL | Factibilidad de Instalación |
| ADSL | Internet ADSL | Instalacion |
| ADSL | Internet ADSL | Factibilidad de Traslado |
| ADSL | Internet ADSL | Traslado |
| ADSL | Internet ADSL | Retiro |
| ADSL | Internet ADSL | Cambios de IP |
| ADSL | Internet ADSL | Cambios de Velocidad |
| WIMAX | WIMAX | Factibilidad de Instalacion |
| WIMAX | WIMAX | Instalacion |
| WIMAX | WIMAX | Factibilidad de Traslado |
| WIMAX | WIMAX | Traslado |
| WIMAX | WIMAX | Retiro |
| WIMAX | WIMAX | Factibilidad de Cambio de Velocidad |
| WIMAX | WIMAX | Cambio de Velocidad |
| WIMAX | WIMAX | Factibilidad de Cambio de Calidad de Servicio |
| WIMAX | WIMAX | Cambio de Calidad de Servicio |
| INT\_LTE | Flujos LTE fijo | Instalacion |
| INT\_LTE | Flujos LTE fijo | Traslado |
| INT\_LTE | Flujos LTE fijo | Cambio de Plan |
| INT\_LTE | Flujos LTE fijo | Retiro |
| INT\_LTE | Flujos LTE fijo | Mantenimiento por reclamo |
| TVSA | Television Satelital | Instalacion del Servicio y/o equipos adicionales (Contratista) |
| TVSA | Television Satelital | Instalacion del Servicio y/o equipos adicionales (Mayorista) |
| TVSA | Television Satelital | Instalacion Packs Adicionales |
| TVSA | Television Satelital | Retiro del servicio y/o equipos adicionales (Contratista) |
| TVSA | Television Satelital | Retiro del servicio y/o equipos adicionales (Mayorista) |
| TVSA | Television Satelital | Retiro packs adicionales |
| TVSA | Television Satelital | Cambio de Plan Automatico |
| TVSA | Television Satelital | Cambio de plan (Migracion) |
| TVSA | Television Satelital | Traslado del Servicio (Contratista) |
| TVSA | Television Satelital | Traslado del Servicio (Mayorista) |
| TVSA | Television Satelital | Reclamos - Actualizacion de STB y/o Smarcard |
| PRIE\_800R | Toll Free Internacional Entrante | Instalacion |
| PRIE\_800R | Toll Free Internacional Entrante | Retiro |
| TSIP | Troncales SIP | Alta del servicio |
| TSIP | Troncales SIP | Adicion de Canales |
| TSIP | Troncales SIP | Adicion de instancias DID |
| TSIP | Troncales SIP | Baja del Servicio |
| TSIP | Troncales SIP | Reduccion de canales |
| TSIP | Troncales SIP | Reduccion de instancias DIDs |
| TSIP | Troncales SIP | Traslado TSIP |
| TSIP | Troncales SIP | Cortes / Rehabilitaciones |
| FTT | FTTX | Factibilidad de Instalación |
| FTT | FTTX | Instalacion |
| FTT | FTTX | Instalacion del Servicio |
| FTT | FTTX | Adicion Internet |
| FTT | FTTX | Adicion Vozip y/o LE |
| FTT | FTTX | Retiro |
| FTT | FTTX | Reduccion LE Vozip |
| FTT | FTTX | Reduccion Internet |
| FTT | FTTX | Retiro del Servicio |
| FTT | FTTX | Anclaje Vozip |
| FTT | FTTX | MPL vozip |
| FTT | FTTX | Servicios Suplementarios LE/Vozip |

**ANEXO N7: INTERFACES PARA ACTIVACION DEL RECURSO**

| **Servicio** | **Plataforma** | **Interfaz** |
| --- | --- | --- |
| Movil | HSS | Telnet |
| Movil | UPCC | Soap |
| TVSat | CAS | Telnet |
| Telefonia Fija | N2000 | TL1 |
| FTTX | U2000 | Soap |
| FTTX | NETNUMEN | Telnet |
| INTERNET | LDAP\_ENTEL | Ldap |
| VozIP | N2000 | TL1 |