Use Case:
IP & Subnet Planning Solution with TIPS

Summary:

A mobile network operator (MNO), actively working with thousands of network elements from multiple vendors was experiencing substantial difficulties in managing their IP network

TTG Int. has provided an effective solution in managing their complex and far-reaching IP network to avoid using duplicate IP's and facilitating IP and subnet planning operations.
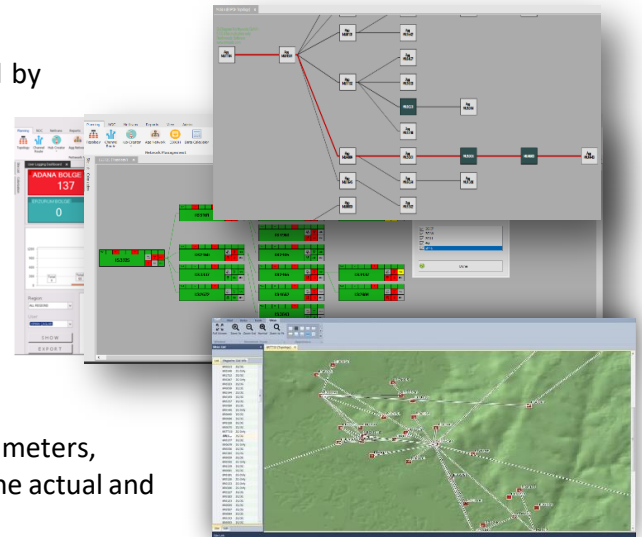
Actor:

Mobile Network Operator

Situation:

The MNO had 25K+ base stations with 30K+ transmission equipment spanning 10 vendors. Inventory management, topology supervision, IP management were handled with different tools with different interfaces. The "map", almost always lagged the actual field status, troubling planning department as well as issuing hurdles in reporting to telecom regulatory body.

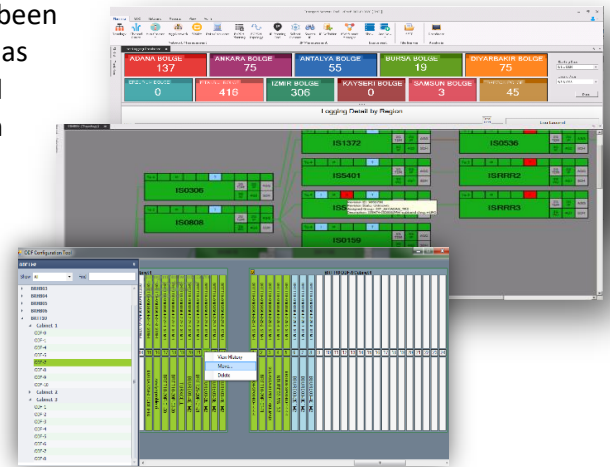The MNO issued a tender to match these challenges with pressing timing requirements.

Solution and Benefit:

- TIPS, Transmission, and Inventory Planning Tool by TTG Int., had been rewarded the tender and in 12 months had enabled the following
- Aggregating disparate modes of communication of vendor tools under one umbrella
- Depicting topology of the network all over Turkey, assisting network planners to visualize to minute detail of the dynamic network

- Creating daily reports on more than 50 key parameters, assisting planners for any discrepancy between the actual and planned topologies for better decision making
- Reports in detail for regulatory needs, such as bandwidth utilization and planning
- IP and port management and planning
- Removal of duplicate IP assignments and removing choking points

Customization:

- As each MNO is different, specific rules had been custom designed and incorporated to TIPS, such as
- Exception ruling Defining and managing old inventories and devices set with IPv4 with exceptions
- Regulatory reporting: Based on dynamic nature of regulations, self-design reporting canvas added for swift operation
- Flexible architecture: though the MNO is not servicing 5G yet, modules were enabled to support the 5G network

By TIPS You Can :

Implement a centralized IP management tool: By using a tool like TIP to manage the IP network, the operator avoids duplicate IP assignments, **facilitate** subnet planning, and improve inventory management.

Visualize the network topology: TIP can depict the topology of the network, assisting the operator better understand the dynamic nature of their network and make **informed** decisions about planning and management.

Generate detailed reports: Generating reports on key parameters **enables** tracking the performance of the network, identify any discrepancies between actual and planned topologies.

Customize upon your needs: Each operator and regulatory framework is different. For specific needs of the operator, such as regulatory reporting and support for 5G networks, the operator can ensure that it has the **right tools** in place to effectively manage the network.

Overall, implementation of TIPS , centralizing the IP management, helps the operator to better **manage** its **complex** and far-reaching IP network , meeting the needs of customers.