

Title: Engineer, Core Network Planner Trainee

Department: Core & Transport Network

Team: Core Network Planning

Period: 12 months

Role: Participate to all activities related to planning, design, engineering and implementation of 2G/3G+ core network (Packet switched domain) and IP core network, according to the company forecast, technology evolution, Vodafone Technology Networks recommendations, quality of service design parameters and business continuity plan.

This job is focused on overall planning, design and base engineering of the IP core network and related implementation activities, where the engineer will participate to projects and rollout process as a resource or technical prime.

Main responsibilities are listed below, but are not limited to:

Responsibilities:

1.Participate to all activities in packet switched Core Network planning area Area of responsibilities:

- Participate to the IP core network evolution strategy and supervise its planning rollout; align it with the architectural framework stated by IP Network Architecture & Security Design group;
- Packet switched (PS and IP telephony) and IP core nodes planning, design, engineering and implementation;
- Configuration management according to required changes for all services;
- Vodafone network interconnection for data services.
- 2. Contribute to day-by-day activities in packet switched Core Network Planning team
 - Assists engineers in evaluating of new network features and functionality for packet switched core network domain;
 - Assists engineers to assess and define capacity requirements for the IP packet switched core network platforms (IP related network systems and equipment used to implement a multi-vendor core and edge IP network);
 - Assists engineers to build scalable, redundant IP transport networks, based on telecom provider class standards (prepare routing &switching low level design (LLD); core/backbone/hub nodes and links capacity upgrade LLD);
 - Participate to assessments for the introduction of new products (equipments or services) on IP core and the backbone/aggregation layer of the IP access infrastructure. Outline technical design of network architecture for network expansion/upgrade. Support interconnection of mobile voice and data core to the IP infrastructure;



• Participate to all design and engineering activities for core network topology with focus on configuration of the network elements and equipment capacity requirements for voice/data services (2G/3G+ core network (PS, IP telephony)) and interconnection with other operators/carriers (Internet and peering routing and capacity up-grades).

3. Participate to projects related to the integration of new packet switched core nodes and adjacent nodes

- Assists engineers to integrate platforms according to GSM/UMTS standards (TDM, IP based);
- Assists engineers to define the HW&SW configuration and LLD for the new core/backbone nodes;
- Prepare engineering documentation to ensure proper equipment installation and commissioning.
- 4. Participate to packet switched core network rollout activities
- 5. Short term performance management of all packet switched core nodes and links
 - Assists engineers to optimize the network routing and configuration in order to maintain the grade of service for core and backbone nodes;
 - Ensure the performance and required capacity of the IP core, border and access network (performance monitoring, HW/SW upgrades, reconfiguration).

6. Reporting and documentation

- Maintain up-to-date documentation of projects where he/she is/was involved;
- Create the procedures used for the network performances tuning, in order to keep the quality of services at the highest standards;
- Prepare and follow up updates on core network documentation, including Network Disaster Recovery Principles for core network (review their alignment to VTN recommendations);
- Create on demand reports and documentation about assessments and projects with impact in Core Network Planning group.

7. Personal development

- Increase technical knowledge and skills related to job disciplines;
- Pro-actively drive own development to be ready for all changes planned in Core Network Planning area, due to business conditions and technology changes.

Working conditions:

- Use MS Office, open space;
- Interruptions can be frequent and deadlines are usually critical;



• Work related stress.

What are we looking for?

Education and other certifications

- University diploma or student in the final year/ at master: Polytechnics University Electronics, Computers Science, Electrical or other technical specialization;
- Other specific and certificated / attested courses.

Professional experience

Previous professional experience is not required.

Technical competences and skills

- English (above average level, technical vocabulary);
- Knowledge within telecom domain Teamwork and Cooperation;
- Provable knowledge of packet switched core network domain;
- Technical skills: Packet switched domain (2G/3G architecture), Data network OSI stack, IP (Internet, IP VPN, MPLS), LAN/WAN network, Traffic engineering;
- Planning, design, engineering experience in Core Network (Circuit/Packet Switched node design, mobile/fixed voice and data, traffic engineering, deployment of IP telephony, knowledge about IP transport (LAN/WAN, PDH, SDH, DWDM)) within a telecom operator;
- Engineering knowledge in Packet switched domain 2G/3G architecture;
- Voice & signalling topology (interfaces, protocol stack, services SS7, PRI, SIP H323, TCP/IP, etc);
- Positive, proactive, "can do" attitude;
- Well organized and structured person;
- Team player;
- Proactive and committed.