KARMOUT ISMAIL

WDM ENGINEER

PROFILE

I'm Ismail KARMOUT, a WDM Transmission Engineer specializing in optical networks and transmission technologies (DWDM, OTN, SDH). With hands-on experience in multi-vendor environments (Huawei, Nokia, ZTE, Ericsson), I focus on ensuring high availability, performance monitoring, and intelligent network protection. Passionate about technological innovation, I also explore how AI and data analysis can enhance network optimization and predictive maintenance. My goal is to combine strong transmission expertise with modern digital tools to solve complex real-world telecom challenges

EDUCATION

- **Master Artificial Intelligence and Data Analysis**   *2022-2024*
  Faculty of Sciences Meknes FSM

- **License Science and Technology Option Software Engineering**   *2022*

  Faculty of Science and Technology of Errachidia

- **Diploma Duest Specialty Mathematics Physical & Computer Science**   *2021*

  Faculty of Science and Technology of Errachidia

- **BACCALAUREATE in Physics Sciences French Option**   *2019*

  Tafilalet High School- ERRACHIDIA

EXPERIENCES & CERTIFICATE & PROJECTS

- **MAROC TELECOM** - **in progress**

  2 years at "National Transmission Support Center"

  - Ensure customer support delivery and transmission network maintenance
  - Skilled in ASON /NGWDM, DWDM, SDH and NGSDH+ transmission products specializing in network maintenance
  - Managed Huawei transmission products including OSN 6800, OSN 8800, OSN 9800)
  - Managed NOKIA transmission products including WDM/NGWDM 1830-PSS32-PSS36
  - Managed Ericsson / ZTE transmission products
  - Create links in different rates
  - Monitoring of WDM Network
  - Ensure preventive maintenance and network health check for optical network.
  - Trouble shooting alarms
  - Protection ASON/SNCP
  - Tracking tickets with venders

- **CERTIFICATE**
  - ZTE-OTN Operation and Maintenance Training
  - Huawie-OptiX OSN 9800 2nd Line Operation & Maintenance Training.
  - ALCATEL SUBMARINE NETWORKS MARINE- Training Type AB WEST AFRICA
- **PROJECTS**

  - SDH to DWDM/ASON Network Migration Project
    Led the transition from legacy SDH to high-capacity DWDM with ASON functionality
    Objective: increase network bandwidth and reduce operational costs.
  - Deployment of 10G / 100G Optical Links Between Sites
    Successfully implemented high-speed inter-site optical connections.
    Included validation, testing, and integration into the existing network.
  - Centralized WDM Network Monitoring Implementation
    Integrated multiple transmission devices into a centralized NMS platform.
    Trained NOC staff to use Huawei U2000 / Nokia NFM-T for 24/7 supervision.
  - Optical Network Health Check Audit
    Performed preventive audits on WDM/OTN networks using KPIs
    (OSNR, BER, power levels).
    Delivered optimization recommendations based on analysis.
  - ASON/SNCP Protection and Failover Simulation
    Simulated protection switching scenarios to verify automatic rerouting.
    Documented test results and prepared technical assessment reports.

SKILLS

- Configuration of OTN (Optical Transport Network) services
- Network topology design (ring, mesh, point-to-point)
- Proficient with NMS tools (Huawei U2000, Nokia 1830 NFM-T, ZTE NetNumen)
- Protection protocols: SNCP, MSP, OCHP, ODUk-SNCP
- Performance analysis: OSNR, BER testing, latency monitoring
- Optical network capacity planning and evolution
- OTDR testing and optical power measurement
- MOP (Method of Procedure) documentation and execution
- Familiar with ITU-T standards (G.709, G.872, G.694.1)
- Equipment security and access control (telnet/SSH, ACLs)

LANGUAGES

- Arabic (Native proficiency)
- French (Advance)
- English (Good level)