Ref.: NTC/9/2016   *Date: 25/09/2016*

To: Telecommunication Standardization Bureau (TSB)
International Telecommunication Union (ITU)
Place des Nations
1211 Geneva 20 Switzerland

Subject: **Sudan Nomination for ITU-T (SGs) Position in WTSA-16**

Dear Sir,

Please find below table contains proposal of above subject related to ITU-T (SGs) position

No.	Name	Position	SG No.
1	Muataz Elsadig Ishag	Vice Chairman	17
2	Hassan Mukhtar Hassan Mohamed	Vice Chairman	12
3	Awad Ahmed Ali Hmed Mulah	Vice Chairman	11
4	Eiman Farouk Mahmoud Osman	Vice Chairman	5
5	Muneer Tajelsir Eltuhami Elmaki	Vice Chairman	3

Best regards

Nadir Ahmed Gaylani
Sudan Focal Point

Annexes:
  1. *Muataz Elsadig Ishag CV.*
  2. *Hassan Mukhtar Hassan Mohamed CV.*
  3. *Awad Ahmed Ali Hmed Mulah CV.*
  4. *Eiman Farouk Mahmoud Osman CV.*
  5. *Muneer Tajelsir Eltuhami Elmaki CV.*

Curriculum Vitae

Muataz Elsadig Ishag

Mobile: 00249912331810

Email: muataz.ishag@gmail.com

Objective

To seek a challenging position in a dynamic environment and desires to progress further in the same field and likes to grow with the organization and prove to be an asset for its effective functioning and be a team player for the achievement of organizational goals and its success.

Interpersonal Skills

- Good working knowledge of the basic statistical concepts and procedures, research method and analysis.
- Capable of quickly learning new complex technologies and applying knowledge to address project needs to meet deadlines, strong problem solving ability and have the ability to multitask, joggle and prioritize work.
- Excellent interpersonal skills with the ability to communicate complex concepts in a team or individually.

Personal Information

- Marital status   : Single
- Nationality   : Sudanese
- Date of Birth   : 1985
- Place of Birth   : Sudan
- Language   : Arabic and English

Academic Qualification

- Bachelor of Computer Science (Information Technology).

Certificates

- OCA Oracle Certified Associate. (Oracle University - India)
- OCP Oracle Certified Professional. (Oracle University - India)
- Red Hat Linux Essentials RH 033. (Red Hat - India)
- Red Hat Linux System Administration. (Red Hat - India)
- Network Forensics: Understanding and Mitigating Malicious Internet Activity (IMPACT- Malaysia)
- VMware Certified Professional (VMware Education)

Training

- VMware Certified Professional 5.1 - Data Center Virtualization (VMware Education)
- Training Session on Cyber-security (NACS - Tunisia)
- ICT Security (ITU Academy)
- Incident Response and Handling (OIC-CERT – Brunei)
- Network Security Administrator. (EC-Council)
- Certified Ethical Hacker. (EC-Council)
- Financial in Telecommunication Management (NTC – Sudan)
- Project Management Professional (Khartoum University – Sudan)
- Oracle Primavera P6 Professional Project Management (Almoheet Center for Training– Sudan)
- Network Security (NIC – Sudan)

Computer Skills

- **Languages: Visual Basic 6.0, C++, Object Oriented Programming.**
- **Java Script: HTML, XML, C, VB Script.**
- **Network Security**
- **Database: Oracle 9i.**
- **Software: Computerization Maintenance Management (Word, Access, Excel, PowerPoint), Installing Windows.**
- **Operating Systems: MS-DOS, Windows 95, 98, 2000, 2003, XP Professional & Linux.**
- **Typing: English & Arabic (English 60 wpm, Arabic 50 wpm).**

Languages Skills

- **Arabic :(native language)**
- **English :**
- **Writing skills   very good**
- **Reading skills   very good**
- **Verbal skills   very good**

Hobbies / Interests

- **Team player.**
- **Communicating with others.**
- **Reading Novels.**

Awards:

- **Diploma in United Nation and International Understanding.**

Experience:

Incident Handling and Threat Analyst – Sudan Cert (Sudan) Jan/ 2010 until now.
Brief description of duties and responsibilities:

- Manage security incidents by understanding common attack techniques.
- Incidents handling framework design and develop
- Managing Incident Response Team
- Managing Forensic Lab
- Ensure International and National Coordination

Key achievements:
- Incident Response Capabilities
- Forensics Lab
- Capacity building capabilities among constituency

Monitoring and Controlling Department - Nation Telecommunication Corporation (Sudan) Jan/2009 to Jan/2013.

Brief description of duties and responsibilities:

- Analyzing requirements into highly specified project briefs
- Drawing up specific proposals for modified or replacement systems
- Producing project feasibility reports
- Working closely with developers to ensure technical compatibility
- Drawing up a testing schedule for the complete system
- Overseeing the implementation of a new system

- Keeping up to date with technical and industry sector developments

Key achievements:

- National Web Filtering Systems
- Monitoring VIOP System
- Sudan Internet Exchange Point
- National Data Center

Membership:

- **Africa Security Experts (Member)**
- **Sudan Network Operator Group**
- **MAG IGF – Advisory Group**
- **Sudan IGF – Advisory Group**
- **African ICCAN**

References

E. Mohamed Mohammed Khair
Head of Networks Security Department
NTC. Sudan
TEL: 00249123500005
Email: Mohamed.elhaj@ntc.gov.sd

Aunj Singh
Director of Global Response Center
IMPACT, Malaysia
TEL: 0060193839791
Email: anuj.singh@impact-alliance.org

Aaron Boyd
Vice President Strategic Development
ABI Research
TEL: 006565920281
Email: boyd@abiresearch.com

E. Badar Alsalehi
Director of Oman National CERT
ITA, Oman
TEL: 0096824166641
Email: badar.alsalehi@ita.gov.om

Philip Victor
Director Center for Policy and International Cooperation
IMPACT, Malaysia
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Vitaly Kamluk
Chief Malware Expert
Russian Global Research
Email: vitaly.kamluk@kaspersky.c

CV

Personal data

Full Name:	Hassan Mukhtar Hassan Mohamed
Address:	Sudan-NTC Building –Buri,Square9-P.O.Box2869Kh
Mobile No:	+249912322615
Date of Birth:	1-Mar-1978
Nationality:	Sudanese
Religion:	Muslim
E-Mail:	hassan@ntc.gov.sd; hassanabukim@gmail.com

Education

1998-2003	• Sudan University For Science & Technology, Faculty of Engineering Bsc in Electronics Engineering awarded October 2003. • Discipline: Electronics & Telecommunication Systems. • Major topics covered in B.Sc.: Telecommunication systems, Computer, Networks, Electronics, Digital design, digital communication, Satellite communication systems, Optical fibers, Antenna and propagation, Control systems and management.

Language

English:	Very Good.
Arabic:	Mother tongue.

Computer Skills

- Application Programs: MS Office, Internet Explorer, Visio Technical...etc.
- Networks: Designing, implementing, configuring and troubleshooting.
- Programming languages: Pascal, C++ (Fundamentals).
- PC's Maintenance (Laptops & Desktops).

Certificates & Workshops

2015	Thirty-second meeting of Quality of Service Development Group (QSDG) (Athens, Greece, 9-11 September 2015) ITU Workshop on "Performance, Quality of Service and Quality of Experience of Emerging Networks and Services Athens, Greece, 9-11 September 2015
2014	Workshop on "Monitoring Quality of Service and Quality of Experience of Multimedia Services in Broadband / Internet Networks" Maputo, Mozambique, 14-16 Apil 2014
2013	ITU Workshop on Benchmarking QoS evaluation of Multimedia Networks Ouagadougou, Burkina Faso, 18 July 2013
2013	ITU Workshop on "Building a Sustainable Future Through Green ICT Standards" Ouagadougou, Burkina Faso, 15-16(A.M.) July 2013
2012	ITU Workshop – Survey and Assessment for Internet Traffic Infrastructure 6

	November 2012 – Doha – Qatar.
2012	TCG system for Telecom Billing assurance – UK – London- BluGem Company –July 2012.
2012	Represent NTC Sudan in Type approval workshop in Egypt – Cairo- Jan 2012.
2011	Tems Investigation 13.0 drive test tool course- UAE-Dubai- Ascom.
2011	Broadband & Selective Radiation Measurement using the Narda STS NBM 550 and SRM 3006.
2011	Standardization gab in Arab & African region Workshop done by ITU in Algeria – Algeria.
2010	RH133 - Red Hat Linux System Administration - Professional lab Khartoum July- August 2010.
2010	RH033 - Red Hat Linux Essentials – Professional lab Khartoum July- August 2010.
2010	Linux server course Shlumberger UA - Dubai February 2010.
2008	CCNA course Ibdaa Institute – Khartoum.
2007	MCP certified (Installing, Configuring and Administrating Microsoft Windows XP Professional) Egypt – Cairo.
2006	Introduction to Petroleum Exploration & Production, 3 days course Khartoum September 2006.
2005	QHSE for Supervisor, Heglig oilfield.
2004	QHSE minimum training, Heglig oilfield.
2004	SSO training (IT Side Security Officer), Schlumberger office- Khartoum.

Experience

2011-2016	Current position: National Telecom Corporation: Head of QoS department Responsible of Leading, planning, decision making, and importing new equipment for QoS department. Establishing Billing verification section.
2010-2011	Schlumberger-Sudan- Procurement administrator. Responsible of ICT procurement & new ICT technical project when I joined procurement team and become focal point to deal with all communication companies including Vision Valley, Sudani, Zain ,MTN and Thabit. Also I've handled all relationships with Telecom companies and Corporations.
2004-2010	Schlumberger-Sudan- ICT Support Engineer • Schlumberger Heglig base network administrator. • Administrating Domain Controller, backup server & backup equipments. • Supervisor building of Heglig new base connectivity (voice and data networks). • Provided quality ICT support to the entire SLB Heglig operation, by being the focal point for all ICT related queries and requests. • SLB ICT asset management. • After successful completion of the SSO course (Aug 2004) acted as the key SSO for Heglig. (Site Security Officer). • Prepared and lead the IT infrastructure development for the new OFS base in Heglig. • Prepared and leaded the communication infrastructure development (phones, radios, PBX, VSAT systems etc.) for the new OFS Base in Heglig. • Support Heglig VSAT operation and maintenance.

- Actively participated in all QHSE activities in Heglig. By being the focal point for IT security and providing IT security training for employees as part of the weekly SOIMs.
- I have configured Tharjath new domain and WNPOC CPF child domain (WNPOC) by using Win2003 Server including domain controller, DHCP ranges, DNS etc.. Dec 2006
- Provide basic IT support for Tharjath main router (WNPOC) from Oct 2006 to Feb 2007.
- Also become responsible of all IT related projects like CCTV, Intruder Alarm and purchasing new IT equipment.

2003   <u>Training in Khartoum Refinery:</u>
Instrument & control: maintenance, DCS, PLC...etc. Cables and Substations departments Dec 2003 to May 2004 at new expansion project.

Reference

Engineer Mustafa Abdehafiz NTC-Sudan Mobile no (0912301544)

Curriculum vita

Awad Ahmed Ali Hmed Mulah

Personal details:

Name   : Awad Ahmed Ali Hmed Mulah

Date of birth   : 10/MAY/1984

Gender   : male

Marital status : single

Nationality   : Sudanese

National service: released from 2007

Address   : SUDAN_KHARTOUM_EL MAMORA BLOCK NO (71)

E-MAIL   : awadmulah@hotmail.com

                  Awadmulah@ntc.gov.sd

                  awadmulah@yahoo.com

Mobile no   : 00249912370494

                  00249912300995

Objective:

Seeking a position to utilize my skills and abilities in the TELECOMMUNICATION industry that offers professional growth while being resourceful, innovative and flexible

Telecom & IT exposure

Education:

BS.c computer engineering   COMPUTER MAN COLLEGE (**CMC**)   05/April/2007

Certificates:

- **IEEE** *Malaysia*
- **TEMS INVESTIGATION 13.0** *Dubai-UAE*   ascom
- **NARDA SAFETY TEST SOLUTION** *Dubai-UAE*   narda
- **Laboratory Techniques** Washington DC-USA   FC
- **Certification Expert** Shenzhen-CHINA
- **Type Approval Testing For Mobile Terminals** Tunis
- **IELTS** Khartoum-SUDAN

Technical experience:

- TEMS investigation 13.0 theoretical and practical course
- Nemo Anite Outdoor 6.0 theoretical and practical training course
- Nemo Anite Analyze theoretical and practical training course
- Broadband& selective radiation measurement using **NARDA** STS NBM 550 AND SRM 3006
- Ericson RBS cabinets 2000&3000
- Rohde and Schwartz Spectrum analyzer and CMW500
- GSM
- CCNA (by course)

- Exceptional expertise in RF, TDMA, GSM, UMTS and Microwave
- Language: C , C+ , VISUAL BASIC , HTML
- Platforms: WINDOWS 95/98/XP/VISTA/2000/NT
- Internet browser: internet explorer , Netscape
- Concepts: networks, operating system, GSM

GSM transmission tools:

- Ericsson MINI-LINK Craft 7.2

- Ericsson OMT-R30 For BTS O&M

- RBS Element Manager For Node B O&M

Experience:

- Quality Assurance Engineer in National Telecommunication Corporation (**NTC**) Sudan from 2013 to Present.

  Job responsibility:

  1. Telecom equipment types approve.
  2. Telecom equipment quality Assurance.
  3. Telecom equipment testing and inspection.
  4. Conformity And Interoperability Assessment on Type Approval testing for Mobile Terminals.
  5. Make sure that imported equipment complying with Sudan standard and specification, with respect to international specialization organizations recommendation.

- Field support engineer in **LULU-TECH** Sudan (ZAIN contractor) from jan-2009 to 2010

- BTS supervisor field Maintenance engineer in **SHABAKKAT** Sudan (ZAIN contractor).From 2010 to 2012.

  Job responsibility:

  1. Zone manager & BTS supervisor Responsible for ZAIN Ericson BSC-44 IN NORTH REGION IN SUDAN **(SHENDI CITY)**

  2. Ericsson Traffic Node 2P,6P,20P, **Mini-link** E Installation and commissioning as per TD

  3. Working on **Mini-link** classic, **Mini-link** HC, MPH, 2p 6p(rev.4) and 20p traffic nodes using **Mini-link** Craft 2, 2.1, 2.3, 2.4, 2.5, 2.7,2.8,2.9,2.10 and MSM 6, 6.7,6.8.

  4. Software Upgrades of Nodes and Modules i.e. LTUs, MMUs etc.

  5. Maintenance of ERICSSON GSM Macro & Micro GSM Base Stations More than 30 Cell Sites

  6. Ericsson Traffic Node 2P,6P,20P, **Mini-link** E Installation and commissioning as per TD

  7. Testing, Commissioning, Integration & Maintenance of ERICSSON Radio Base Stations RBS 2000 cabinets (2216, 2206), and out door cabinets (2106).

  8. Testing, Commissioning, Integration & Maintenance of ERICSSON Radio Base Stations RBS 3000 cabinets (3206).

  9. Expertise on Traffic node **TN**, **2G** and **3G** Radio Base Station. Field Supervision and installation of Ericsson Equipments

  10. Operation & maintenance of Marconi **MDRS** 155E

  11. Installation and Configuration of Marconi(**MDRS**) and **OMS**(1200,1600) via LCT

12. Installation, Configuration, Alignment and Commissioning of **MARCONI MDRS 155CE**.
13. Immediate hardware rectification on cells identified to have BTS alarms, faulty antenna systems and faulty BTS modules
14. Fault tracing and localization using a wide range of test equipments including site master and loops technique tools

Membership:

The institution of electrical electronic engineering in Malaysia (**I.E.E.E**)

Preferred skills:

+ Ability to work in a group.
+ Self learning capabilities.
+ Good Communication skills.
+ Perform well under pressure.
+ Keen to know new technologies and techniques.

Other objectives and hobbies:

+ Organizing various cultural
+ Reading E-books
+ Net surfing

Declaration:

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

(3)

Full Name: Eiman Farouk Mahmoud Osman
Organization: National Telecommunication Corporation (NTC)
Country: Sudan
Address: Block No 9, Buri Alamab, NTC Tower Khartoum, Sudan
Mobile: +249-912-939-333
Tel: +249187171226
E-mail: **eiman@ntc.gov.sd**

Candidate profile:

- More than 8 years of experience in all levels of communication technology (regulation and management, policy of regulation and personnel management).
- I worked in Technical Department (Standards & Specifications Dept). My experience extends to studying specifications of base stations and telecommunication towers, setting telecom-national specifications, leading telecom towers specification campaigns conformity and Electronic Waste management.
- I have the ability to work across multiple teams and sites, monitoring team members where required. and have experience in building relationships with customers and suppliers.

Education/ Professional:

2000	**B.sc in Physical Applied Since (HONOURS)** Sudan University of Science and Technology
2008	**M.sc in Electronic Physics (Solid State)** Sudan University of Science and Technology
2003	**Postgraduate Diploma in Computer in Engineering and Networks** Gezira University (Sudan)
2007	**M.sc in Computer Engineering and Networks** Gezira University (Sudan)

Career History:

Date:	2008 – To Present National Telecommunication Corporation (NTC)
Position:	Head of Environmental Effects Division
Summary of Duties:	Regulation and management, policy of regulation and personnel management, Environment and Climate Change, aspects with regard to, measurement of electromagnetic radiation and electronic waste management.

Key Duties:

- Inspection of telecom towers according to NTC approved technical specs:
  - Examining and checking conformity and specifications of base stations and telecommunication towers.
  - Establishing data base of every site.
  - Monitoring the violations and removing them by telecommunication operators.
  - Preservation of human health and environment.
  - Updating and the periodic keeping pace with the technical terms and indicators.
  - Terms and Conditions of the towers, transmit power and radiation measurements (Selective Radiation Meter SRM 3006, NARDA NBN 550(NARDA), EME Spy 200 INSITE Free (SATIMO) and radiation analysis (EMF estimator, Simulation Software EFC 400 (NARDA), EMF Visual (SATIMO).
- Electronic Waste management.
- Environmental & Climatic change.

Trainings and Workshops:

Khartoum/NTC **04 – 08 May 2008**	Next Generation Networks (NGN) by Goulet Telecom International Inc.
Khartoum / NTC **25 – 29 May 2008**	Spectrum Management by Goulet Telecom International Inc.
Khartoum /Sudan **01– 30 June 2008**	Cisco certified network associate by SUDATEL/ DATA NET.
Khartoum/Sudan **06 – 10 July 2008**	The development of administrative and managerial skills and creative thinking by Society Services & Training Center.
Khartoum/Sudan **27 – 31 July 2008**	QoS in Telecommunication Networks by Goulet Telecom International Inc.
Khartoum/NTC **02-06 November 2008**	Fraud Management in Telecommunication by Goulet Telecom International Inc**.**
Khartoum/NTC **12 – 23 April 2009**	Financial Management in Telecommunication by Goulet Telecom International Inc.
Khartoum/NTC **07- 14 April 2009**	Fiber Optics Technology by Canar Academy.
Mumbai/India **02 Nov – 04 Dec 2012**	Mobile Technology & Services by Centre for Excellence in Telecom Technology & Management.
Khartoum/Sudan **04 – 06March 2013**	Submarines cables workshop by ITU, Arab Center of Excellence.

Istanbul/Turkey 06 – 10 May 2013	SPECTRUM REGULATIONS by ICTA
Khartoum/Sudan 17 – 18 December 2013	Broadcasting and Digital Dividend Transition to Digital Current Deployment & Regulatory Issue by ITU.
SHENZHEN/China 10 – 25 October 2015	Seeds for the future by HUAWEI.
Khartoum/Sudan 27-29 October 2015	Mobile Roaming by ITU-BDT Arab Regional.
Brest /France 16 – 20 May 2016	TRAINING ON RF Safety by MVG company.
Khartoum/Sudan 24-25 August 2016	Digital Financial Inclusion by ITU-BDT Arab Regional.

Meetings:

ITU-T Study Group 12 meeting "Performance, QoS and QoE"	**Geneva, Switzerland, 31 October- 9 November 2011 by ITU.**
ITU-T Study Group 5 meeting "Environment and Climate Change"	Kochi, India,08-19 December 2014 by ITU.

Conference:

ITU-D WTDC-14	Dubai, U AE 30 March - 10 April 2014.

Key Skills:

- Language :
    1. Arabic: Native language
    2. English: very good (writing/reading & speaking).
- Telecom Generation
- Computer Skills Optimization
- Equipment & Towers Specifications
- Electronic Waste management.
- Review and evaluate work products, methods, and procedures; meet with staff to identify and resolve problems.
- Manage and/or coordinate implementation of all technology projects.
- Approval of all telecom equipment according the NTC regulations.
- Periodic inspection of telecom of equipments and instrumentation.
- Release of the approved telecom equipment to the operators.
- Studying licenses requests for various telecom services.
- Testing, conforming and releasing equipment.

Reference:

Nadir Ahmed Elgilany	Manager of Technical Depart (NTC) Mobile: +249 123 88997 Khartoum /Sudan(NTC).
Babiker Mohammed Saeed	Manager of Standards & Specifications Dept. – NTC, Khartoum - Sudan Mobile: +249 123888070

CURRICULUM VITAE

Personal Data:

Name:	**Muneer Tajelsir Eltuhami Elmaki**
Date of Birth:	04.12.1986
Place of Birth:	Khartoum, Sudan
Nationality:	Sudanese
Marital Status:	Single
Address:	Khartoum, Sudan
Mobile:	+249 918089464
E-Mail:	muneer_eltuhami@ntc.gov.sd

Education:

2003	**Sudan secondary school certificate.**
2008	B.Sc. (honours) in Statistic and Computer sciences, Faculty of Mathematical Sciences University of Khartoum.
2009	Linux system administration course at Academic council of NIIT.
2011	Online course on "Performance assessment for fixed and mobile communication network".
2011	Oracle 10G Certified Administration (OCA).
2012	Course in Billing Verification.
Mar - May 2014	Telecom Management course at CTTM India.
2014 - 2015	MSc in Statistics from faculty of Mathematical Sciences University of Khartoum.
Mar 2016	Business Analysis course (ITU Academy).

Experience:

Sept. 2008- Sept. 2009	**information technology and system administration centre, University of Khartoum.**
Sep 2011 –Till now	Pricing and competition specialist at National Telecommunication Corporation (NTC).

Duties:

1. As pricing and Competition specialist, at National Telecommunication Corporation responsible of:
2. Determine wholesale prices:
   - Tariff of local interconnection based on LRIC model.
   - Leased line.
3. Approve the tariff of telecommunication services, considering the effectiveness of competitive market.
4. Prepare telecom tariff benchmarking studies.
5. Verify billing system using BluGem verification system.
6. A member of teams responsible of prepare policies related to:
   - Competition.
   - Big Data.
   - National and International Roaming.
7. Member of the team responsible for preparing Market assessment study (2012).
8. NTC delegate to Government Strategic Data Collection plan Committee.

Skills:

Operating systems:	**Windows, Linux.**
Programming skills:	Visual Studio .NET C++& C#, JAVA.
Database management system:	Oracle 10G , SQL server.
Data Analysis Toolbox:	Excel, SPSS, R, STATA.
Telecom:	GSM, UMTS, LTE.

Language:

Arabic	**Native language**
English	Good (Read / Write & Speak).

Academic Papers:

1. **Embedded Neural Recognizer for Pattern Association (BSc Graduation Project).**
2. **Reviewing the Revised Simplex Method (MSc final project).**