**ITUEvents** 

# ITU in service of space

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GHANA'S EXPERIENCE IN REGULATING THE USE OF RADIO-FREQUENCY SPECTRUM AND SATELLITE ORBITS

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# **PRESENTATION OUTLINE**

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# **ESTABLISHMENT OF THE NCA**



- The NCA was established in December 1996 by the NCA Act (Act 524) which was repealed and replaced by the National Communications Authority Act, 2008 (Act 769).
- It is the central body with the mandate to license and regulate communications activities and services in the country; and to provide for related purposes.
- The Authority regulates all commerce and activities in the communications space in the country regardless of the technology employed.



### **CORPORATE STATEMENT**

VISION

A WORLD-CLASS COMMUNICATIONS REGULATOR THAT FACILITATES INNOVATIVE, RELIABLE AND SUSTAINABLE COMMUNICATION SOLUTIONS TO MEET STAKEHOLDERS' EXPECTATIONS.







# **CORPORATE STATEMENT**



#### MISSION

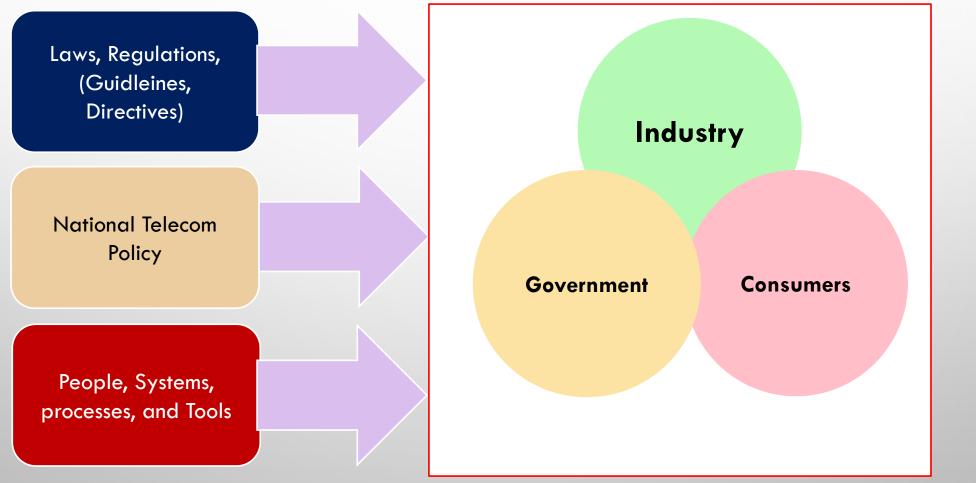
REGULATE THE COMMUNICATIONS INDUSTRY IN A FORWARD-LOOKING AND TRANSPARENT MANNER THAT PROMOTES FAIR AND SUSTAINABLE COMPETITION, STIMULATES INNOVATION, ENCOURAGES INVESTMENT, PROTECTS STAKEHOLDERS' INTERESTS AND FACILITATES UNIVERSAL ACCESS TO QUALITY COMMUNICATIONS SERVICES FOR NATIONAL DEVELOPMENT.







#### FRAMEWORK: REGULATORY, LEGAL AND POLICY





# POLICY MAKING BODIES ON SATELLITE COMMUNICATIONS- ITU



- THE INTERNATIONAL TELECOMMUNICATION UNION (ITU) IS AN AGENCY OF THE UNITED NATIONS WHICH REGULATES INFORMATION AND COMMUNICATION TECHNOLOGY ISSUES.
  - AS ONE OF THE MOST IMPORTANT ORGANIZATIONS REGULATING TELECOMMUNICATIONS, THE ITU HAS A STRONG INFLUENCE ON THE ACTIVITIES OF NATIONAL REGULATORY AUTHORITIES (NRA)S.
  - AS AT 2023, THE ITU HAS :
    - 193 COUNTRIES MEMBERS
    - MORE THAN 700 SECTORS MEMBERS
    - MORE THAN 164 ASSOCIATES



### **MISSION OF THE ITU**

- SPECIFIC OBJECTIVES INCLUDE:
  - REGULATION OF SATELLITE COMMUNICATIONS
  - COORDINATE AND DEVELOP INTERNATIONAL COMMUNICATIONS
  - HARMONIZING NATIONAL POLICIES
  - TECHNICAL ASSISTANCE TO DEVELOPING COUNTRIES IN THE DOMAIN OF TELECOMMUNICATIONS AND INFORMATION ACCESS
- AMONGST THE TASKS ASSIGNED TO ITU WE CAN MENTION:
  - ELECTROMAGNETIC SPECTRUM FREQUENCY BAND ALLOCATION
  - REGISTER SPACE ORBITAL POSITION OF SATELLITES
  - CONTROL OF RADIO INTERFERENCES





## GHANA'S EXPERIENCE IN SATELLITE REGULATION AND LICENSING



- GHANA, INCLUDING OTHER COUNTRIES HAS BEEN ALLOCATED SLOT IN APPENDICES 30 AND 30A (BROADCASTING SATELLITE SERVICE AND FEEDER LINKS) AND APPENDIX 30B (FIXED SATELLITE SERVICE) BY THE ITU IN THE PLANNED BAND.
- IN ORDER TO ENSURE A CONTINUAL PROTECTION OF THIS ALLOCATION, WE CONSTANTLY RESPONDS TO ALL ITU CIRCULARS REQUESTING FOR COORDINATION FROM OTHER ADMINISTRATIONS.
  - FAILURE TO RESPOND TO ITU CIRCULARS ON TIME CAN CAUSE THE DEGRADATION OF THE EMP LEVEL OF OUR ORBITAL SLOT.



# GHANA'S EXPERIENCE IN SATELLITE REGULATION AND LICENSING- CONT.



- REGULATORS ARE BOTH DRIVING AND BEING DRIVEN BY COMMERCIAL AND TECHNOLOGICAL ADVANCES IN SATELLITE COMMUNICATIONS.
  - WHILE THIS HAS BEEN TRUE FOR DECADES, THE RELEVANCE OF THE TREND HAS NEVER BEEN MORE PRONOUNCED THAN AT PRESENT.
- REGIONAL AND SUB-REGIONAL GROUPS UNTIL RECENTLY HAVE COMMENCED THE DEVELOPMENT OF SATELLITE REGULATORY FRAMEWORK TO AID/HARMONIZE THE LICENSING OF SATELLITE AND SATELLITE SERVICES FOR BOTH THE SPACE SEGMENT INCLUDING THE TERRESTRIAL COMPONENTS WITHIN THE MEMBER STATES.
  - EXAMPLE IS THE DEVELOPMENT OF THE **ATU-R RECOMMENDATION 005**, "THE IMPLEMENTATION OF EMERGING RADIOCOMMUNICATION TECHNOLOGIES NAMELY: FSS ESIM; MSS APPLICATIONS; FSS VSAT AND OTHERS".



# GHANA'S EXPERIENCE IN SATELLITE REGULATION AND LICENSING- CONT.



- IN 2017 THE NCA FOR THE FIRST TIME, FILED THE GHANASAT1 NGSO SATEL
- GHANA HAS GRANTED A GATEWAY LICENSE TO ONEWEB.
  - PRIOR TO THE ISSUANCE OF THE LICENSE TO ONEWEB, GHANA DID NOT HAVE ANY FRAMEWORK ON SATELLITE GATEWAY.
  - THIS MOTIVATED/ COMPELLED GHANA TO DEVELOP A REGULATORY FRAMEWORK ON SATELLITE GATEWAYS.
- IN LINE WITH OUR CORPORATE VISION, THE AUTHORITY HAS DRAFTED A SATELLITE REGULATORY FRAMEWORK FOR SOME MAJOR SATELLITE TECHNOLOGIES INCLUDING LANDING RIGHTS, THIS WAS DONE WITH THE INPUT FROM THE INDUSTRY.



#### **CHALLENGES**



- IN DEVELOPING SATELLITE REGULATIONS WITHIN OUR ADMINISTRATIONS, SOME TECHNOLOGIES LIKE THE ESIM AND OTHERS SHOULD GUIDE US IN HARMONIZING WITH OUR NEIGHBORS.
- THE ITU'S POLICY LIKE THE 'FIRST COME FIRST SERVED' IS PROVING INADEQUATE GIVEN THAT THE MOST OF THE COUNTRIES HAVE NOT DEVELOPED CAPACITIES IN SPACE PROGRAMS THAT WOULD TYPICALLY ALLOW THEM TO BEGIN THE 4-5 YEAR PROCESS OF SPECIFYING, ORDERING, LAUNCHING, AND INSURING SATELLITES.
- INABILITY OF THE DEVELOPING COUNTRIES TO BE ACTIVE IN PROTECTING THE REGAINED RESOURCES THEREAFTER BY AMONG OTHER THINGS, CARRYING OUT A SERIOUS EXAMINATION OF THE BR IFIC'S AND TO COMMENT WHENEVER NECESSARY WITH A VIEW TO PROTECTING THEIR SATELLITE RESOURCES.
- LACK OF EXPERTISE IN THE USE OF THE ITU SPACE SOFTWARE'S
- WITH THE LATEST SATELLITE IOT'S THAT ARE USING NON-FIXED SATELLITE FREQUENCIES, THERE IS A NEED FOR SOME FRAMEWORK TO AID THE DEVELOPING COUNTRIES IN THEIR LICENSING
- SATELLITE TO PHONE TECHNOLOGIES NEEDS TO HAVE A LICENSING FRAMEWORK BY THE ITU TO ASSIST DEVELOPING COUNTIES
- THE NEED FOR A YEARLY UPDATE OF THE ITU SATELLITE REGULATORY FRAMEWORK HANDBOOKS TO KEEP UP WITH THE LATEST TECHNOLOGICAL TREND.
- LACK OF GOOD MONITORING AND INTERFERENCE RESOLVING MECHANISM FOR SATELLITE SERVICES



# RECOMMENDATION



- ALTHOUGH WE HAVE A SOVEREIGN STATES, ADMINISTRATION SHOULD DO WELL TO CONSIDER THAT, SOME TECHNOLOGIES FOR EXAMPLE ESIM, IS REGULATED WHEN WE HARMONINISE OUR REGULATION WITHIN THE SUB REGION OR AT A REGIONAL LEVEL.
- THE ITU SHOULD HAVE IN MIND THE DEVELOPING COUNTRIES IN ORDER TO PRESERVE SOME ORBITAL SLOT IN THE LOWER EARTH ORBIT FOR THEIR FUTURE USE .
- DEVELOPING COUNTRIES SHOULD ALSO PAY CONSTANT ATTENTION TO THE ITU CORRESPONDENCE.
- AFRICAN COUNTRIES TO BE ACTIVE IN PROTECTING THE REGAINED RESOURCES THEREAFTER BY AMONG OTHER THINGS, CARRYING OUT A SERIOUS EXAMINATION OF THE BR IFIC'S AND TO COMMENT WHENEVER NECESSARY WITH A VIEW TO PROTECTING THEIR SATELLITE RESOURCES.





# **MERCI!!**

