NCC/SA/XXX/Vol.III/015

Month Day, Year

The Managing Director, Company Nigeria Limited, Street, District, City, State.

Dear Sir,

UNMANNED AERIAL VEHICLE (UAV)/DRONE NETWORK FREQUENCY LICENCE

Following your acceptance of the provisional offer of the Commission vide your letter dated December 17, 2018 and your payment of the stipulated fee, the Commission hereby assigns Frequency pairs to you for the deployment of **UAV Network** in **Nigeria**, subject to the conditions stated below:

(1) UAV/DRONE NETWORK PARAMETERS:

- a. UAV/Drone Application:
- b. Frequency Band of Operation:

(2) TRANSMITTER PARAMETERS:

- a. Power Limit (W):
- b. Modulation:
- c. Bandwidth:
- d. Frequency Range of Operation: From:
- e. Coverage distance:
- f. Max. EIRP/Carrier (dBW):
- g. Max. ERP Density per Carrier (dBW/4KHz):

(3) RECEIVER PARAMETERS:

- a. Power Limit (W):
- b. Modulation:
- c. Bandwidth of Receive Signal:
- d. Frequency Range of Operation:

(4) ASSOCIATED UAV/DRONE CONTROL CENTER:

- a. Associated control center ID:
- b. Associated control center address:
- c. Town/City:
- d. Country:

- e. Latitude:
- f. Longitude:
- g. Site elevation above Sea level (ASL)

(5) ASSOCIATED SPACE SATELLITE PARAMETERS:

- a. Name of Associated Space Satellite (If applicable):
- b. Name of Satellite Home administration (if applicable);
- c. Orbital Type of Space Satellite (if applicable):
- d. Orbital Position of Satellite (If applicable):

(6) UAV/DRONE DEPLOYED NETWORK PARAMETERS:

UAV/Drone Network ID: Upon deployment, UAV/Drone operators are expected to report utilization to the Commission using the template on the Commission's website biannually (January 7 and July 7 of each year) via the URL https://www.ncc.gov.ng/accessible/documents/824-satellite-services-deployment-reporting-template

(7) LIMITATIONS ON USE:

The UAV/Drone Stations shall only:

- a. Use the frequencies as specified 1(b) above.
- b. Communicate with Satellites in the orbital position as specified in (5) above.
- c. The Effective Isotropic Radiated Power (EIRP) in this frequency assignment.
- d. Use power density not exceeding that specified in the Spectral Power Density of the equipment.
- e. Use the classes of emission specified in this frequency assignment the ITU RR.
- f. Operate from the location(s) that will be specified in the reporting template
- (8) Effective Date shall be Month/Day/Year.
- (9) The next renewal will be due by **Month/Day/Year**. The renewal fee shall be based on the Frequency License Fee and Pricing Regulation in force at the time of renewal.
- (10) The frequency spectrum to be used by the UAV/Drone has also been assigned to other terrestrial services with co-primary allocation. You are to ensure that there is proper coordination with these services to avoid harmful interference.
- (11) The characteristics of the UAV/Drone Network shall remain within the envelope characteristics of typical earth stations associated with the satellite network with which these UAV/Drone communicate.

- (12) The use of UAV/Drone Network shall not cause more interference and shall not claim more protection than for typical earth stations in the GSO FSS network.
- (13) The use of UAV/Drone Network shall not claim ANY protection when using the ISM band.
- (14) Receiving UAV/Drone in the assigned frequency band shall not claim protection from terrestrial services to which the frequency band is allocated and operating in accordance with the Radio Regulations.
- (15) Transmitting UAV/Drone in the assigned frequency band shall not cause unacceptable interference to terrestrial services to which the frequency band is allocated and operating in accordance with the Radio Regulations.
- (16) The XXX UAV/Drone Network Operator is required to comply with Resolution 22 resolves 3 of the ITU WRC-19.
- (17) XXX are to submit to the Commission, data on the telecommunications operators you provide services to. A copy of the template for submission can be downloaded from the Commission's website through the path: http://www.ncc.gov.ng/technology/spectrum/eartstation-report-templates.
 - XXX is required to complete all the fields and submit in both hard and soft copies. The soft copy should be sent to spectrum-space@ncc.gov.ng. A CD copy should also be sent to the Commission. You are to comply strictly with this template when sending your data to the Commission.
- (18) XXX are also required to submit regular updates of the data referred to in (17) above to the Commission **twice** every year.
- (19) Updates should be submitted on **January 7** and **July 7** of each year. In situations where these dates fall on weekends or Public Holidays, the submission will be due on the next working day following the due dates.
- (20) XXX are hereby reminded that all equipment must be **Type Approved** by the Commission before installation.
- (21) The Commission may withdraw this assignment and invoke sanctions if it is used contrary to the stipulated conditions without prior written approval from the Commission, or if false information on the actual usage of the frequency is provided to the Commission.

Thank you.

Yours faithfully,

For: Nigerian Communications Commission

EXECUTIVE VICE CHAIRMAN/CEO