



STATION LICENCE

FOR

NATIONAL

TELEVISION BROADCASTING

RADIOCOMMUNICATIONS SYSTEM

SUCCESSFUL BIDDER

Telecommunications Authority of Trinidad and Tobago
#5, Eighth Avenue Extension, off Twelfth Street,
Barataria
Republic of Trinidad and Tobago, West Indies

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Pursuant to Section 36 of the Telecommunications Act, Chapter 47:31 (the "Act"), this Licence is issued to SUCCESSFUL BIDDER (hereafter referred to as the "Licensee"), of REGISTERED ADDRESS.

Subject to the conditions contained in this Licence, the Licensee is hereby authorised to install, operate and use the radiotransmitting equipment identified in Schedule B of this Licence, to use the radio frequencies identified in Schedule C of this Licence, and to establish, operate and use the related radiocommunications service.

Signature:
.....

Mrs. Cynthia Reddock-Downes
Chief Executive Officer

**For and on behalf of the Telecommunications Authority
of Trinidad and Tobago (the "Authority")**

Signature:
.....

Name:
.....

Position:
.....

For and on behalf of the Licensee

Dated:

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The Licence

Definitions and Interpretation

1. In this Licence, unless the context requires otherwise, the following words shall have the following meanings:

“Effective Date” means the date set out on the first page of this Licence being the date upon which this Licence takes effect;

“Government” means the Government of the Republic of Trinidad and Tobago;

“Minister” means the member of Cabinet to whom responsibility for telecommunications is assigned;

“National Spectrum Plan” means the spectrum management plan developed by the Authority for management of radio frequency spectrum pursuant to section 41 of the Act;

“Term” means the period for which this Licence shall remain in force as set out in Condition A5 and further referred to in schedule C.

2. Save as otherwise specified above, words and expressions used shall have the meaning given in the Act.
3. References to any statute or statutory provision shall, unless the context otherwise requires, be construed as a reference to that statute or statutory provision as from time to time amended, consolidated, modified, extended, re-enacted or replaced.

Section A - General Conditions applicable to the Licence

Laws and Regulations

A1. This Licence is issued pursuant and subject to the Act. The provisions of the Act shall apply to this Licence and to the Licensee’s operation or use of any radiocommunication service or radiotransmitting equipment. Nothing in this Licence shall be construed as limiting or excluding the application of any provision of the Act.

A2. The Licensee shall comply with the Act, all regulations or other instruments made under the Act, the conditions of this Licence and all relevant laws in force from time to time in the Republic of Trinidad and Tobago.

A3. The Licensee shall, without delay, comply with any lawful direction made by the Government, the Minister, or by the Authority under the Act.

A4. The conditions contained in this Licence shall be construed and interpreted in accordance with the Laws of the Republic of Trinidad and Tobago.

Period of Licence

A5. This Licence shall take effect on the Effective Date and shall continue in effect for the Term referred to in Schedule C hereto.

A6. This Licence may be renewed by the Authority upon application by the Licensee to the Authority, such application to be made no later than three (3) months before end of the term.

A7. The Authority shall, in assessment of any application for renewal of this Licence, be entitled to consider and have regard to the Licensee’s previous compliance with the conditions of this Licence, any material contravention of the Act, or regulations made thereunder and/or whether the licensee failed to comply materially with any lawful direction of the Authority.

Payment of Licence Fees

A8. The Licensee shall pay to the Authority any licence fee applicable to the radiocommunication service or radiotransmitting equipment authorised by this Licence as determined in accordance with the Telecommunications (Fee) Regulations.

A9. The licence fees shall be paid annually at the offices of the Authority or otherwise as directed by the Authority in accordance with the Telecommunications (Fee) Regulations.

Use of Spectrum and Equipment

A10. This licence may be revoked in the event that the Licensee does not commence, use or operate the radiocommunication service or radio transmitting equipment authorized by this licence within three (3) months of the effective date.

A11. Without prejudice to the provisions of the Act, the Licensee shall allow the Authority upon receiving reasonable prior notice to inspect the Licensee's radiotransmitting equipment or equipment used to provide the radiocommunication service and shall provide any related assistance to verify that the Licensee is in compliance with the terms and conditions of this Licence.

A12. The Licensee shall take all necessary steps to ensure that its operation or use of the radiocommunication service or radiotransmitting equipment authorised by this Licence does not cause harmful interference to any other licensed radiocommunication service or radiotransmitting equipment unless and to the extent that same is expressly provided for in any regulation, instrument or under the Act.

A13. The Licensee shall take all necessary steps to ensure that its operation or use of the radiocommunication service or radiotransmitting equipment authorised by this Licence does not cause any danger to the public.

A14. The Licensee shall in connection with its operation of its radiocommunication service or radiotransmitting equipment, take proper and adequate measures for the safeguarding of life, property and the environment, including safeguarding against exposure to any electrical or radiation hazard emanating from any equipment used by the Licensee under this Licence as outlined in Schedule A.

A15. The Licensee shall ensure that the radiocommunication service and the radiotransmitting equipment operated by it or on its behalf at all times strictly complies with all applicable emission standards and technical specifications or requirements as stated in the licence including those specified by the Authority from time to time.

A16. The Licensee shall cooperate with the Authority for the purposes of assisting the Authority in coordinating and managing the efficient use of radio frequency spectrum as a public resource, including in relation to any neighbouring country, and shall provide any assistance reasonably requested by the Authority for these purposes.

A17. The Licensee shall, in accordance with the Act, any regulation and any other relevant law, obtain all required consents, approvals and rights of access from all relevant Government ministries, Government departments, local authorities and statutory bodies before the commencement of any installation of its radiotransmitting equipment.

A18. The Licensee shall keep accurate, up to date and detailed records of the operations of the radiotransmitting equipment used to provide the radiocommunication service. The Licensee shall make such information available, promptly and without charge to the Authority and shall provide copies of the information as required for the Authority's purposes.

A19. The Licensee shall notify the Authority of any proposed material changes to its radiocommunication service or radiotransmitting equipment, and shall provide to the Authority with such information as the Authority shall reasonably require for the purpose of assessing the effect of such changes.

Transfer of Licence

A20. The Licensee shall not, without the prior written approval of the Authority, such approval not to be unreasonably withheld, transfer, assign or otherwise part with this Licence or any permission, right, obligation or benefit granted under this Licence.

A21. The Licensee shall not, without the prior written approval of the Authority, such approval not to be unreasonably withheld, enter into any joint venture, management agreement, outsourcing agreement, association contract or other arrangement with a third party, the effect or purported effect of which would be to permit a person who is not authorised under this Licence or any other licence granted under the Act to obtain rights or privileges under this Licence, or which would otherwise result in a breach of Condition A20.

Remedies for Non-Compliance

A22. Without prejudice to the foregoing and in accordance with the Act the Authority may take such action as it deems appropriate for any breach of any condition contained in this licence.

A23. In the event of a material breach of the Act, any regulation, instrument, or direction of the Authority made under the Act, or any condition of this Licence, the Authority and/or the Minister may:

- a. suspend or terminate this Licence or the Licensee's right to use radio frequency spectrum under this Licence; or
- b. take any other action it deems appropriate;

in accordance with the relevant provisions of the Act and any regulation made thereunder.

A24. The Licensee shall not be held to have failed to comply with its obligations under this Licence if and to the extent that the Authority is satisfied that it is or was prevented from complying with any such obligation for the following reasons:

a. where such failure is directly attributed to force majeure, including but not limited to hostilities, embargo, strikes, lockouts, riots, insurrections, acts of war and explosions or damage not caused by or resulting from the negligence of the Licensee; or

b. any other factor which in the opinion of the Authority is beyond the Licensee's reasonable control and which notwithstanding the exercise by the Licensee of reasonable diligence, the Licensee was unable to prevent or overcome

provided that the Licensee shall use all reasonable endeavours to address, without delay, the factor(s) preventing the carrying out of its obligations and shall resume the performance of its obligations as soon as the factor(s) which prevented the performance thereof ceases or abates.

Requirement to Furnish Information to the Authority

A25. The Licensee shall furnish to the Authority, in such manner and at such times as the Authority may request in writing, such information related to the activities of the Licensee under this Licence as the Authority may reasonably require in order to perform its functions.

A26. Subject to Condition A27, the Authority shall keep confidential any information furnished to it by the Licensee, which the Licensee has specifically expressed to be confidential at the time of submission to the Authority, and which is of a confidential nature. The Licensee shall label such confidential information at the time of disclosure orally and in writing with a prominently placed label marking stating that such information is "CORPORATE PROPRIETARY AND CONFIDENTIAL". The Authority shall exercise reasonable care and take all reasonable steps in protecting such confidential information, and in particular shall take reasonable precautions to procure that such confidential information is only disseminated to those employees of the Authority that need to know and use such information in the performance of the Authority's functions.

A27. In accordance with Section 80 of the Act, the Authority shall be entitled to disclose any information received by it where:

- a. the Authority considers that disclosure is necessary in the discharge of the Authority's functions;
- b. the information is or becomes public knowledge other than through disclosure by the Authority;
- c. the information was known to the Authority before receipt from the Licensee, without any obligation of confidence;
- d. the information lawfully becomes available to the Authority from a source other than the Licensee; or,
- e. the Licensee agrees to the disclosure of the information.

A28. Prior to any disclosure of information under Condition A27 above, the Authority shall afford the entity requesting the information and the Licensee that owns the information, an adequate opportunity to make representations regarding the disclosure. Without prejudice to the generality of the foregoing, the Authority shall:

- a. give no less than fourteen (14) days prior written notice of disclosure to the Licensee whose information the Authority proposes to disclose;
- b. give reasonable considerations to any representations made under part a. above; and
- c. where appropriate, consider such reasonable proposals made by the Licensee to protect the confidentiality of the information,

where such proposals do not prejudice the Authority's objective in seeking to disclose the information.

National Security

A29. The Licensee shall, as required pursuant to any applicable law, direction or order, cooperate with the relevant Government, statutory body or official agency in all ways in matters of law enforcement, public emergency or national security.

A30. Pursuant to section 84 of the Act and without prejudice to the generality of the foregoing the Licensee shall make available its radiocommunication service and radiotransmitting equipment to the Government.

Amendment

A31. This Licence may be amended pursuant to the provisions of the Act.

Surrender

A32. The Licensee may at any time during the duration of this licence, upon the giving of thirty (30) days notice in writing to the Authority, surrender its licence. Such surrender shall take effect subject to the approval of the Authority, such approval not to be unreasonably withheld. Surrender of this licence shall be without prejudice to the rights and obligations hereunder arising prior to the effective date of surrender.

Suspension and Termination

A33. The Authority may suspend or terminate this licence on written notice pursuant to the provisions of the Act where:

- a. the Licensee has failed to comply materially with any of the provisions of the Act, regulations made thereunder or the terms and conditions of this licence; or
- b. the Licensee has failed to comply materially with any lawful direction of the Authority.

Disputes

A34. Any dispute on matters relating to the requirements of this Licence or the Act shall be referred to the Authority for determination in accordance with Section 82 of the Act. The Licensee expressly agrees and acknowledges that it shall, as provided for within the provisions of such dispute resolution process, be bound by any decision or award made in such process.

Service of Notices

A35. Any notice required to be given to the Licensee under this Licence shall be in writing and shall be deemed to have been given if sent by hand or post or by facsimile (in the case of facsimile when proof of transmission is received) to the Licensee's registered address in the Republic of Trinidad and Tobago as filed with the Registrar of Companies, or any other address provided by the licensee to the Authority in writing.

Section B - Specific Conditions Applicable to the Licence

- B1. The Licensee shall keep an up-to-date record of the assignment of frequency/frequencies including but not limited to:
- a. All the telecommunications equipment, including the antennae, operated under the licence and the equipment specifications;
 - b. The Coverage area;
 - c. The effective radiated power (ERP) of the transmitter;
 - d. The transmitter location and height; and
 - e. The International Telecommunications Union (ITU) emission designation.
- B2. The record referred to in the aforementioned section shall be submitted to the Authority at such intervals as the Authority may, from time to time, require within fourteen (14) days of the request being made.
- B3. When an applicant is granted a Broadcast station licence, prior to broadcasting to the public, they must inform the Authority in writing, of the exact date that they intend to go live, at least fourteen (14) days prior to the expected date.
- B4. Subject to 3 above a licensee shall notify the Authority, in writing if they do not begin broadcasting on the intended date within seven (7) days of the intended date.
- B5. A licensee shall inform the Authority if they intend to cease their broadcast for a period of time as indicated by the Authority.
- B6. The licensee shall also give their reasons for ceasing their broadcast, and shall not cease operations unless the reasons given are acceptable by the Authority.
- B7. Subject to 6 above the Authority may revoke the said licence, after giving the licensee a reasonable period of time in which the broadcast service should be re-started.
- B8. The licensee shall provide the Authority with a site map of their transmitters, the effective radiated power, the radiated pattern and any other information as determined by the Authority.
- B9. The licensee shall keep an up-to-date record of the information stipulated in (8) above and shall make the record available to the Authority on paper or any other form as the Authority may determine, from time to time as the Authority may require.
- B10. The licensee shall not significantly change the location or any technical parameters of any transmitter without prior approval of the Authority.

Schedule A

Public Health and Safety Criteria for Radiocommunication Devices in Trinidad and Tobago

1. The following benchmarks are applicable to all radiotransmitter arrays operated for the provision of public telecommunications networks or in the provision of public telecommunications services and/ or broadcast services.

Service	Evaluation Required if:
Experimental Radio Services	Power > 100W ERP (164W EIRP)
Multipoint Distribution Services	<u>Non-rooftop antennae</u> : height above ground level to radiation centre < 10m AND power > 1640 W EIRP <u>Rooftop Antennae</u> : power > 1640 W EIRP
Paging and Radio telecommunications Services (including Cellular – 800MHz)	<u>Non Rooftop Antennae</u> : height above ground level to radiation centre < 10m AND total power of all channels > 1000W ERP (1640W EIRP) <u>Rooftop Antennae</u> : Total power of all channels > 1000W ERP (1640W EIRP)
Personal Communications Services (1900 MHz band and above)	(1) Narrowband: <u>Non rooftop antennae</u> : height above ground level to radiation centre < 10m AND total power of all channels > 1000W ERP (1640W EIRP) <u>Rooftop Antennae</u> : Total power of all channels > 1000W ERP (1640 W EIRP) (2) Broadband: <u>Non rooftop antennae</u> : height above ground level to radiation centre < 10m AND total power of all channels > 2000W ERP (3280W EIRP) <u>Rooftop Antennae</u> : Total power of all channels > 2000W ERP (3280 W EIRP)
Satellite Communications	All included
Radio and Television Broadcast Services	All included

Transmitters, Facilities and Operations are subject to routine environmental evaluation before Authority approval.

2. The following health and safety requirements are to be upheld by all Licensees in the operation of authorised radiotransmitting equipment associated with their operations.

Maximum Permissible Exposure (MPE) Limits for Radio-Frequency Radiation (RFR) Power Density

Frequency Range (MHz)	Occupational (Controlled) Limit (mW/cm ²)	General Population (Uncontrolled) Limit (mW/cm ²)
10 - 400	1.0	0.2
400 - 2,000	$f/400$ (1.0 to 5.0)	$f/2000$ (0.2 to 1.0)
2,000 - 300,000	5.0	1.0
f = frequency in MHz		

3. The licence shall also conform to all relevant Health and Safety Requirements in accordance with the laws of Trinidad and Tobago.

SCHEDULE B

Technical Parameters

The Licensee shall conform to all relevant international standards for the operation of the radiotransmitting equipment used in the provision of the radiocommunication service

NATIONAL TELEVISION BROADCASTING RADIOCOMMUNICATIONS SYSTEM

Parameter	Requirements
1. DTT Standard	ATSC 3.0 The deployment must comply with the ATSC 3.0 suite of standards. The standards approved and published by ATSC can be accessed via the following URL https://www.atsc.org/atsc-documents/type/3-0-standards/
2. Network Type	Single-frequency network (SFN)
3. Frequency Band	UHF (470-518 MHz)
4. Channel Bandwidth	6 MHz
5. Maximum ERP	20 kW
6. Modulation and Forward Error Correction (FEC) Code Rate (ModCod) Combinations, Long LDPC code (64800 bits)	QPSK - 2/15, 3/15, 4/15, 5/15, 6/15, 7/15, 8/15, 9/15 and 11/15 16QAM - 4/15, 5/15, 7/15, 8/15, 9/15 and 11/15 64QAM - 3/15, 4/15, 5/15, 6/15, 7/15, 8/15, 9/15, 10/15 and 11/15 256QAM - 4/15, 5/15, 7/15, 8/15, 9/15, 10/15, 11/15, 12/15 and 13/15
7. Modulation and Forward Error Correction (FEC) Code Rate (ModCod) Combinations, Short LDPC code (16200 bits)	QPSK - 2/15, 3/15, 4/15, 5/15, 6/15, 7/15, 8/15 and 9/15 16QAM - 5/15, 6/15, 7/15, 8/15 and 11/15 64QAM - 5/15, 6/15, 7/15, 8/15, 9/15, 10/15 and 11/15 256QAM - 5/15, 7/15, 8/15, 9/15, 10/15, 11/15, 12/15 and 13/15
8. Minimum Field Strength within the licensed coverage area	Based on ModCod. See Appendix I table 9 of the <i>Implementation Plan for the Free-to-Air Television Digital Switchover in Trinidad and Tobago</i>

Schedule C

Specific Radio Frequencies assigned to SUCCESSFUL BIDDER

Assignment No.	Frequency Identification	Radio Frequency Carrier			Location		Effective Date	Term (Years)
		Transmit Frequency (Tx)	Maximum Effective Radiated Power (ERPmax)	Channel Bandwidth	Latitude	Longitude		
N/A	UHF Channel	470 – 476 MHz	20 kW	6 MHz				
N/A	UHF Channel 15	476 – 482 MHz	20 kW	6 MHz				
N/A	UHF Channel 16	482 – 488 MHz	20 kW	6 MHz				

Technical Specifications

The radiocommunications system shall operate within the technical specifications as identified in the licence application X/X/X/X/X.