

**LICENCE**

**GRANTED BY THE MINISTER  
UNDER THE  
TELECOMMUNICATIONS ACT No-- of 200-**

**TO**

***[BROADCAST LICENSEE]***

**FOR THE**

**ESTABLISHMENT AND OPERATION**

**OF A**

**CABLE TELEVISION BROADCAST NETWORK**

**IN**

***[ECTEL Member State]***

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## TELECOMMUNICATIONS BROADCAST LICENCE

**THE MINISTER in accordance with the Telecommunications Act No - of 200-, and acting upon the recommendation of ECTEL, hereby grants this Licence to [BROADCAST LICENSEE] (hereinafter referred to as the Licensee) to establish and operate a Cable Television Broadcast Network and/or Services within [ECTEL Member State] and to do all or any of the acts specified herein.**

### PART I - LICENCE

#### 1. LICENCE

- 1.1 This licence shall be known as the [Broadcast Licensee] Broadcast Network and Services Licence 200-.

#### 2. INTERPRETATION

- 2.1 In this Licence:

“**Act**” means the Telecommunications Act 200- and regulations made thereunder;

“**Affiliate**” means, in relation to this Licensee, any body corporate that is a subsidiary of this Licensee or if this Licensee and another body corporate are subsidiaries of the same body corporate or if each of them is controlled by the same person; and if the Licensee and another body corporate are affiliated with the same body corporate at the same time, they are affiliated with each other.

“**Annex**” means one or more attachments to this Licence, all of which constitutes a part of and is unique to this Licence.

“**Annual Licence Fee**” means the fee payable by the Licensee to the Commission on each anniversary of the Effective Date;

“**Authorised Frequency**” means the radio frequency that the Licensee is authorized to use pursuant to its frequency authorization issued under the Act.

“**Broadcasting Services**” means either sound broadcasting or television broadcasting or both and includes subscriber television services;

“**Commission**” means the Commission established under the Telecommunications Act;

“**Control**” means the Licensee is controlled by a person if any shares of the Licensee carrying voting rights sufficient to elect the majority of the directors of the Licensee are, except by security only, held, directly or indirectly, by or on behalf of that person;

“**Coverage Obligations**” means the geographical coverage obligations to provide the Licensed Services according to the geographical coverage set out in **Annex B** to this Licence;

“**Customer**” means any Person who is, or who wishes to be, provided with the Licensed Services by the Licensee;

“**Customer Equipment**” means the Broadcast equipment used by the Customer for the purpose of accessing the Licensed Services;

“**Effective Date**” means [DATE OF LICENCE]

“**Government**” means the Government of the [ECTEL Member State];

“**Internet Access**” means the provision of access to the Internet

“**Licence**” means this Licence together with the Annexes;

“**Licence Term**” means five (5) years from the Effective Date

“**Licensed Area**” means the territory of ECTEL Member State;

“**Licensed Networks**” means those networks detailed in **Annex A**;

“**Licensed Services**” means those Telecommunications Services detailed in **Annex A**

“**Licensee**” means [Broadcast Licensee];

“**Order**” means an order issued by the Minister under the Act;

“**Quality of Service Obligations**” means the quality of service obligations set out in an **Annex** to this Licence;

“**Regional Spectrum Management Plan**” means the Spectrum Plan to be developed by ECTEL in accordance with the Regulations;

“**Regulations**” means regulations issued by the Minister pursuant to Section [-] of the Act;

“**Renewal Fee**” means a fee payable by the Licensee to the Commission on the renewal of this Licence;

**“Standard Customer Agreement”** means the terms and conditions on which a particular Licensed Service is provided to the Customer;

**“Technical Standards”** means those principles and protocols established by the Commission including those in **Annex D**.

**“Universal Service Obligation”** means the obligation to provide Universal Service as set out in Part II, Condition 3.1 of this Licence and **Annex B**;

2.2 Any word, phrase or expression used in the Licence shall, unless the context requires otherwise, have the same meaning as it has in the Act.

2.3 Words importing the singular shall include the plural and vice versa.

### **3. SCOPE**

3.1 The Licensee is hereby authorized to establish and operate the Licensed Networks to provide the broadcast services to any Person within the Licensed Area provided that such network is in compliance with all applicable laws and regulations, and in particular the Telecommunications (Terminal Equipment) Regulations.

3.2 The Licensee is hereby authorised to provide the Licensed Services by means of the Licensed Network using the Authorised Frequency.

3.3 The Licensee is authorized to sell or lease Customer Equipment to the public and provide maintenance and repair services in connection with any such Customer Equipment provided that such Customer Equipment is of type approved under Section [-] of the Act.

3.4 This License is non-exclusive and is not intended to convey proprietary rights.

### **4. PRECONDITION**

4.1 The rights of the Licensee set out herein shall not take effect until the Licensee shall have paid the fees as prescribed in the Act.

### **5. DURATION AND RENEWAL**

5.1 This Licence is granted on the Effective Date for a period of five (5) years.

5.2 The Minister shall renew the Licence upon request by the Licensee for an additional period of five (5) years by the Minister upon expiration of the Licence Term provided none of the provisions of section [-] of the Act would cause the Minister to refuse a request for renewal.

- 5.3 Where a Licensee wishes to renew the Licence, it shall apply to the Minister in writing one year prior to the expiry date of the Licence or at a later date if the Minister so determines.
- 5.4 On granting a renewal of the Licence the Minister may vary the terms of the Licence; if the conditions then prevailing require such variation and it is reasonable to do so.
- 5.5 The provisions of section [-] of the Act relating to suspension, revocation, etc shall apply mutatis mutandis to the renewal of a Licence.
- 5.6 Renewal of the Licence shall not take effect until the Licensee has paid the Renewal Fee and any other fees owed under the Licence.

## **6. ASSIGNMENT**

- 6.1 The Licensee shall not assign or otherwise transfer this Licence or any of its rights or obligations under this Licence without the prior written consent of the Minister, subject to clause 6.2 below.
- 6.2 The prior written consent of the Minister shall not be required by the Licensee where the assignment or transfer results from an internal reorganization of a body corporate that involves no change in the beneficial ownership thereof. The Licensee shall give prior notification to the Minister of the nature and extent of such assignment or transfer.

## **7. MODIFICATION, SUSPENSION AND REVOCATION**

- 7.1 This Licence shall be subject to modification, variation, suspension and revocation in accordance with sections [-] and [-] of the Act.
- 7.2 In deciding whether to agree to an amendment proposed by the Licensee, the Minister shall give due consideration to any submissions received from the Licensee and other interested parties in relation to the proposed amendment.
- 7.3 If after twelve [12] months of the date of issuance of this licence the Licensee does not commence operations leading to the provision of the licensed services for which this licence has been granted, then the Licensee shall forfeit this licence. Upon forfeiture, there shall be no refund of any fees or any other payment that have been paid in respect of this licence.

## **PART II - LICENCE CONDITIONS**

### **1. LICENCE FEES AND MONEYS OWED**

- 1.1 The Licensee shall pay all fees prescribed under the Act.
- 1.2 If the Licensee owes the prescribed fees payable in respect of this Licence, the Licensee shall be in breach of this Licence.

### **2. NETWORK BUILD OUT AND EMERGENCIES**

- 2.1 The Licensee shall comply with the Geographical Coverage Obligations as outlined in **Annex B**.
- 2.2 The Licensee shall provide access to emergency services by means of the Licensed Networks.
- 2.3 In the event of hurricanes, earthquakes, floods and similar emergencies, the Minister may require the Licensee to provide free of charge to Government or to such Institutions or persons as the Minister may identify, such Telecommunications Services as the Minister reasonably determines are necessary in the public interest, provided that if the emergency extends beyond thirty (30) days, the Government will compensate the Licensee for any days in excess of thirty (30) days.

### **3. UNIVERSAL SERVICE**

- 3.1 The Licensee shall fulfill the Universal Service Obligations pursuant to section [-] of the Act.
- 3.2 The Licensee shall make and receive payments into and from the Universal Service Fund in accordance with the Act or Regulations issued by the Minister pursuant to Section [-] of the Act.

### **4. LICENSEE'S OBLIGATIONS TO CUSTOMERS**

- 4.1 The Licensee shall, in accordance with the Act take such steps as are necessary to ensure that in relation to its Licensed Networks, each customer can reasonably and reliably have access to information services to assist them with queries relating to the Licensed Networks including installation and fault reporting;
- 4.2 The Licensee agrees that after consultation appropriate Quality of Service Obligations shall be included as an Annex to this licence.

- 4.3 The Licensee shall meet those Quality of Service Obligations and a repeated failure to comply with a Commission's directive to meet such quality of service obligations shall be regarded as a breach of this Licence.
- 4.4 The Licensee shall, no later than three months after the Effective Date, establish and submit for the Commission's approval, an efficient procedure for the resolution of disputes with Customers, in accordance with the Act.
- 4.5 The Licensee shall, no later than three months after the Effective Date, submit for the Commission's approval, a form of Standard Customer Agreement containing the terms and conditions for the provision of Licensed Services to Customers.
- 4.6 The Licensee shall notify all Customers of the terms and conditions of the Standard Customer Agreement in the manner specified by the Commission and shall thereafter provide Licensed Services based upon the Standard Customer Agreement.
- 4.7 The Licensee may from time to time modify the Standard Customer Agreement and shall notify the Commission and customers of such modification.
- 4.8 The Standard Customer Agreement and any modifications made under Condition 4.6 above shall be compliant with the Act and other applicable laws. In the event that the Standard Customer Agreement or modifications do not comply with the Act and other applicable laws, the Commission shall instruct the Licensee to make the appropriate amendments. Such amendments shall be notified to the Customer in accordance with Condition 4.6 above and shall not have retroactive effect.

## **5 TECHNICAL STANDARDS**

The Licensee shall develop and operate the Licensed Networks in accordance with the technical standards outlined in **Annex D**.

## **6. FREQUENCY**

- 6.1 Nothing in this Licence empowers the Licensee to use spectrum that has not been granted in accordance with the Act.
- 6.3 The Licensee shall use the Authorised Frequency in accordance with the Regional Spectrum Management Plan and only for the purposes of providing the Licensed Services.



**7. NON-DISCRIMINATION AND FAIR TRADING**

- 7.1 The Licensed Networks shall be established and operated, and the Licensed Services shall be provided, by the Licensee on an arm's length commercial basis with respect to all Affiliates of the Licensee.
- 7.2 The Licensee shall not engage in any activities, whether by act or omission, which have, or are intended to or likely to have, the effect of unfairly preventing, restricting or distorting competition in relation to the Licensed Services.

**8. INFORMATION REQUIREMENTS**

- 8.1 The Licensee shall provide the Minister, the Commission and ECTEL with any relevant agreements (including agreements with any Affiliates of the Licensee) and such relevant accounting, financial, costs, technical and other information (including but not limited to a complete audited financial report) reasonably required to enable the Minister, the Commission and ECTEL to carry out their functions under the Act in such manner and at such times that the Minister, the Commission and ECTEL may request.

**9. PRIVACY AND CONFIDENTIALITY**

- 9.1 The Licensee shall ensure the privacy and confidentiality of information and business secrets obtained in the course of its business from any Person to whom it provides Licensed Services by establishing and implementing procedures for maintaining confidentiality of such information as set out in the Act.

**10. PRE-NOTIFICATION OF CHANGES IN SHAREHOLDING**

- 10.1 The Licensee shall notify the Minister of any acquisition of shares or change in shareholding of the Licensee, by reason of that acquisition or change, the total number of shares held by any nominee or trustee for that Person, immediately after the change or acquisition exceeds 25 per cent of the total number of shares in the Licensee (where such shareholding did not already exceed 25 per cent prior to that change or acquisition).
- 10.2 The Licensee shall notify the Minister in writing thirty (30) days prior to the taking effect of such change or acquisition stated above.
- 10.3 Upon receipt of such information the Minister may vary, suspend or revoke such licence pursuant to sections [-] and [-] of the Act.

## **11. RIGHTS OF ACCESS**

- 11.1 Subject to the provisions of section [-], the Licensee shall have the rights of access that are necessary to permit the installation and maintenance of the Licensed Networks on public rights-of-way, in public buildings and other public property, and in respect of similar works necessary for the provision of the Licensed Services.
- 11.2 In the course of constructing or maintaining any Licensed Network of the Licensee, the Licensee may, by its officers or agents duly authorized in writing and on production of the authority, cut or remove from any street, high-way or land, any tree or branch or other parts of a tree, tending to interfere with, endanger, or otherwise prejudicially affect such Licensed Networks. In exercising this right, no person shall enter any land without the consent of the owner or occupier until after the expiration of fifteen days notice in writing given to the owner or occupier or posted up conspicuously upon the property.
- 11.3 If such owner or occupier, within seven days from the service or posting up of such notice gives written objection thereto, the Licensee may not enter upon the private land in question without first having obtained the necessary Court Order.
- 11.4 Where any condition exists which is dangerous and relates to the provision of the licensed services by the Licensee, the Licensee may immediately enter upon Land and take whatever reasonable action is necessary and expedient to establish safe conditions thereon.
- 11.5 Where the Licensee takes action under Condition 11.4 above, the Licensee must within three (3) days thereof, inform the owner or occupier of the land in question (either by service of a written notice on him or by posting up conspicuously a notice on such land) of the action taken.
- 11.6 In the exercise of any powers under this Clause, the Licensee shall cause as little inconvenience or damage as is reasonably practicable and the Licensee is liable to pay compensation to any person who suffers damage to his property in consequence of the exercise of such powers by the Licensee. For the avoidance of doubt, this Condition shall also apply to public lands, public buildings and other public property.

## **12. FORCE MAJEURE**

- 12.1 Force Majeure refers to an event or accident which is beyond the control of the Licensee and includes:
- (a) acts of God, action by or against enemies of the State, riot or civil commotion;

- (b) strikes, lock-outs and other industrial disturbances;
- (c) wars, blockades or insurrection;
- (d) earthquake, hurricane, flood, fire or explosion or other such disaster;
- (e) outbreak of pestilence or epidemics;
- (f) government rationing of electricity or other wartime or emergency controls imposed by Government;
- (g) embargoes or trade restrictions;

12.2 The Licensee shall not be in breach of this Licence if and to the extent that it is prevented from fulfilling its obligations by reason of Force Majeure.

### **13 COMPLIANCE**

13.1 The Licensee shall comply with all applicable Acts, Regulations, Directions, Orders and Recommendations, including but not limited to the Act and shall comply with the Directions, Orders and Recommendations issued by the Minister and the Commission.

Signed by

.....  
Minister of Telecommunications

## **ANNEX A**

### **LICENSED NETWORKS**

1. The Licensee is authorized pursuant to this Licence to establish, own and operate all telecommunications facilities necessary for the transmission of Broadcast telecommunications services whether:
  - (a) using wireline or wireless technology, or any combination thereof, provided that network is used to provide broadcast television-over air-cable, subscription programming;
  - (b) reception or retransmission from satellite networks; or
  - (c) used in conjunction with other multi-media services
  
2. In this context, the term “transmission” relates to the infrastructure for the transport of signals intended for the production of television programming.

For the avoidance of doubt, nothing in this Licence grants a person the rights to own or operate any telecommunications facilities used for the provision of a any other telecommunication service that have not been granted in accordance with the Act or any other legislation.

## **ANNEX B**

### **GEOGRAPHICAL COVERAGE OBLIGATIONS**

1. The Licensee shall provide a geographical coverage of at least [ **95** ]% of [Member State]
2. The Licensee shall provide a geographical coverage of at least [ **92** ] % across ECTEL Member State with a quality of service as determined by the Commission with the requisite power levels to ensure non-interference reception by customers in the designated area. For greater certainty, detailed technical specifications are provided in Annex D.

## **ANNEX C**

### **UNIVERSAL SERVICE OBLIGATION**

## ANNEX D

### Technical Standards for Signal Transmission and Reception

#### BROADCASTING STANDARDS

##### CABLE TELEVISION STANDARDS

###### SECTION 1

###### Television

###### 1.0 General

The provision of cable television service is carried out with the use of domestic television set as the standard video output device. The standards applied though similar television parts must not be used interchangeably as the mode of delivery is distinctly different; one being a coaxial cable and the other a wireless (RF) signal.

###### 1.1 Standards

Television standard	NTSC
Channel bandwidth	6.0 MHz per channel
Channel configuration	Standard 4.5 MHz video/audio: audio 15-17 dB below carrier
Minimum signal level at TV input	2 dBmV across 75-ohm termination at the channel input
Minimum Carrier/Noise	30 dBc (below carrier)
Visual carrier frequency	1.256 MHz above channel lower limit
Permissible variation of visual carrier level	

a) Over 24 hours	12 dB max
b) Between two adjacent channels	3 dB max
c) between any two channels	12 dB max
Frequency response (each channel)	+ 2 dB from 0.75 kHz to 4 kHz above visual carrier level
Aural frequency deviation	25 kHz
Signal to inter-modulation ratio	45 dB min.
Radiation level	< 15 uV/m at 30 metres
Line amplifier voltage	60 Vac max

## 2.0 Prohibited Frequencies

No cable television system may utilize a frequency at power levels equal to or exceeding 10 microwatts within 100 kHz plus tolerance of the emergency aircraft locator frequency 121.5 MHz or within 50 kHz plus tolerance of the distress signal frequencies 156.8 MHz and 243.0 MHz.



## SECTION II

### CABLE

This Part applies to the performance of a subscriber television system as measured at any subscriber terminal with a matched impedance at the termination point or at the output of the modulation or processing equipment (generally the head-end) of the subscriber television and are applicable to each NTSC or similar video downstream subscriber television channel in the system.

1. The subscriber television channels delivered to the subscriber's terminal shall be capable of being received and displayed by TV broadcast receivers used for the off-the-air reception of TV broadcast signals.
2. Subscriber television systems shall –
  - a) Transmit channels to subscriber premises equipment on frequencies in accordance with the channel allocation plan specified in the Appendix;
  - b) Use the channel allocation plan for signals transmitted in the frequency range 54 MHz to 1002 MHz.
3. The aural centre frequency of the aural carrier shall be  $4.5 \text{ MHz} \pm 5\text{KHz}$  above the frequency of the visual carrier at the output of the modulating or processing equipment of a subscriber television system and at the subscriber terminal.
4. (1) The visual signal level across a terminating impedance which correctly matches the internal impedance of the subscriber system as viewed from the subscriber terminal shall -
  - a. not be less than 1 millivolt across an internal impedance at 75 ohms (0dBmV);
  - b. as measured at the end of a 30 metre cable drop that is connected to the subscriber tap, not be less than 1.41 millivolts across an internal impedance of 75 ohms (+ 3 dBmV).
- (2) At other impedance values, the minimum visual signal level as viewed from the subscriber terminal, shall be the square root of 0.0133 (Z) millivolts and, as measured at the end of 30 metre cable drop that is connected to the subscriber tap shall be 2 times the square root 0.00662 (Z) millivolts, where 'Z' is the appropriate impedance value.

5. The visual signal level on each channel as measured at the end of 30 metre cable drop that is connected to the subscriber tap shall not vary more than 8 decibels within any six-month interval, and shall be maintained within -
  - a) 3 decibels (dB) of the visual signal level of any visual carrier within a 6 MHz nominal frequency separation;
  - b) 10 dB of the visual signal level on any other channel on a cable television system of up to 300 MHz of a cable distribution system upper frequency limit, with a 1 dB increase for each additional 100 MHz of cable distribution system upper frequency limit (for example, 11 dB for a system at 301-400MHz, etc); and
  - c) a maximum level such that signal degradation due to overload in the subscriber's receiver or terminal does not occur.
6. The rms voltage of the aural signal shall be maintained between 10 and 20 decibels below the associated visual signal level and shall be met at the subscriber terminal and at the output of the modulating and processing equipment (generally the head-end).
  - (2) Subscriber terminal which use equipment which modulate and remodulate the signal (for example, base band converters), the rms voltage of the aural signal shall be maintained between 6.5 and 17 decibels below the associated visual level at the subscriber terminal.
7. (1) The amplitude characteristic shall be a range of 2 decibels from 0.75MHz to 5.0 MHz above the lower boundary frequency of the cable television channel referenced to the average of the highest and lowest amplitudes within those frequency boundaries.
  - (2) The amplitude characteristic may be measured after subscriber tap and before a converter which is provided and maintained by the licensee may be measured at the subscriber terminal.
8. The ratio of RF visual signal level to the system noise shall not be less than 40 decibels.
9. The ratio of visual signal level to the rms amplitude of any coherent disturbances (for example, intermodulation products, second and the third order distortions or discrete frequency interfering signals not operating on proper offset assignments)-
  - a) shall not be less than 51 decibels for non coherent channel subscriber television systems, when ensured with modulated carriers and time averaged; and

- b) which are frequency-coincident with the visual carrier, shall not be less than 47 decibels for current channel subscriber system when measured with modulated carriers and time averaged.

10. The terminal isolation provided to each subscriber terminal -

- a) shall not be less than 18 decibels in lieu of periodic testing, so however, that the licensee may use specifications provided by the manufacturer for the terminal isolation equipment to meet this standard, and
- b) shall be sufficient to prevent reflections caused by open-circuited or short-circuited subscriber terminals from producing visual picture impairments at any other subscriber terminal.

11. (1) The peak-to-peak variation in visual signal level caused by undesired low frequency disturbances (hum or repetitive transients) generated within the system, or by inadequate low frequency response, shall not exceed 3 percent of the visual signal level.

(2) Measurements made on a single channel using a single unmodulated carrier may be used to demonstrate compliance with this parameter at each test location.

12. With effect from [XXXXXX 1, 2004], the following requirements apply to the performance of the subscriber television system as measured at the output of the modulating or processing equipment (generally the head-end) of the system –

- a) the chrominance-luminance delay inequality (or chrome delay) which is the change in delay time of the chrominance component of the signal relative to the luminance component, shall be within 170 nanoseconds;
- b) the differential gain for the colour subcarrier of the television signal which is measured as the difference in amplitude between the largest and smallest segments of the chrominance signal divided by the largest, shall not exceed  $\pm 20\%$ ; and
- c) the differential phase for the colour subcarrier of the television signal which is measured as the largest phase difference in degrees between each segment of the chrominance signal and reference segment (the segment at the blanking level of 0 IRE) shall not exceed  $\pm 10$  degrees.

13. Signal leakage from a subscriber television systems shall be limited as follows –

<u>Frequencies</u>	<u>Signal leakage limit</u>	<u>Distance in metre (m)</u>
1. Not exceeding 54 MHz and over 216 MHz	15 microvolt/metre	30
2. Over 54 MHz but not exceeding 216 MHz	20 microvolt/metre	3

The cumulative leakage index (CLI) air based criterion shall not exceed 10 (microvolt/metre) rms at a level of 450 meters above the cable systems average ground level.

### FREQUENCY BANDS

14. (1) For operation in the frequency bands 108-137 and 225-400 MHz the standards relating to Signaling Leakage Performance Criteria and Frequency Separation Standards are applicable to all subscriber television systems transmitting carriers or other signal components carried at an average power level equal to or greater than  $10^{-4}$  watts across a 25 KHz bandwidth in any 160 microsecond period at any point in the cable distribution system in the frequency bands 108-137 and 225-400 MHz for any purpose.

(2) Before transmitting any carrier or other signal component with an average power level across a 25 Hz bandwidth in any 160 microsecond time period equal to or greater than  $10^{-4}$  watts at any point in the subscriber television distribution system on any new frequency or frequencies the aeronautical radio frequency bands the licensee is to notify the Commission.

### FREQUENCY SEPARATION STANDARDS

All subscriber television systems which operate in the frequency bands 108-137 and 225-400 MHz shall comply with the following frequency separation standards;

1. In the aeronautical radio communication bands 108-137, 225-328.6 and 335.4-400 MHz, the frequency of all carrier signals or signal components carried at an average power level equal to or greater than  $10^{-4}$  watts in a 25 KHz bandwidth in any 160 microsecond period shall operate at frequencies offset from certain frequencies which may be used by aeronautical radio services and the aeronautical frequencies from which offsets shall be maintained are those frequencies which are within one of the aforementioned aeronautical bands, and when expressed in MHz and divided by 0.025 yield an integer, the offset meeting one of the following criteria –

- a) all such cable carriers or signal components shall be offset by 12.5kHz with a frequency tolerance of  $\pm 5$  Hz; or
  - b) the fundamental frequency from which the carrier frequencies are derived by multiplication by an integer number which shall be 6.0003 MHz with a tolerance of  $\pm 1$ Hz Harmonically Related Carrier (HRC) comb generators only;
2. In the aeronautical radio navigation bands 108-118 and 328.6-335.4 MHz, the frequency of all carrier signals or signal components carrier at an average power level equal to or greater than  $10^{-4}$  watts in a 25 Hz bandwidth in any 160 microsecond period shall be offset by 25hz with a tolerance of  $\pm 5$ hz and the aeronautical radio-navigation frequencies from which offsets shall be maintained are as follows –
- a) within the aeronautical band 108 - 118 MHz when expressed in MHz and divided by 0.025 yield even integer;
  - b) within the band 328.6 - 335.4MHz.

NOTE: The Harmonically Related Carrier (HRC) system shall meet the requirement in the 328.5 - 335.4 MHz navigation glide path band, those incrementally Related Carriers (IC) system with comb generator reference frequencies set at certain odd multiples equal to or greater than 3 times the 0.0125 MHz aeronautical communications band offset (for example  $6n \pm 1.250 \pm 0.0375$  MHz may also meet the 25 KHz offset requirement in the navigation glide path band).

## APPENDIX

### CHANNEL ALLOCATION PLAN FOR SUBSCRIBER TELEVISION

No allocation shall be made by a licensee who operates subscriber television service for operations over the standard VHF Channels which are in use for over the air television broadcasting operations in the zone served by the licensee, that is to say, channels 2 to 13.

#### Sub Low Band Channels

Frequency Band (MHz)	Visual Carrier (MHz)
5.75 -11.75	7.00
11.75 - 11.75	13.00
11.75 - 23.75	19.00
23.75 - 29.75	25.00
29.75 - 35.75	31.00
35.75 - 41.75	37.00
41.75 - 47.75	42.00

#### Mid Band Channels

Channel	Frequency Band	Standard Visual Carrier (MHz)
12	108 -114	109.25
13	114 -120	115.25
14	120 -126	121.25
15	126 -132	127.25
16	142 - 138	133.25
17	138 - 144	139.25
18	144 - 150	145.25
19	150 - 156	151.25
20	156 - 162	157.25
21	162 -168	163.25
22	168 - 174	169.25

Super Band channels

Channel	Frequency Band	Standard Visual Carrier (MHz)
23	216 - 222	217.25
24	222 - 228	223.25
25	228 - 234	229.25
26	234 - 240	235.25
27	240 - 246	241.25
28	246 - 252	247.25
29	252 - 258	253.25
30	258 - 264	259.25
31	264 - 270	265.25
32	270 - 276	271.25
33	276 - 282	227.25
34	282 - 288	283.26
35	288 - 294	287.25
36	294 - 300	295.25

Hyper Band Channels

Channel	Frequency Band	Standard Visual Carrier (MHz)
37	300 - 306	301.25
38	306 - 312	107.25
39	312 - 318	313.25
40	318 - 324	319.25
41	324 - 330	325.25
42	330 - 336	331.25
43	336 - 342	337.25
44	342 - 348	343.25
45	348 - 354	349.25
46	354 - 360	355.25
47	360 - 366	361.25
48	366 - 372	367.25
49	372 - 378	373.25
50	378 - 384	379.25
51	384 - 390	385.25
52	390 - 396	391.25
53	396 - 402	497.25
54	402 - 408	403.25
55	408 - 414	409.25
56	414 - 420	415.25
57	420 - 426	412.25

Hyper Band Channels (cont'd)

Channel	Frequency Band	Standard Visual Carrier (MHz)
58	426 - 432	427.25
59	432 - 438	433.25
60	438 - 443	439.25
61	444 - 450	445.25
62	450 - 456	451.25
63	456 - 462	457.25
64	462 - 468	463.25
65	468 - 467	469.25