

**LICENCE GRANTED UNDER SECTION 7 OF THE
TELECOMMUNICATIONS ACT, 1990 (NO. 27 OF 1990)
TO
CEL*STAR GUYANA INC.**

- 1 The **Minister**, in exercise of the powers conferred on him by section 7 of the Telecommunications Act 1990 (No. 27 of 1990) ("the Act") and all other powers exercisable by him for that purpose, hereby grants to **Cel*Star Guyana Inc.** (a company registered under the Companies, 1991 (No.29 of 1991) Registration Number 4715 whose registered office is situated at 61 Waterloo Street, Georgetown, Guyana ("the Licensee"), a Licence, for the period specified in paragraph 3 subject to the conditions specified in Schedules 1, 2, 3, 4 and 5 attached hereto, for the following purposes:
- (a) to establish, operate and maintain a GSM 900 MHz Cellular Radio Telephone System, ('the System'), which is hereby declared a public telecommunication system in keeping with section 9 of the Act; and
- (b) to do all or any of the acts specified in Schedule 3 and to provide Cellular Radio Telephone Service ('the Service'), throughout the Licensed Area, provided that the Licensee may provide international service only through interconnection with other Licensed Telecommunications Operators.
- 2 This Licence is subject to the provisions of the following Statutes and any rule and regulation made thereunder: -
- i. the Telecommunications Act, 1990 (No. 27 of 1990);
 - ii. the Public Utilities Commission Act 1999 (No. 10 of 1999);
 - iii. the Post and Telegraph Act CAP 47:01 or any other law enacted to replace it; and
 - iv. the National Frequency Management Unit Order No. 79 of 1990 made under the Public Corporations Act 1988 (No 21 of 1988).
- 3 (a) This Licence shall be a non-exclusive Licence for a period of 15 years, commencing on 21st February, 2001.
- (b) This Licence may be renewed for a further period of 15 years on a non exclusive basis, subject to the following conditions:
- i. the Licensee complying with all terms of this Licence; and
 - ii. the favourable recommendation of the Director of Telecommunications or the National Frequency Management Unit.
- SJB*

(c) The Licensee may exercise its option to renew this Licence for a further period of 15 years no later than five years prior to the expiry of this Licence.

4 The Licensee shall, within one hundred and twenty (120) days of the issuance of this Licence, or three (3) months before the commencement of operations, serve on the Minister a notice specifying the charges, or specifying the method that is to be adopted for determining the charges for providing the service. However, any tariffs to be charged and method contemplated in determining charges or amendments in such tariffs or in the methodology for determining such charges shall be subject to the approval of the Public Utilities Commission, in accordance with the Public Utilities Commission Act, 1999 (No. 10 of 1999).

5 (a) Approval is hereby granted under section 20 (1) of the Act for the Licensee to connect telecommunications apparatus comprising the System, to any other relevant connectable system which has been licensed by the National Frequency Management Unit, provided, however, that the conditions set out in Schedule 3 are first complied with.

(b) The Licensee hereby agrees to provide on request similar connectivity to any Licensed Operator complying with the rules and regulations set by the National Frequency Management Unit.

6 The Licensee shall pay to the Minister, on behalf of the Government, or to such other agency as may be delegated that function, the following sums in the manner stated -

(a) An initial payment of one million, two hundred thousand dollars (\$1,200,000.00) in two (2) equal instalments payable, the first on or before thirty (30) days after the execution of this Licence, and the second within ninety (90) days thereafter.

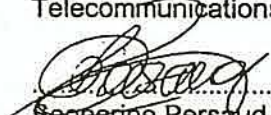
(b) On 31st March, 2003 and annually thereafter on 31st, March in each subsequent year, a further fee, which shall be the sum equivalent to one per cent (1%) of the gross revenues of the Licensee's System in the year preceding the year in which the fee is payable. This fee is subject to review by the Minister acting upon the advice of the Director of Telecommunications or the Chief Executive Officer of the National Frequency Management Unit on the expiration of one (1) year following the year of commencement of

(c) For the purposes of this Clause, "Gross Revenues" means the aggregate of the total revenues received by the Licensee from operation of its Cellular Radio Telephone System and provision of its Cellular Radio Telephone Service.

- 7 The Licensee shall pay the required annual spectrum usage fees as prescribed by the Minister for the cellular frequencies assigned by the Unit for the purposes of this Licence.
- 8 The Licensee shall not engage in any practices that impede or restrict free competition and shall not enter into an agreement or arrangement of any kind with other telecommunications operators, if such agreement or arrangement has the effect of impeding or restricting free competition or producing a condition of market dominance.
9. The Interpretation and General Clauses Act CAP. 2:01, shall apply for the purpose of interpreting this Licence as if it were an Act of Parliament; and expressions used in this Licence, but not defined herein, shall have the meanings specified in the Interpretation and General Clauses Act CAP 2:01 and any expression not defined herein or in that Act, shall have the meaning attributed to it by the International Telecommunications Union, ETSI or the GSM MOU Group.
10. For the removal of doubt it is hereby declared that references herein to the Licence shall be deemed to include references to the Schedules annexed hereto.
11. This Licence is exclusive to the Licensee and is not transferable.

Dated this 21st day of February, 2001


 Hon. Samuel A.A. Hinds, MP
 Prime Minister and Minister responsible for
 Telecommunications


 Seemarine Persaud,
 Chief Executive Officer (NFMU)
 For and on behalf of the
 National Frequency Management Unit



SCHEDULE 1

PART 1


DEFINITIONS AND INTERPRETATIONS

1. In this Licence, unless the context otherwise requires, the following terms shall have the meanings herein assigned to them:

- a) **'Aeronautical Mobile Service'**, means a mobile service between the aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacons may also participate in the service on designated distress and emergency frequencies.
- b) **'Base Station'**, means a land based Base Transceiver Station (BTS), including Tower, Antennas, Antenna Cables, Power Supply and mechanical Frames;
- c) **'CCITT'** means the Consultative Committee on International Telegraphy and Telephony now known as ITU-T, International Telecommunication Union Telecommunications Standardisation Sector;
- d) **'Central Switching Office'**, means the main switching apparatus or equipment, comprised in a cellular radio telephone system, used for switching or routing calls.
- e) **'Cellular Radio Telephone System' or 'Mobile Network'**, means a Network which divides a normal land mobile service area into smaller 'cells', each with a base station and an assigned set of frequencies. Mobile units within a cell communicate with that cell's base station, which conveys the signals or messages either via wire line or fixed microwave radio relay to a central switching office for distribution to either another mobile, fixed, or conventional telephone in a Public Switched Telephone Network (PSTN).
- f) **'Cellular Radio Telephone Service'**, means any telecommunication service provided by wireless telegraphy for reception by means of apparatus which is or is to be used while in motion, but does not include service of the maritime mobile service or aeronautical mobile service.

Siva

- g) **'Cellular Telephone'**, means an item of telecommunication apparatus which, by wireless means, connects to a cellular station in order to route a call via a switch to another fixed or mobile phone or to another applicable system that is connected to a public switched telephone network for transmitting and receiving messages or signals.
- h) **'ETSI'** means the European Telecommunications Standards Institute.
- i) **'Fully Served'**, means when a cellular telephone at any particular location within a cellular service area can effectively communicate via the licensee's telecommunication system with its base station or with any other cellular telephone connected to the System on any of the voice channels or radio frequencies assigned to the licensee under this Licence.
- j) **'GSM'** means Global system for Mobile Communication/Group Special Mobile;
- k) **'Guyana'** includes any area to which the provisions of the Act apply by virtue of Section 56 thereof.
- l) **'Harmful Interference'**, means interference which endangers the functioning of a radio communications service or of other safety service or seriously degrades, obstructs, or repeatedly interrupts a radio communication service operating in accordance with the International Telecommunications Union's Radio Regulations and in accordance with the Post and Telegraph Act CAP 47:01 or any other written law that might, from time to time, be in substitution therefore.
- m) **'Licence'**, means a Licence granted or having effect as if granted under Section 7 of the Act.
- n) **'Licensed Area'**, means Guyana, including its territorial waters.
- o) **'Marine Mobile Service'**, means a mobile service between coast stations and ship stations, or between ship stations, or between associated on-board communication stations; survival craft stations and emergency position-indicating radio beacon stations may also participate in this service.
- p) **'Minister'** means the Minister responsible for telecommunications or any other Minister empowered to carry out the functions and duties of the Minister responsible for telecommunications.

- q) **'Message'**, means anything falling within paragraphs (i) to (iv) of Section 2 (1) (v) of the Act.
- r) **'Operator'**, means the person or persons licensed to carry on the telecommunications service as set out in the Licence;
- s) **'Relevant Connectable System'**, means any other telecommunications system which the Licensee may access to be able to provide a cellular or mobile radio service and includes,
(1) The Public Switched Telephone Network (PSTN), or
(2) Any other telecommunication system as determined by the Minister of Communications or the Director of Telecommunications, as the case may be.
- t) **'Signal'**, means any message, voice, data, tone, video, control codes, or other thing conveyed by electrical or electronic signal by way of radio, wire or optical cable.
- u) **'Station'**, means one or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at any location for carrying on a radio communications service.
- v) **'Network Design'**, means the physical and schematic layout of the Mobile Network including the location and the antenna height above average terrain for each base station of the Cellular Radio Telephone System and the technical specifications including frequencies used in each part of the System.
- w) **'Telecommunication apparatus'**, means any apparatus falling within Section 2(1) (t) of the Act.
- x) **'Unit'** means the National Frequency Management Unit or any other agency empowered to manage the Spectrum.
- 

PART II
CONDITIONS

1. **Closure of station for infringements** - Where any Station comprised in the Licensee's network causes any harmful interference to any other telecommunication service in Guyana operating outside of the frequency bands assigned pursuant to Schedule 4, the Unit may by thirty (30) days notice in writing given to the licensee at its registered office, require the licensee to cease operating that station, unless the Licensee remedies the cause of harmful interference within fourteen (14) days of notification.
2. **Interference:** The apparatus comprised in the Cellular Radio Telephone System must be so designed and maintained that it shall not cause avoidable and/or harmful interference to any other telecommunication or broadcasting service in Guyana operating outside of the frequency bands assigned pursuant to Schedule 4.
3. **Inspection:** The Stations and other buildings where apparatus are housed must conform to the Unit's practices and must be accessible for inspection, at all reasonable times, by officers of the Unit. All technical information relating to the Cellular Radio Telephone System and pertaining to Spectrum Management must be submitted to the Unit upon request.
4. **Operations of System to conform to Schedule 4:** The Licensee shall at all times operate the equipment comprised in its Cellular Radio Telephone System in accordance with the Technical characteristics and conditions set out in the attached Schedule 4.
5. **Operation of System to Conform to ETSI Standards and Guidelines:**
Without prejudice to the provisions of the Act, the Public Utilities Commission Act or the National Frequency Management Unit Order, the Licensee shall establish, operate and maintain its GSM 900 MHz Cellular Radio Telephone System in accordance with the Standards, Guidelines and Regulations established or prescribed by ETSI, the GSM MOU Group, other relevant GSM standardization body and any successor therefore.
6. **Operation of Service to commence within twelve months:** The Licensee shall commence operation of the Cellular Radio Telephone Service within twelve (12) months from the date of this Licence. If the Licensee fails to do so, the

Minister or the Director of Telecommunications, as the case may be, may levy or impose on the Licensee a penalty of one hundred thousand dollars (\$100,000.00). Thereafter, for each month that the Licensee remains in default of this Clause the sum of ten thousand dollars (\$10,000.00) per month shall be levied against the Licensee. However, notwithstanding the foregoing, if the Licensee has not commenced operation of the service within fifteen (15) months of the date of issue of the Licence, the Minister or Director of Telecommunications may give written notice to the Licensee that its Licence shall be cancelled should the Service not be brought into use within three (3) months thereafter. On the expiration of this period, should the Service not be commenced this Licence shall automatically stand terminated.

7. **Network Design:** The Licensee shall submit to the Unit the basic network design including a frequency and channel planning before the Cellular Radio Telephone System is implemented. The Unit will approve the use of the frequency spectrum in accordance with its established Spectrum Management practices. All planning documents shall be submitted to the Unit for approval before implementation. These procedures shall also apply to any expansion or improvement or updating of any existing system or to any new system which the Licensee intends to implement as part of its expansion development.
8. **Implementation Schedule:** The Licensee shall fulfil its commitments as set out in the Implementation Schedule annexed hereto as Schedule 5 within the time periods specified therein.

SCHEDULE 2

REVOCATION OR CANCELLATION OF LICENCE

1. Without prejudice to the provisions of the Telecommunications Act 1990 (No. 27 of 1990) and the Public Utilities Commission Act 1999 (No. 10 of 1999), Section 63 of the Post and Telegraph Act CAP. 47:01 or any other law enacted to replace it, and the National Frequency Management Unit Order No. 79 of 1990, made under the Public Corporation Act 1988 (No 21. of 1988), the Minister or the Director of Telecommunications, as the case may be, may at any time revoke this Licence by giving to the Licensee 30 days notice, in writing, in any of the following circumstances -
 - (a) if the Licensee agrees in writing with the Minister that this Licence be revoked;
 - (b) in the event any sum payable under paragraphs 6 and 7 of the Licence remains unpaid for 30 days after it becomes due and payable and is not paid by the licensee within 14 days of the Minister or Director or the Chief Executive Officer having notified the Licensee that payment is overdue, save that such notification shall not to be given earlier than the sixteenth day after the day on which the payment became due;
 - (c) if the Licensee fails to comply with a final order (within the meaning of section 13 of the Act) or a provisional order (within the meaning of the said Section) which has been confirmed thereunder and the Licensee fails to commence proceedings for review of that order and such failure to comply with the final order is not rectified within three (3) months after the Minister has given notice to the Licensee, in writing, of such failure;
 - (d) if the Licensee -
 - (i) is unable to pay its debts, within the meaning of Section 355 of the Companies Act, 1991 or convenes any meeting with its creditors generally with a view to the general re-adjustment or rescheduling of its indebtedness or makes a general assignment for the benefit of its creditors;
 - (ii) enters into receivership or liquidation; or

- (e) if the Licensee or any other person takes any action for voluntary winding-up dissolution of the Licence or if the Licensee enters into any scheme or arrangement (other than in any such case for the purposes of reconstruction or amalgamation, upon terms, and within such period as may previously been approved, in writing, by the Minister) or if a receiver, trustee or similar officer of the Licensee, or all or any material part of the revenues and assets of it, is appointed, or if any order is made for the compulsory winding-up or dissolution of it; or
 - (f) in the event that there is an assignment of the legal and beneficial interest the Licence to a third party.
2. For the purposes of paragraph (1) (d) (i) of this Schedule, in construing the terms of paragraph (a) of Section 355 of the Companies Act, 1991 the words: five hundred therein shall be deemed to be replaced by 'ten thousand' or such higher figures as the Minister or the Director of Telecommunications or the Chief Executive Officer of the Unit, as the case may be, shall determine; and the said paragraph (a) shall not apply if the demand therein referred to is being contested in good faith by the Licensee with recourse to all appropriated measures and procedures, whether legal or otherwise, or if the demand is satisfied prior to expiration of the notice.

S

SCHEDULE 3**Conditions included under Section 20 of The Act**

1. Without prejudice to paragraph 5 of the Licence, nothing in this Licence can be construed to remove any need to obtain any other Licence (or permission) that may be required under the Act or any other written law for:
 - (a) Connecting the system to:
 - (i) any other telecommunication system;
 - (ii) any telecommunication system run by the government; and
 - (b) the provision, by means of the Cellular Radio Telephone System of any other telecommunication service not permitted under this Licence.
2. The Licensee shall be required to obtain permission from the operator or owner of any 'Relevant Connectable System' in accordance with Section 20 (2) of the Act before connecting the system to any other 'Relevant Connectable System'
3. The Licensee shall not use the Cellular Radio Telephone System to provide the following services:
 - (a) Maritime Mobile Service or;
 - (b) Aeronautical Mobile Service.
4. The Licensee shall design, build, install, maintain, and operate a GSM 900 MHz Cellular Radio Telephone System including peripheral systems and services, the necessary backbone and backhaul network, for conveying any thing falling within section 2(1) (v) (i) to (iv) of the Act. The System may consist of microwave transmitters and repeaters, receiving stations, poles, wires, cables, optical fibres, underground conduits, ducts, trenches, amplifying equipment, manhole fittings and any other fixtures and appliances necessary for the installation, maintenance and operation of a GSM 900 MHz Cellular Radio Telephone System. Any construction of telecommunication facilities along public right of way must have the required and necessary approval from the relevant agency, in this case either the Mayor and City Council or the Central Planning and Housing Authority. In addition to the foregoing all relevant regulations must also be complied with. All wireless stations in the licensee's network are subject to the Post and Telegraph Act CAP 47:01, and regulations made thereunder, or any other law enacted to replace it.

SCHEDULE 4
TECHNICAL SCHEDULE
GSM 900MHz Cellular Radio Telephone System

1. GSM Cellular frequencies

The frequency bands assigned to this Mobile Network are:

- 902,75MHz - 915 MHz paired with
- 947,75 MHz– 960,00 MHz.

2. Frequencies for "point to point" and other stations

The frequencies below or their equivalent are reserved for the system of which the assignment to the Licensee is subject to the relevant notification, payment for frequency usage and approval by the National Frequency Management Unit.

Service Application	Frequency	Bandwidth
Point-to-point	7 GHz	65 MHz
Point-to-point	15 GHz	40 MHz

Frequency Stability

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Field Strength limits

The predicted or measured median field strength at any location on the border of the cellular service area shall not exceed 47 dB μ V/m unless approval is granted by the National Frequency Management Unit.

Frequency coordination

To avoid harmful interference, the Licensee is required to coordinate frequency usage with co-channel and adjacent channel Licensed users, wherever and whenever necessary. Coordination must occur before initiating operations.

BORDER COORDINATION

In the event that a cellular system using the same frequency frames in one of our neighboring countries as that assigned in an adjacent territory in Guyana, transmitter stations within seventy kilometers (70 km) (forty five miles (45mi)) of the border shall be

required to coordinate frequency use and eliminate any harmful interference that might otherwise exist and to ensure continuance of equal access to the block of frequencies by both countries. The Unit shall be notified of any agreements agreed to.

CELLULAR SERVICE AREAS

Regions 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10

The ERP and antenna height shall be limited to that necessary to provide the required services as governed by the system requirements.

Stations must employ antennas, which radiate a signal, the electrical component of which is vertically polarized.

SCHEDULE 5

IMPLEMENTATION SCHEDULE

Within a time period of three years from the date of grant of the Licence, the Licensee shall establish and operate the Mobile Network, which contains the necessary network equipment and apparatus to provide the Cellular Radio Telephone Service.

The roll out of the Mobile Network shall be as follows:

- Phase 1a:** Within twelve months of the date of grant of the Licence, the Licensee will be ready to operate its Mobile Network and in particular, will be ready to operate 9 BTS to provide Cellular Radio Telephone Service in Georgetown, parts of West Demerara, East Bank, including the Cheddi Jagan International Airport Timehri. The capacity of the Mobile Network will be approximately 3,000 subscribers @22/25 mE and coverage of the Population will be approximately 15%.
- Phase 1b:** The Mobile Network will be expanded by approximately 21BTS with consequential increase of the BSC and MSC capacity, to provide service to additional areas including, Demerara/Mahaica, West Berbice, East Berbice/Corentyne, Upper Demerara/Berbice and the Essequibo Coast. Network capacity will increase by approximately 15,000 subscribers @22/25 mE. Total population coverage will be 32%.
- Phase 2:** During this Phase, the Mobile Network will be expanded by approximately 38 BTS with integration of WAP/GPRS. Service areas will be expanded to include the Essequibo Islands/West Demerara, Northwest District, Upper Takatu, Cuyuni/Mazaruni and Potaro/Sipuruni. The Network capacity will be approximately 30,000 Subscribers @22/25 mE. Total population coverage will be approximately 65%.
- Phase 3:** Channel capacity will be increased as required by the traffic. Network capacity will increase to 45,000 Subscribers @22/25 mE. Total population coverage will be approximately 87%.

The abovementioned three Phases will be implemented within three years of the date of grant of this Licence at which time the Mobile Network will achieve a coverage of approximately 87% of the total population of Guyana with a Network capacity of 45,000 subscribers with traffic assumption of 22/25 mE.