**Exhibit 10.1**

December 11, 2009

Ken Reali

5213 Atherton Bridge Rd

Raleigh, NC 27613

**Re: Offer of Employment with TranS1 Inc.**

Dear Ken:

     On behalf of TranS1 Inc., a Delaware corporation (the “Company”), I am pleased to invite you to join the Company as its President and Chief Operating Officer. The first day of your employment will be no later than Monday, January 18, 2010, or such other date as you and the Company mutually agree in writing (“Effective Date”).

     The terms of this offer of employment are as follows:

     1. **At-Will Employment; Position and Duties**.

          (a) *At-Will Employment*. You should be aware that your employment with the Company is for no specified period and constitutes “at-will” employment. As a result, either you or the Company may terminate your employment with the Company at any time and for any or no reason. We request that you give the Company at least thirty (30) days’ notice in the event of a resignation without Good Reason (as defined under Section 6 below).

          (b) *Position and Duties*. As of the Effective Date, you will serve as the Chief Operating Officer of the Company, reporting directly to me, the Company’s Chief Executive Officer. In this position, you will be expected to devote your full business time, attention and energies to the performance of your duties with the Company.

     2. **Compensation**. The Company will pay you a salary at the rate of $340,000.00 per year payable in accordance with the Company’s standard payroll policies, including compliance with applicable withholding (the “Base Salary”). Any increased or decreased Base Salary shall serve as the “Base Salary” for future employment under this offer letter. The first and last payment by the Company to you will be adjusted, if necessary, to reflect a commencement or termination date other than the first or last working day of a pay period.

     3. **Stock Option**.

##### 

Ken Reali

December 11, 2009

Page 2

          (a) *Grant*. Subject to approval by the Company’s Board of Directors, you will be granted an option pursuant to the Company’s 2005 Stock Plan (the “Plan”) to purchase 300,000 shares of the Company’s Common Stock at an exercise price equal to the fair market value per share of the Company’s Common Stock on the date the Board of Directors approves the option grant (the “Option Grant”). The Option Grant shall be subject to the terms and conditions of the Plan and the Company’s standard form of stock option agreement.

          (b) *Vesting Schedule; Exercise Terms*. One-fourth (1/4th) of the shares subject to the Option Grant will vest on the first anniversary of the Effective Date and an additional one thirty-sixth (1/36th) of the remaining number of such shares will vest each month thereafter, subject to your continued employment with the Company on each such date. The Option Grant shall be exercisable up to the number of vested shares according to the vesting schedule set forth in the preceding sentence.

          (c) *Change of Control*. In the event of a Change of Control, if you are not employed by the successor of our business as the Chief Operating Officer, or your then existing position with the Company, for the Spine business of the successor all then-unvested options under the Option Grant shall vest and become exercisable on the effective date of such Change of Control. If you are so employed as the Chief Operating Officer or such higher position as you should then hold with the Company of the successor’s Spine business and the successor assumes or replaces your Options, then your Options will continue to vest as provided above. If your are so employed and your employment with the successor is terminated by the successor without Cause or by you for Good Reason within twelve months of the effective date of such Change of Control your Options shall vest and become exercisable.

     4. **Bonus**.

          (a) *Annual Bonus*. You will be eligible to earn a bonus of up to fifty percent (50%) of your Base Salary, based upon the achievement of Company and individual goals that will be determined by the Company’s Board of Directors. The bonus, if any, will be determined and paid on an annual basis at the sole discretion of the Board of Directors, at the time and manner to be determined by the Board of Directors. You must be employed on the date that your bonus, if any, is to be paid in order to earn and be eligible to receive the bonus.

          (b) *Signing Bonus***.** On March 1, 2010, following commencement of your employment with the Company, you shall be paid a bonus in the amount of at least $115,000, less deductions as required by law. Such bonus shall be increased by up to $50,000 in the event your current employer determines that you must reimburse them for all or a portion of the relocation cost that they incurred upon your joining that company. The Company shall reimburse such payment by you to your former employer for up to $50,000. In the event you have no such reimbursement obligation to your former employer, or your reimbursement amount is less than $15,000, then the Company shall pay such lower reimbursement amount plus an amount to cause the signing bonus plus reimbursement amount hereunder to be increased by an additional $15,000.

     5. **Benefits**.

##### 

Ken Reali

December 11, 2009

Page 3

          (a) *Standard.* During the term of your employment, you will be eligible to participate in the Company’s standard vacation and benefits covering Company employee executives at your level, as such may be in effect from time to time.

          (b) *Apartment.* The Company shall provide you with an apartment in Wilmington, North Carolina for such time as you have not moved your family to Wilmington, North Carolina during the term of your employment with the Company.

     6. **Definitions**.

          (a) *Cause*. For purposes of this offer letter, “Cause” shall mean: (1) your gross negligence in the performance of or failure to perform the duties and obligations of your position with the Company or under this offer letter (for reasons other than death or Disability), which gross negligence, if curable within the discretion of the Company’s Board of Directors, is not cured to the reasonable satisfaction of the Company’s Board of Directors within thirty (30) days after receipt of written notice from the Board of Directors of such failure; (ii) any act of personal dishonesty, fraud, embezzlement, misrepresentation, or any unlawful act committed by you that results in your substantial gain or personal enrichment at the expense of the Company; (iii) your violation of a federal or state law or regulation applicable to the Company’s business; (iv) your violation of or a plea of nolo contendere or guilty to, a felony under the laws of the United States or any state; or (v) your material breach of the terms of this offer letter or the Confidentiality Agreement.

          (b) *Change of Control*. For purposes of this offer letter, “Change of Control” shall mean the occurrence of any of the following events:

               (i) Any “person” (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the “beneficial owner” (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company’s then outstanding voting securities, except that any change in the beneficial ownership of the securities of the Company as a result of an equity financing of the Company that is approved by the Company’s Board of Directors, shall not be deemed to be a Change in Control; or

               (ii) The consummation of the sale or disposition by the Company of all or substantially all of the Company’s assets; or

               (iii) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

          (c) *Disability*. For purposes of this offer letter, “Disability” shall mean that you, at the time notice is given have been unable to substantially perform your duties of your position with the Company or under this offer letter for not less than one-hundred and twenty (120) work days within a twelve (12) consecutive month period as a result of your incapacity due to a physical or

##### 

Ken Reali

December 11, 2009

Page 4

mental condition and, if reasonable accommodation is required by law, after any reasonable accommodation.

          (d) *Good Reason*. For purposes of this offer letter and prior to a Change of Control, “*Good Reason*” shall mean, without your written consent: (i) there is a material reduction of the level of your compensation (excluding any bonuses) (except where there is a general reduction applicable to the management team generally); (ii) there is a material reduction in your overall responsibilities or authority, or scope of duties; or (iii) there is a material change in the geographic location at which you must perform your services; provided however, that in no instance will such a relocation to an office location fifty (50) miles or less from the Company’s current office location or a relocation that does not require you to move from your present home in Raleigh, North Carolina be deemed material for purposes of this offer letter. For purposes of this offer letter and after a Change of Control but prior to the expiration of the twelve months after the Change of Control, “Good Reason” shall mean, without your written consent: (i) there is a material reduction of the level of your compensation (excluding any bonuses) below the amount set forth in the first sentence of Section 2 above; (ii) you are not the Chief Operating Officer of the successor’s spine business; or (iii) there is a material change in the geographic location at which you must perform the your services after the Change of Control; provided however, that in no instance will such a relocation to an office location fifty (50) miles or less from the Company’s office location immediately preceding the Change of Control or a relocation that does not require you to move from your present home in Raleigh, North Carolina be deemed material for purposes of this offer letter.

     7. **Immigration Laws**. For purposes of federal immigration laws, you will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided within three (3) business days of the effective date of your employment, or your employment relationship with the Company may be terminated. You understand and agree that any termination under this Section 10 for failure to properly provide the requested documentation shall be considered the same as a termination for Cause under this offer letter.

     8. **Employee Proprietary Information Agreement**. As a condition of this offer of employment, you will be required to complete, sign and return the Company’s standard form of At-Will Employee Confidential and Proprietary Information Agreement (the “Confidentiality Agreement”). A copy of the Confidentiality Agreement is attached hereto as Exhibit A.

     9. **General**. This offer letter, the Confidentiality Agreement and the stock option agreement (as approved by the Board of Directors) covering the Option Grant, when signed by you, set forth the terms of your employment with the Company and supersede any and all prior representations and agreements, whether written or oral. In the event of a conflict between the terms and provisions of this offer letter and the Confidentiality Agreement and the stock option agreement, the terms and provisions of the Confidentiality Agreement and the stock option agreement will control. Any amendment of this offer letter or any waiver of a right under this offer letter must be in a writing signed by you and an officer of the Company or a member of the Company’s Board of Directors (other than yourself). North Carolina law will govern this offer letter.

##### 

Ken Reali

December 11, 2009

Page 5

     We look forward to you joining the Company. If the foregoing terms are agreeable, please indicate your acceptance by signing this offer letter and returning it to me, along with your completed and signed Confidentiality Agreement

*[Signature pages to follow]*

##### 

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | Sincerely,  **TRANS1 INC.** | | |  |
|  | By: | /s/ Richard Randall | |  |
|  |  | Richard Randall, Chief Executive Officer | |  |
|  |  |  | |  |
|  | | | | |

AGREED TO AND ACCEPTED:

**“Employee”**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| /s/ Ken Reali | | |  |  |
| Ken Reali | | |  |  |
|  | | |  |  |
|  | | | | |

Signature Page to Employment Offer Letter

##### 

**Exhibit A**

Confidentiality Agreement