



BHARAT SANCHAR NIGAM LIMITED

(A GOVT. OF INDIA ENTERPRISE)

TELECOM QUALITY ASSURANCE CIRCLE

(An ISO 9001:2008 Certified Organization)

II Floor, Sanchar Complex, WMS Compound

Jayanagar 5th Block, 9th Main, 47th Cross, Bangalore-560041

TECHNICAL SPECIFICATION EVALUATION CERTIFICATE

No. TSEC/BG/CUG-01/03/069. JUN 2012

Date: 13.06.2012

THIS IS TO CERTIFY THAT THE PRODUCT DESCRIBED BELOW CONFORMS TO TEC SPECIFICATION (GR) No. MENTIONED BELOW AND IS APPROVED FOR PROCUREMENT BY BSNL. THIS CERTIFICATE IS ISSUED SUBJECT TO THE TERMS AND CONDITIONS STIPULATED IN THE ANNEXED LETTER.

PRODUCT : Solid PIJF Armoured Underground Cables
Solid PIJF Un-Armoured Underground Cables
(Sizes Covered) – Group I
5pr: 0.50mm (U/A)
10pr: 0.50mm
20pr: 0.50mm/0.63mm/0.90mm
50pr: 0.50mm/0.63mm/0.90mm
100pr: 0.50mm/0.63mm
200pr: 0.50mm
Tested for: 100pr/0.50mm (A)

MODEL NO: Nil

SPECIFICATION NO.: GR/CUG-01/03. AUG 2003

(SOFTWARE VERSION,
IF ANY) : NIL

ISSUED ON: 13.06.2012

VALID UP TO : 30.06.2015

ISSUED TO

(Manufacturer) : M/s. KEC International Limited,
349 & 350, Hebbal Industrial Area,
Hootagalli, Belvadi Post,
Mysore - 570018

REMARKS: Nil

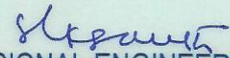


S. K. Srinivas
DIVISIONAL ENGINEER (TSA)
for CGM, TQAC, BG-41

I. TERMS AND CONDITIONS

- i) Telecom Quality Assurance Circle (TQAC), may at any time and at its absolute discretion, for any reason(s) as it deems fit, suspend or cancel the TECHNICAL SPECIFICATION EVALUATION CERTIFICATE (TSEC). TQAC may modify any of the terms of the Certificate or specifications which the holder must at his own expense may comply with.
- ii) No modification without necessary permission /approval from TQAC is permitted in design (Hardware/Software), Engineering and /or facilities in the approved model subsequent to the issue of this certificate. In case of any modification in the product without permission/approval from TQAC, the certificate shall be deemed to have been cancelled and may need fresh certificate.
- iii) During the validity of certificate, TQAC reserves the right to inspect and or test this product at any premises where it is in use, or at the place of manufacturer. If any deterioration in performance of the approved product is noticed during inspection and / or testing or its use in BSNL network, the TQAC reserves the right to cancel/suspend the Certificate.
- iv) In case of any dispute at any stage during the validity of this Approval the verdict of the Competent Authority of BSNL QA shall be final and binding on the manufacturer.
- v) The certificate is valid only up to the date mentioned in the certificate and may be renewed, if required, by applying at least three months prior to the expiry date of this certificate. After expiry of the certificate, the case will be treated as a fresh case.
- vi) Issue of this Approval does not ensure that the BSNL shall necessarily place order on the manufacturer for this product. It merely qualifies the product for meeting the clauses of the relevant Generic Requirement (GR). Actual supply of equipment to BSNL shall depend on their procurement policy and procedures.
- vii) The validity of approval certificate is also subject to the conditions that the validity of approval by TQAC or its authorized agency of the raw materials, insulated conductors & joints-in-conductor exists during validity of certificate.
- viii) Five Nominal / standard lengths, out of eight consecutive cable lengths in each size / gauge shall be tested for water penetration and drip tests as in the GR and shall meet all the specifications
- ix) Details of Raw Materials:
 - a) PE for Conductor insulation : Grade CHNA 8380 of M/s Hanwha Chemical Corporation, Korea
 - b) Filling Compound : Grade Petrogel TCA of M/s Petrogel (India) Pvt. Ltd., Pondicherry
 - c) Poly-al Tape : M/s Nagreeka Foils Ltd., Dadra
 - d) PE for Sheath/Jacket : Grade LLD-222 of M/s Sankhla Polymers Pvt. Ltd., Naroli
 - e) Galvanised Steel Tape : M/s Bhushan Power & Steel Ltd., Kolkata
 - f) Filling Machine : M/s Dussek Campbell – UK
- x) QA testing / Procedures as per QM 303

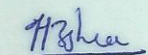
II. Infrastructure Assessment No. CGMQATSEC/BG/IA/10-11/073 dated 15.11.2010.


DIVISIONAL ENGINEER (TSA)
for CGM, TQAC, Bangalore-41

TO:

1. Sr.DDG, TEC, K.L.Bhavan, Janpath, New Delhi.
2. CGM, T & D Circle, BSNL, Jabalpur.
3. Sr.GM (MM)/ Sr.GM (CN), BSNL, Bharat Sanchar Bhavan, Harishchandra Mathur Lane, Janpath, New Delhi-01
4. Sr.GM (QA), Bangalore
5. GM (NWP-CDMA WiMAX), BSNL, Bharat Sanchar Bhavan, Harishchandra Mathur Lane, Janpath, New Delhi-01
6. DGM (QA), Bangalore
7. Applicant: **M/s. KEC International Limited**
No. 349 & 350, Hebbal Industrial Area, Hootagalli
Belavadi Post, Mysore – 570 018
8. Office copy




SUB-DIVISIONAL ENGINEER (TSA)
O/o CGM, TQAC, Bangalore-41