

# Project Appraisal – Quality Cables Limited

---

**Conclusion: Project is financially viable. Please go through below details for the justification.**

## **I) Introduction:**

### **A) Utility of the product:**

The telecommunication cables are suitable for direct burial due to the steel wired armour and can be installed outdoors and through cable ducting. The jelly filled cables are generally used for voice frequency transmission, local networks and industrial areas. They are used for control protection signaling communications and data transmission purposes.

Source: <http://www.clevelandcable.com/products/communication-cable-petroleum-jelly-filled-scr-swa-cw1128.1198-p/>

### **B) Government initiatives to boost cable industry in India:**

The cable industry which has been growing at the rate of around 15% currently will start growing at the CAGR of over 20% over the next five years. The increasing demand for power, light and communication will strengthen the wires and cables industry in the future as well.

In India, the size of the cable manufacturing industry is approximately Rs. 40,000 crores . Still 35% of the industry continues to be a part of the unorganized sector.

Source: <https://timesofindia.indiatimes.com/business/india-business/govt-initiatives-to-boost-cable-industry-in-india/articleshow/60332457.cms>

### **C) Telecom Industry in India**

The mobile industry is expected to create a total economic value of Rs 14 trillion (USD 217.37 billion) by the year 2020. Rise in mobile-phone penetration and decline in data costs will add 500 million new internet users in India over the next five years creating opportunities for new businesses. The monthly data usage per smartphone in India is expected to increase from 3.9 GB in 2017 to 18 GB by 2023. Data usage on Indian telecom operators' networks (excluding Reliance Jio), doubled in six months to 359 petabytes or 3.7 million gigabytes per month as 4G data usage share increased to 34 per cent by the end of June 2017. According to a report by leading research firm Market Research Store, the Indian telecommunication services market will likely grow by 10.3 per cent year-on-year to reach US\$ 103.9 billion by 2020.

Some of the developments in the recent past are:

- Finnish telecommunication company Nokia, is going to collaborate with Indian telecom companies Bharti Airtel and BSNL to work on the roadmap for development of 5G technology and creating a conducive ecosystem for 5G in India.
- The Government of India is working to digitally connect the rural and remote regions in the country and has decided a new affordable tariff structure with the principle of more you use, less you pay. The changes will soon be reflected in tariff changes by service providers in the country.
- India telecommunication companies will be investing US\$ 20 billion over the next two years for expansion of network and operations, stated Mr Akhil Gupta, Vice Chairman, Bharti Enterprise.
- Mr Manoj Sinha, Union Minister of Communications, Government of India, stated that the government will provide the required support for achieving the dream of a fully connected and truly empowered India soon, while inaugurating a national conference on 'BharatNet and its utilisation with states'.

Source: <https://www.ibef.org/industry/telecommunications.aspx>

## **II) Project feasibility analysis**

### **A) Commercial viability**

Project seems to be commercially viable considering above economic scenario and government support for the sector's growth. But marketing strategy information is missing which helps to identify how company is planning to compete in the market. Also, another threat is jelly filled copper cables import is permitted freely without any import license by DGFT (Director General of Foreign Trade).

### **B) Financial viability**

1) IRR of the project is 33.57% and calculated WACC is 10.73% assuming 20% (dividend) is the cost of equity.

2) Debt to equity ratio reduces substantially YoY due to exponential growth in retained earnings (CAGR 33%).. Liability is merely 8% of the shareholder's equity by 10<sup>th</sup> year which is in line with industry average D/E ratio. Company should take advantage of the increased profits that financial leverage may bring.

3) Current ratio - Due to above reason cash and bank balance has increased, hence current ratio also increases substantially YoY.

4) Asset coverage ratio - Book value of assets is sufficient enough to cover the long term debt considering it is repaid regularly as per schedule.

5) BEP gradually reduces YoY as fixed cost reduces YoY. BEP w.r.t capacity utilization in optimal year is 30.94%.

6) DSCR drops in 3<sup>rd</sup> year as repayment of loan starts, but steadily increases after 3<sup>rd</sup> year as net operating cash flow increases.

7) Discounted payback period w.r.t total cash outflow is 3.32 years and from lender's perspective w.r.t principal amount it is 6.12 years.

**(i) Sensitivity analysis** – Raw material cost is assumed to be constant for 10 years which is unrealistic. For e.g. Price of copper has increased by 7.9% from 2008 to 2018. Hence IRR is calculated with respect to increase in raw material cost per CKM and drop in initial sale price per CKM i.e. Rs.500. With 10% increase in raw material cost i.e. Rs.275/CKM and 15% reduction in sales price i.e. Rs.425/CKM, IRR drops to 8.33% which is the worst possible scenario as WACC is 10.73%.

We can expect rise in raw material cost will result in rise in selling price also, in a way there is no negative correlation between two. But market forces and competitors will try to keep cap on rise in selling price.

**(ii) Scenario analysis** – IRR and Average DSCR is simulated 1000 times as per below scenarios.

Variable	Condition of scenarios
Raw material cost/CKM	Random between Rs.240 and Rs.300 per CKM
Capacity utilization	Random between 15% less than expected capacity utilization. Eg. For 1st year between 30% and 45%
Initial sale price/CKM	Random between Rs.450 and Rs.550 per CKM

**Method 1:** WACC is subtracted from simulated IRR. There is approximately 95% probability that IRR will be above WACC. Mean of simulated IRR is 24% which is greater than WACC.

DSCR is benchmarked at 1.5 which is subtracted from simulated DSCR. There is approximately 99.30% probability that DSCR will be above 1.5. Mean of simulated DSCR is 2.54 which is greater than benchmarked DSCR of 1.5.

**Method 2:** Assuming simulated distribution is normally distributed, we can accept the project with approximately 95% confidence level for IRR and approximately 98% confidence level for DSCR where  $\alpha = 0.05$  (significance level).

Since simulated distribution is not normally distributed as per JB test, we can stick to probability calculated by method 1. **(Please note, above approximations might change marginally as excel continuously keeps on generating random values).**

**C) Technical feasibility**

Important information regarding production process, machinery, technology, location is not given; hence technical feasibility cannot be performed. Project implementation schedule is not available, like Gantt chart or CPM is not given to identify critical paths which will enable us to identify probable chances of time overrun leading to cost overrun. However, product mix is given with respect to pairs of conductors in a cable.

**D) Managerial aspect**

No information available of the management.