

# TREND PAPER 2019

## PROFIBUS-DP Network Failure Trends in the Indian Market Analysis Report 2019

FEBRUARY 2020

**UTTHUNGA TECHNOLOGIES**

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## PROFIBUS-DP Network Failure Trends in the Indian Market - Analysis Report 2019

### Study of the PROFIBUS networks

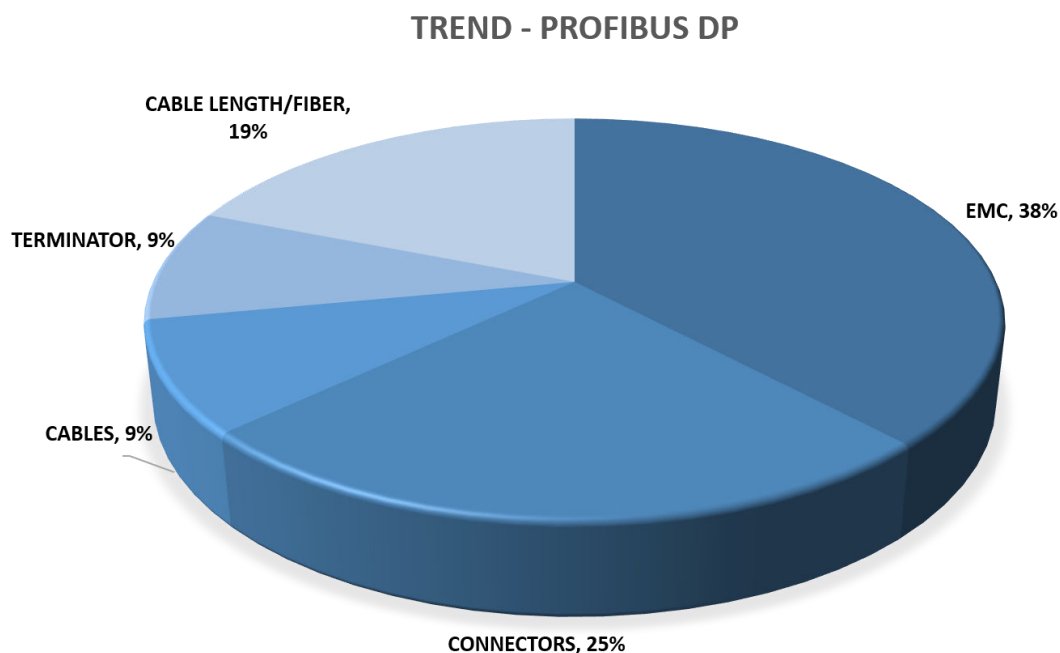
After a comprehensive analysis of PROFIBUS-DP networks in several process and manufacturing plants in India, we have concluded our findings in this annual report on the failure trends in PROFIBUS-DP networks.

The PROFIBUS network solutions and diagnostics tools from our partner Indu-Sol GmbH helped us to identify and understand the exact faults in the communications networks in the plants. Further, we were able to help these plants in resolving the downtimes. PROFIBUS has a huge installed base in India, however several plants are very old and are suffering from lack of proper network maintenance.

The adoption of PROFINET is still in early stages in India. Industries requiring high speed and increased accuracy are slowly transitioning to PROFINET.

80% of the measurements done by Utthunga network experts were on PROFIBUS networks and 20% on PROFINET networks.

### Trend of network failures



***“Network failures are imminent. Be proactive to analyze your networks to predict failures”***

Category	Typical sources of failure	% share
<b>Connectors</b>	<ul style="list-style-type: none"> <li>- Poorly designed connectors</li> <li>- Poorly assembled connectors</li> <li>- Improper connections</li> </ul>	25%
<b>Terminations</b>	<ul style="list-style-type: none"> <li>- Improper terminations</li> <li>- Faulty terminations</li> <li>- Missing terminations</li> </ul>	9%
<b>Cables</b>	<ul style="list-style-type: none"> <li>- Faulty cables</li> <li>- Damaged cables</li> <li>- Change in impedance</li> </ul>	9%
<b>Cable Length</b>	Cable length was inappropriate for the baud rate used	19%
<b>EMC</b>	Electromagnetic interference	38%

## Benefits realized by the industries

In our engagement with the various process and manufacturing industries, we identified the network failures as above. Using the PROFIBUS network solutions and diagnostics tools from Indu-Sol GmbH, we helped these industries realize the following benefits:

- Increase in the operational efficiency of the networks by utilizing the predictive maintenance capability of Indu-Sol diagnostics tools
- Significant reduction in plant breakdown which resulted in performance and production improvement
- On-demand availability of quality parameters
- Reduction in man-hours required for network troubleshooting which was directly impacting production

## Our offerings

- PROFIBUS/ PROFINET diagnostic tools
- PROFIBUS/PROFINET diagnostic services and solutions
- Network architecture recommendation

## About Utthunga

Utthunga is an industrial software services and solutions company specializing in process automation, factory automation, power & utility, and automotive sector. We provide intelligent solutions for field device integration, industrial connectivity, OPC, IT-OT integration, IIoT solutions to global industrial automation OEMs and manufacturing companies. We partner with our customers in their digital transformation journey.

## About Indu-Sol GmbH, Germany

Germany based Indu-Sol GmbH provides comprehensive solutions for proper functioning of industrial automation systems that run on fieldbus and industrial Ethernet. The Indu-Sol portfolio contains a large spectrum of products and solutions for all popular industrial network such as PROFIBUS, PROFINET, CAN, ASI and many more.

## Partnership with Indu-Sol GmbH, Germany

Utthunga has vast experience in industrial networks. Utthunga provides sales and service support on a wide range of network monitoring and diagnostic tools from Indu-Sol.

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