

SCTE • ISBE[®]

S T A N D A R D S

Energy Management Subcommittee

SCTE STANDARD

SCTE 225 2020

**Cable Operator Fleet Maintenance and Vehicle
Selection Operational Practice**

NOTICE

The Society of Cable Telecommunications Engineers (SCTE) / International Society of Broadband Experts (ISBE) Standards and Operational Practices (hereafter called “documents”) are intended to serve the public interest by providing specifications, test methods and procedures that promote uniformity of product, interchangeability, best practices and ultimately the long-term reliability of broadband communications facilities. These documents shall not in any way preclude any member or non-member of SCTE•ISBE from manufacturing or selling products not conforming to such documents, nor shall the existence of such standards preclude their voluntary use by those other than SCTE•ISBE members.

SCTE•ISBE assumes no obligations or liability whatsoever to any party who may adopt the documents. Such adopting party assumes all risks associated with adoption of these documents, and accepts full responsibility for any damage and/or claims arising from the adoption of such documents.

Attention is called to the possibility that implementation of this document may require the use of subject matter covered by patent rights. By publication of this document, no position is taken with respect to the existence or validity of any patent rights in connection therewith. SCTE•ISBE shall not be responsible for identifying patents for which a license may be required or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

Patent holders who believe that they hold patents which are essential to the implementation of this document have been requested to provide information about those patents and any related licensing terms and conditions. Any such declarations made before or after publication of this document are available on the SCTE•ISBE web site at <http://www.scte.org>.

All Rights Reserved

© Society of Cable Telecommunications Engineers, Inc.
140 Philips Road
Exton, PA 19341

Table of Contents

Title	Page Number
NOTICE	2
1. Introduction	5
1.1. Executive Summary	5
1.2. Scope	5
1.3. Benefits	5
1.4. Intended Audience	5
1.5. Areas for Further Investigation or to be Added in Future Versions	5
2. Normative References	5
2.1. SCTE References	6
2.2. Standards from Other Organizations	6
2.3. Published Materials	6
3. Informative References	6
3.1. SCTE References	6
3.2. Standards from Other Organizations	6
3.3. Published Materials	6
4. Compliance Notation	7
5. Abbreviations	7
5.1. Abbreviations	7
6. Understand the Fleet	7
6.1. Data points to gather	7
6.2. Include fleet size relative to the mission	8
6.3. Procedures that can impact fleet performance include	8
7. Life Cycle Costing	9
7.1. Life cycle costing phase one	10
7.2. Life cycle costing phase two	10
7.3. Life cycle costing phase three	10
8. Components of vehicle cost	11
8.1. Fuel	11
8.2. Oil	12
8.3. Maintenance	12
8.4. Tire selection and maintenance	13
8.5. Accelerated tire wear characteristics	14
8.6. Bad driving habits	14
9. Fleet management optimization	14
10. Leadership communication	15
11. Fuel efficiency and petroleum reduction	15
12. Conclusion	15
13. Appendix	17
13.1. Vehicle Selection Questionnaire	17

List of Figures

Title	Page Number
FIGURE 1 - EXAMPLE OF TECHNICIAN INTERVIEW QUESTION COMPONENTS	8
FIGURE 2 - EXAMPLE FLEET CAPITAL ACTIVITY FLOW	9
FIGURE 3 - VEHICLE SELECTOR MATRIX	11

List of Tables

Title	Page Number
TABLE 1 - FLEET TOOL: VEHICLE SELECTION WORKBOOK, VEHICLE SELECTION MATRIX WORKSHEET	17

1. Introduction

This document is identical to SCTE 225 2015 except for informative components which may have been updated such as the title page, NOTICE text, headers and footers. No normative changes have been made to this document.

1.1. Executive Summary

Cable operators run a distributed network covering thousands of miles connecting facilities to customers and facilities to facilities. This network requires maintenance, upgrades, installation and repairs. Also, new cable subscribers require visits to their site ensuring proper deployment of equipment and turn up of service. All of this is accomplished via a fleet of vehicles that if not managed optimally can impact both the company's bottom line as well as environment.

1.2. Scope

This operational practice will outline steps helping cable operators to:

- Optimize fleet reliability
- Minimize fleet operating and maintenance costs
- Minimize fleet unregulated and regulated emissions
- Help to properly outline questions to match the right vehicle for the right job

This practice applies to cable operator owned or leased fleet and does not include sub-contracted employee fleets.

1.3. Benefits

Cable operators' fleets represent a significant capital and operational expense regarding budget management and with the proper attention financial and operational values can be optimized. With a growing customer concern for environmental care, the cable operator fleet is highly visible in the consumer's eyes. This operational practice helps to optimize financial and environmental impact through right size deployment, data, and maintenance.

1.4. Intended Audience

The following teams would benefit from adopting this operational practice: corporate management, fleet management, and vehicle operators respectively.

1.5. Areas for Further Investigation or to be Added in Future Versions

For future consideration, alternate fuel vehicles could be studied to present use cases for non-petroleum based vehicles.

2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

2.1. SCTE References

- No normative references are applicable.

2.2. Standards from Other Organizations

- No normative references are applicable.

2.3. Published Materials

- No normative references are applicable.

3. Informative References

The following documents might provide valuable information to the reader but are not required when complying with this document.

3.1. SCTE References

- No informative references are applicable.

3.2. Standards from Other Organizations

- ANSI American National Standards Institute: <http://www.ansi.org/>
- DOT Department of Transportation: <http://www.transportation.gov/>
- EPA Fuel Economy Guide: <http://www.fueleconomy.gov/>
- NHTSA - National Highway Traffic Safety Administration: www.nhtsa.gov/
- OSHA Occupational Safety and Health Administration: <https://www.osha.gov/>

3.3. Published Materials

- ASTM F1430/F1430M-15: Standard Test Method for Acoustic Emission Testing of Insulated and Non-Insulated Aerial Personnel Devices with Supplemental Load Handling Attachments
<http://www.astm.org/Standards/F1430.htm>