



ATIS STANDARD

ATIS-0300039

(Formerly known as TCIF-03-005)

ATIS Standard on -

**Guideline for Identifying Downloadable Software for Plug-in
Cards**



As a leading technology and solutions development organization, the Alliance for Telecommunications Industry Solutions (ATIS) brings together the top global ICT companies to advance the industry's most pressing business priorities. ATIS' nearly 200 member companies are currently working to address the All-IP transition, 5G, network functions virtualization, big data analytics, cloud services, device solutions, emergency services, M2M, cyber security, network evolution, quality of service, billing support, operations, and much more. These priorities follow a fast-track development lifecycle — from design and innovation through standards, specifications, requirements, business use cases, software toolkits, open source solutions, and interoperability testing.

ATIS is accredited by the American National Standards Institute (ANSI). The organization is the North American Organizational Partner for the 3rd Generation Partnership Project (3GPP), a founding Partner of the oneM2M global initiative, a member of the International Telecommunication Union (ITU), as well as a member of the Inter-American Telecommunication Commission (CITEL). For more information, visit www.atis.org.

Notice of Disclaimer & Limitation of Liability

The information provided in this document is directed solely to professionals who have the appropriate degree of experience to understand and interpret its contents in accordance with generally accepted engineering or other professional standards and applicable regulations. No recommendation as to products or vendors is made or should be implied.

NO REPRESENTATION OR WARRANTY IS MADE THAT THE INFORMATION IS TECHNICALLY ACCURATE OR SUFFICIENT OR CONFORMS TO ANY STATUTE, GOVERNMENTAL RULE OR REGULATION, AND FURTHER, NO REPRESENTATION OR WARRANTY IS MADE OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. ATIS SHALL NOT BE LIABLE, BEYOND THE AMOUNT OF ANY SUM RECEIVED IN PAYMENT BY ATIS FOR THIS DOCUMENT, AND IN NO EVENT SHALL ATIS BE LIABLE FOR LOST PROFITS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. ATIS EXPRESSLY ADVISES THAT ANY AND ALL USE OF OR RELIANCE UPON THE INFORMATION PROVIDED IN THIS DOCUMENT IS AT THE RISK OF THE USER.

NOTE - The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights. By publication of this standard, no position is taken with respect to whether use of an invention covered by patent rights will be required, and if any such use is required no position is taken regarding the validity of this claim or any patent rights in connection therewith. Please refer to [<http://www.atis.org/legal/patentinfo.asp>] to determine if any statement has been filed by a patent holder indicating a willingness to grant a license either without compensation or on reasonable and non-discriminatory terms and conditions to applicants desiring to obtain a license.

Published by

**Alliance for Telecommunications Industry Solutions
1200 G Street, NW, Suite 500
Washington, DC 20005**

Copyright © 2020 by Alliance for Telecommunications Industry Solutions
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher. For information contact ATIS at 202.628.6380. ATIS is online at < <http://www.atis.org> >.

Guideline for Identifying Downloadable Software for Plug-in Cards and Standalone Hardwired Equipment Items

Alliance for Telecommunications Industry Solutions

Approved December 30, 2020

Abstract

This guideline provides a method to determine how plug-in cards and standalone hardwired equipment items that are capable of supporting downloadable software should be identified. Additionally, this guideline addresses how to manage plug-in cards and standalone hardwired equipment items that support downloadable software capability. This includes processes related to provisioning, installation, removal and warehousing to ensure high quality network reliability and efficient operational procedures.

Foreword

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The **Automatic Identification & Data Capture** Committee establishes guidelines for common shipping labels, product marking labels, product changes and software issuance standards. These common guidelines simplify the receiving, shipping, transportation and tracing of telecommunications products through company and industry business processes and the global supply chain. The Automatic Identification and Data Capture (AIDC - Formerly BCSC) Committee was a former working committee of the Telecommunications Industry Forum.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement on this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, Automatic Identification & Data Capture Committee, 1200 G Street NW, Suite 500, Washington, DC 20005.

Table of Contents

1	PURPOSE	1
2	REASON FOR REISSUE (2020)	1
3	SCOPE	1
4	DEFINITIONS	2
5	BACKGROUND	5
6	BUSINESS PROBLEM	5
7	ASSUMPTIONS	7
8	RESOLUTION OF ISSUES	7
8.1	CHARACTERISTICS OF PLUG-IN CARDS AND STANDALONE HARDWIRED EQUIPMENT UNITS WITH DOWNLOADABLE SOFTWARE CAPABILITY	7
8.2	DETERMINE IF A PLUG-IN CARD OR STANDALONE HARDWIRED EQUIPMENT UNIT HAS THE CAPABILITY OF DOWNLOADABLE SOFTWARE	8
8.3	PRODUCT CHANGE MANAGEMENT	8
8.4	ENCODED IDENTIFICATION	8
8.5	HARDWARE AND SOFTWARE IDENTIFIERS	9
8.6	LOCATING AND DOWNLOADING THE CORRECT SOFTWARE VERSION	9
8.7	RECOMMENDATIONS FOR EFFICIENT SOFTWARE DOWNLOADS	9
8.8	CHARACTERISTICS OF PLUG-IN CARDS AND STANDALONE HARDWIRED EQUIPMENT UNITS WITH VIRTUALIZED NETWORK FUNCTION (VNF) CAPABILITY	9
8.9	DETERMINE IF A PLUG-IN CARD OR STANDALONE HARDWIRED EQUIPMENT UNIT SUPPORTS VIRTUALIZED NETWORK FUNCTION (VNF) CAPABILITY	10
9	REFERENCES	10