

SLOVENSKI STANDARD oSIST prEN 9276:2024

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Aeronavtika - Vodenje programov - Priporočila za izvajanje integrirane logistične podpore

Aerospace series - Programme management - Recommendations for the implementation of the integrated logistic support

Luft- und Raumfahrt - Programm-Management - Empfehlungen zur Durchführung der integrierten logistischen Unterstützung

Série aérospatiale - Management de programme - Recommandations pour la mise en œuvre du soutien logistique intégré

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Aerospace series - Programme management -Recommendations for the implementation of the integrated logistic support

Série aérospatiale - Management de programme -Recommandations pour la mise en œuvre du soutien logistique intégré Luft- und Raumfahrt - Programm-Management -Empfehlungen zur Durchführung der integrierten logistischen Unterstützung

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee ASD-STAN.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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European foreword

This document (prEN 9276:2024) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document is currently submitted to the CEN Enquiry.

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Introduction

In a very restrictive economic context, the technical performance of the system is not the only objective assigned to large aeronautic, space or weapons programmes. The quality of the expected service, the cost of implementation and support, the sustainability of equipment goods are now at the same level of requirements.

In a programme, the quest for efficiency goes through the common will of all the stakeholders to serve a common objective that is to satisfy the system user. In this respect, satisfying the need of the user as regards logistic support and the control of usage costs is essential to ensure the availability and sustainability of the system he will operate.

In order to optimize the compromise between performance, costs and lead times over the entire life cycle, it is necessary to consider the support needs from the beginning of the programme and to develop solutions closely linked to system development, its service phase and its disposal. The failure of programme management to take the life cycle cost into consideration can have consequences for the users in the operational phase.

This document specifies the integrated logistic support (ILS) application procedures and constitutes one of the accompanying documents of EN 9200 on the specification of programme management.

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1 Scope

The purpose of this document is to:

- identify and describe, in a structured way, the principles of the integrated logistic support (ILS) activities and tasks for the main types of stakeholders in the system life cycle, from the expression of need to disposal;
- place the activities, tasks and ILS deliverables within the programme execution;
- identify the main selection and sizing of activities and tasks criteria according to the nature and the requirements of the programme;
- control the relations with the other aspects of programme management.

This document covers the following subjects:

- management of ILS (definition, implementation and running of the processes);
- expression of the support requirements;
- elaboration of the contracts (e.g. for development, maintenance, supply
- implementation of the tasks and processes.

This document is also related to the following subjects:

- relations with costs and lead times control, configuration management, performance and RAMS management, quality assurance, documentation management;
- regulations (e.g. information system security, export controls, safety at work);
- human and organisational factors (HOF);
- information systems (IS) and the links between them;
- logistics information systems (LIS);
- in-service support (ISS) activities;
- configuration management of ILS objects;
- life cycle.

The following stakeholders are concerned by ILS:

- users in the broadest sense: operators, maintenance operators, administrators, dismantlers of the system, trainers;
- the customer, who:
 - prepares technical and contractual specifications of need with which the system shall comply,

- sets up the funding of the programme,
- oversees the realization and commissioning of the main system and of the support system,
- facilitates the feedback;
- NOTE 1 At the highest level of the system, the customer can also be referred to as the "project owner".

NOTE 2 The "main system" can also be referred to as the "system of interest".

the supplier(s) who deliver a system (main and support) to the customer, which meets the
performance specifications, including the regulatory requirements, on time and for the agreed cost,
throughout the system life cycle;

NOTE At the highest level of the system, the supplier can also be referred to as the "industrial prime contractor".

 the regulatory authorities that supervise and approve the support processes and equipment, as needed.

The principles laid down in this document can be applied, after adaptation, to all the customer/supplier relations resulting from the breakdown of the main contract into sub-contracts.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <u>https://www.iso.org/obp/</u>

https:/—a IEC Electropedia: available at https://www.electropedia.org/e8-71f1e7d49b2b/osist-pren-9276-2024

3.1 logistic support analysis

LSA

structured and iterative method that helps to optimize the operational availability and operating costs (operation and maintenance) of the system, on the basis of the expression of needs and the planned operational concepts, by pre-planning all aspects of integrated logistics support

3.2

service level contract

contract that formally defines the quantity (in terms of units of use) and quality of the service concerned

Note 1 to entry: It describes the stakeholders' expectations concerning the content of the services, their execution procedures, the stakeholders' responsibilities, the guarantees, i.e. the service level.

Note 2 to entry: It can specify the availability, performance, operational levels or any other respective service attributes, such as invoicing and even penalties (financial or other) in the event of breach.

3.3 life cycle cost LCC

total cost of a product throughout its life cycle, from the initial expression of needs to its disposal

Note 1 to entry: In certain programmes, the life cycle cost is called the global cost.

3.4

life cycle (of a product)

set of successive maturity states that the product takes during the different phases of a programme

Note 1 to entry: States of maturity during which the product is gradually processed are typically:

- concept;
- development;
- realization;
- use, including in-service support;
- disposal.

Note 2 to entry: The life cycle of a product takes into account all the activities involved in the manufacture, use, transport, recycling and disposal of the product. This is the basis of eco-design.

Note 3 to entry: The life cycle is generally illustrated as a series of stages, from production (extraction and harvesting of raw materials) to final disposal (disposal or recovery), including manufacturing, packaging, transport, use and recycling or disposal.

Note 4 to entry: Notion not to be confused with life profile.

3.5

availability

aptitude of a product to be ready to perform a required function under given conditions, at a given moment

Note 1 to entry: This aptitude depends on the combined aspects of reliability performance, maintainability performance and maintenance support performance.

[SOURCE: adapted from EN 13306:2017]

3.6

support elements

constitutive elements of the support system

Note 1 to entry: Support elements cover the means and services provided by the different stakeholders: industrials, organisations and end users.

Note 2 to entry: See 5.1 for more information.

3.7

maintenance

all the actions required to maintain a product or restore a product to a specified condition, in which it can realize the required function(s)

Note 1 to entry: Maintenance includes the support management and supervision activities.

Note 2 to entry: In the operating phase, maintenance helps to preserve the safety, security and availability of the product.

Note 3 to entry: Maintenance includes corrective or preventive maintenance.

3.8 in-service support ISS

all the tasks that guarantee the capacity of the equipment to function and to be available within an imposed budgetary framework

Note 1 to entry: ISS includes the following main functions:

- maintenance (hardware and software);
- adaptability and upgradability of the equipment in relation to the physical or strategic environment;
- technical assistance;
- repairs;
- logistics (supplies, storage and distribution of spares);
- availability of operational personnel (use and maintenance).

Note 2 to entry: ISS also includes associated but essential functions, such as:

- maintenance of the support infrastructures;
- keeping the documentation up to date;

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- management of the configuration and technical incidents;
- document management;
- management of all the above-mentioned activities.

Note 3 to entry: The implementation of ISS is conditional on the consideration of a maintenance plan which more particularly defines the main functions of ISS. Constraints, in particular budgetary ones, and agreements contribute to validating a gap between this maintenance plan and the ISS actually carried out.

Note 4 to entry: The ILS team analyses the support in the development phase and produces the maintenance plan, which remains a reference document throughout the ISS (with foreseeable changes during the operational phase).

3.9

level of intervention

maintenance operations execution level defined within the general framework of a maintenance policy, taking into account the operational availability objective and specific constraints

Note 1 to entry: Specific constraints include but are not limited to:

- complexity of the equipment;
- qualification of the personnel;
- logistic and geographical organization (e.g. place of intervention);
- costs;
- intervention times;
- means, infrastructures, etc.

Note 2 to entry: There are various typologies, such as those defined in Annex D: technical level of intervention (NT11, NT12, NT13) and the level of industrial support/level of operational support.

3.10

life profile

chronological description of the situations in which a physical product is expected to be found, from exfactory to disposal

Note 1 to entry: By situation, we mean: transport, handling, storage, maintenance, preparation to use, operational use, with all environmental conditions, durations and respective occurrences.

Note 2 to entry: The life profile is described for product / customer or product / job couples. For a given product, there can be several life profiles depending on the considered concepts of use or deployments.

Note 3 to entry: The life profile is not to be confused with life cycle (which includes life profile).

Note 4 to entry: The disposal phase is part of the life cycle but is not part of the life profile.

3.11

support technical-logistics data reference SIST prEN 9276:2024

set of technical and logistical data belonging to the initial data reference or data service reference

Note 1 to entry: The initial data reference allows the system to be taken into account before its use. Resulting from the activities of the ILS and updated throughout the life cycle of the system, it consists of:

— the LSA DB (logistics support analysis database), made up in particular of the maintenance logistics breakdown structure, the maintenance plan and the associated tasks;

- the LAR (supply items list);
- the technical user documentation.

Note 2 to entry: The data service reference ensures the monitoring of the system during its use. It consists of:

- applicable configurations;
- applied configurations;
- parts orders;
- items making up the feedback: technical event, intervention report, etc.