



SLOVENSKI STANDARD
SIST EN 15341:2019/oprA1:2021
01-februar-2021

Vzdrževanje - Ključni kazalniki učinkovitosti in uspešnosti vzdrževanja

Maintenance - Maintenance Key Performance Indicators

Instandhaltung - Wesentliche Leistungskennzahlen für die Instandhaltung

Maintenance - Indicateurs de performance clés pour la maintenance

Ta slovenski standard je istoveten z: EN 15341:2019/prA1

[SIST EN 15341:2019/oprA1:2021](https://standards.iteh.ai/catalog/standards/sist/f91a043f-bc6d-410c-b01d-356e0f4718b4/sist-en-15341-2019-opra1-2021)

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ICS:

03.100.99	Drugi standardi v zvezi z organizacijo in vodenjem podjetja	Other standards related to company organization and management
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SIST EN 15341:2019/oprA1:2021 **en,fr,de**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 15341:2019
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January 2021

ICS 03.100.99

English Version

Maintenance - Maintenance Key Performance Indicators

Maintenance - Indicateurs de performance clés pour la maintenance

Instandhaltung - Wesentliche Leistungskennzahlen für die Instandhaltung

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 319.

This draft amendment A1, if approved, will modify the European Standard EN 15341:2019. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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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 COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 15341:2019/prA1:2021) has been prepared by Technical Committee CEN/TC 319 “Maintenance”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

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EN 15341:2019/prA1:2021 (E)

1 Modification to Clause 7, 'KPIs of "Maintenance within Physical Asset Management'

In Table 2, replace the lines PHA3, PHA5, PHA13, PHA14, PHA15, PHA17 and PHA20 with the following:

“

PHA3 Capital intensity required to generate turnover	Physical asset turnover	Annual turnover generated by the physical asset
	Physical asset replacement value	The estimated amount of capital that would be requested to build the existing physical asset

“

“

PHA5 Rate of replacement (%)	Replacement costs	Annual expenditures to replace the existing physical assets
	Physical assets replacement value	The estimated amount of capital that would be requested to build the existing physical asset

“

“

PHA13 Average maintenance cost for operational available time (Euro/Hour)	Total maintenance cost	See M17
	Hours of operational availability	See maintenance records

“

“

PHA14 Annual maintenance cost on annual total life cost (%)	Annual maintenance costs	See M17 (annually)
	Annual total industrial life cost	See total industrial annual cost to keep the physical asset running

“

“

PHA15 Impact of maintenance on standard technical output (Euro/output unit)	Annual maintenance cost	See M17 (annually)
	Annual standard technical output	Annual technical standard output of a physical asset is the quantitative output generated fulfilling the qualitative characteristics

“

“

PHA17 Impact of maintenance cost on an annual turnover of physical asset (%)	Total maintenance cost	See M17
	Annual turnover	Turnover generated by the sales of products/services developed by physical asset

“

PHA20 Contribution of capitalized spare parts on replacement value of physical asset (%)	Cost of capitalized critical spare parts	Value of the annual average inventory of capitalized critical spare parts. The critical spare parts are the spare parts having high unit value, long lead time, whose unavailability could create big production loss
	Physical Asset Replacement Value	The estimated amount of capital that would be requested to build the existing physical asset

iTeh STANDARD PREVIEW
2 Modification to Clause 8, 'KPIs of Sub-function "Health-Safety-Environment (HSE)" on Maintenance' (standards.iteh.ai)

In Table 3, replace lines HSE21 and HSE22 with the following:

“ <https://standards.iteh.ai/catalog/standards/sist/91a043f-bc6d-410c-b01d-356e0f4718b4/sist-en-15341-2019-oprA1-2021> ”

HSE21 Safety and health improvements rate (%)	Maintenance cost spent to improve H.S. level	All the resources internal and external spent to ensure HSE level
	Total maintenance cost	See M17

“

HSE22 Environment improvements rate (%)	Maintenance expenditures to reduce environmental risks	All the resources internal and external spent to improve environment
	Total maintenance cost	See M17

“

EN 15341:2019/prA1:2021 (E)

3 Modification to Clause 9, 'KPIs of Sub-function "Maintenance Management"'

In Table 4, replace lines M11 and M 12 with the following:

“

M11 Availability based on operating time (%)	Operating time (OT)	Time interval throughout which an item is performing as required.
	Required operating time	Required operating time is the interval throughout which the item is required to be in an up-state and operating. It excludes standby time and idle time It excludes lost operating time due to external reasons such as market demand, laws, business reasons, lack of resources, working time

”

“

M12 Availability based on time to restoration	Operating time (OT)	Time interval throughout which an item is performing as required.
	Operating time + Time to restoration (OT + TTR).	Time to restoration includes active repair time and delays and ramp up times

”

4 Modification to subclause 10.2, "Qualification"

In Table 5, replace lines P1, P2 and P3 with the following:

“

P1 Competence of maintenance managers (%)	Achieved	See EN 15628:2014
	Required	See EN 15628:2014, 5.3

”

“

P2 Knowledge of maintenance managers (%)	Achieved	See EN 15628:2014
	Required	See EN 15628:2014, 5.3

”

“

P3 Skill of maintenance managers (%)	Achieved	See EN 15628:2014
	Required	See EN 15628:2014, 5.3

”

5 Modification to Clause 11, 'KPIs of Sub-function "Maintenance Engineering"'

In Table 6, replace lines E1 and E2 with the following:

“

E1 Capacity to develop maintenance engineering (%)	Cost of maintenance engineers	See economics of maintenance
	Estimated physical asset replacement value	The estimated amount of capital that would be requested to build the existing physical asset

“

E2 Incidence of maintenance engineering (%)	Cost of maintenance engineering	See economics of maintenance
	Total maintenance cost	See M17

“

6 Modification to Clause 12, 'KPIs of Sub-function "Organization and Support"'

In Table 7, replace line O&S5 with the following:

“

O&S5 Maintenance people on shifts (%)	Maintenance people on shift	Maintenance people working permanently on shift
	Total maintenance personnel	See O&S2

“

7 Modification to Clause 13, 'KPIs of Sub-function "Administration and Supply"'

In Table 8, replace lines A&S1, A&S2, A&S3, A&S4, A&S7, A&S8, A&S9, A&S10, A&S11, A&S12, A&S13, A&S14, A&S15, A&S16, A&S17 and A&S25 with the following:

“

A&S1 Relative maintenance costs (%)	Total maintenance costs	See M17
	Asset replacement value	The estimated amount of capital that would be requested to build the existing physical asset

“