



Information Note

Machinery Regulation (EU) 2023/1230 impact on EN 81-20:2020

Approach, gap assessment and mapping of relevant references

Disclaimer

This Information Note is not providing any presumption of conformity to the new or modified Essential Health and Safety Requirements of the Machinery Regulation (EU) 2023/1230. It provides information for the purpose of conforming to these new or modified EHSRs using harmonized standards. Other ways to conform to these EHSRs are possible.

This Information Note becomes relevant after publication of EN ISO 8100-1:2026 by CEN.

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Acknowledgement

The technical content of this Information Note was developed by CEN/TC 10/WG 1 as part of the initiative on the introduction of EN ISO 8100-1:2026.

We sincerely thank the experts of CEN/TC 10/WG 1 for their valuable technical input and collaboration throughout the project and for their support in analysing and documenting the main changes between EN 81-20:2020 and EN ISO 8100-1:2026.

Introduction

The new or modified Essential Health and Safety Requirements (EHSRs) of the Machinery Regulation (EU) 2023/1230 (MR) will apply also to lifts falling into the scope of the Lifts Directive 2014/33/EU (LD) as of 20th of January 2027 where the relevant risks exist and are not dealt with by the Lifts Directive.

The EN ISO 8100-1:2026 covers the EHSRs of the MR as indicated in its Annex ZA 1.3.

Experts of CEN/TC 10/WG 1 have analyzed the differences between EN 81-20:2020 and EN ISO 8100-1:2026 to identify the additional requirements in EN ISO 8100-1:2026 which need to be considered in addition to requirements from EN 81-20:2020 to cover the new or modified EHSRs of the MR. Some of the modified EHSRs are covered by EN 81-20:2020 already.

The EN ISO 8100-1:2026 does NOT provide presumption of conformity under Lifts Directive 2014/33/EU before its reference is cited in the EU Official Journal in support of the Lifts Directive.

Approach

In order to give manufacturers sufficient time to adapt their products to the revised version of harmonized standards, it is usual practice to defer the withdrawal of the references of the superseded standard EN 81-20:2020. This means that manufacturers could continue using the superseded standards throughout the transition period. However, they would need to combine them with parts of EN ISO 8100-1:2026 to cover the new or modified EHSRs as set out below.

To cover the new or modified EHSRs of the MR, the following additional requirements of EN ISO 8100-1:2026 must be considered in addition to EN 81-20:2020:

- EN ISO 8100-1:2026 clause 4.10.1.1.5;
- EN ISO 8100-1:2026 clause 4.10.1.1.6;
- EN ISO 8100-1:2026 clause 4.12.4;
- EN ISO 8100-1:2026 clauses 6.2.2 g); 6.2.4 k) 7); 6.2.4 v) and 6.2.4 w);

Gap Assessment

- The following MR EHSRs are new or modified and they apply where relevant risks exist and the LD does not address them.
- This table shows the impact of each EHSR with respect to EN 81-20:2020

EHSR MR	Impact with respect to EN 81-20:2020
1.1.2 (e)	Covered by additional reference to EN ISO 8100-1:2026 clause 6.2.4 w)
1.1.6 (b)	Already covered by EN 81-20:2020 clauses 5.2.3.2, 5.2.6.3.2.1, 5.2.6.3.2.2, 5.2.6.4.1.2, 5.2.6.4.2, 5.4.6.1, 5.12.1.5.2.3 & Annex F
1.1.6 (f) & (g)	‘Fully or partially self-evolving behaviour or logic’ is not covered in this information note.
1.1.9	Covered by additional reference to EN ISO 8100-1:2026 clauses 4.10.1.1.5, 4.12.4, 6.2.4 k) 7) and 6.2.4 v)
1.2.1 (a), (d), (f)	Covered by additional reference to EN ISO 8100-1:2026 clauses 4.10.1.1.5, 4.10.1.1.6, 6.2.2 g) and 6.2.4 k)
1.2.1 (a bis), (b bis), (c bis)	‘Fully or partially self-evolving behaviour or logic’ is not covered in this information note.
1.2.1 (c ter)	Covered by additional reference to EN ISO 8100-1:2026 clause 4.10.1.1.5
1.2.1 Wireless control	Already covered by EN 81-20:2020 clauses 5.9.2.5, 5.10, 5.11, 5.12, Annex A
1.2.6	Already covered by EN 81-20:2020 clauses 5.9.2.5, 5.10, 5.11, 5.12, 5.6.2.1.4.3, 5.6.5.9.1, 5.6.5.9.2, 5.6.6.7, 5.6.7.9, 5.6.6.2 & Annex A
1.3.7	Already covered by EN 81-20:2020 clauses 5.9.1.2, 5.2.5.5, 5.4.7.4, 5.6.2, 5.5.7, 5.6.2.1.6.3, 5.6.2.2.3 g), 5.9.2.3.1 a) 1), 5.9.2.3.1 a) 3) & 5.9.3.2.6.6 b)
1.6.2	Already covered by EN 81-20:2020 clauses 5.2.1.4, 5.2.1.5, 5.2.2, 5.2.3, 5.2.4, 5.4.8, 5.2.6.3.2, 5.2.6.4.1.2, 5.2.6.4.2, 5.2.6.4.3.1, 5.2.6.4.3.3, 5.2.6.4.4.2; 5.2.6.4.5, 5.2.6.4.6, 5.2.6.6.4, 5.2.6.7.1.1, 5.6.3.2 & 5.6.4.2
1.7.1	Already covered by EN 81-20:2020 clauses 5.1.2, 5.2.4, 5.3.6.2.1.1

Annex

To support a better understanding of EN ISO 8100-1:2026 clauses in the context of EN81-20:2020, and only for purely illustrative purposes, the relevant EN ISO 8100-1:2026 clauses have been rewritten using references to EN81-20:2020 clauses:

EN ISO 8100-1:2026 clause 4.10.1.1.5.

The lift and the lift components, capable of connectivity to external equipment:

- which is not powered by the main switch as per EN 81-20:2020 clause 5.10.5.1 or by a supply disconnecting device as per EN 81-20:2020 clause 5.10.5.3; and
 - which is not located in a machine room, a pulley room, a machinery cabinet or the well as per EN 81-20:2020 clause 5.2.1.1;
- shall be in accordance with ISO 8102-20:2022 Clause 5 and Clause 6.

EN ISO 8100-1:2026 clause 4.10.1.1.6.

Security related event records (audit records) related to software as per the Table below shall be stored at least five years.

EN ISO 8100-1:2026 clause 4.12.4.

Software relevant for safety functions referenced in the Table below shall be identified. When replacement of software is possible, identification information shall be available on demand. Software identification shall be available in human readable form, either by a built-in system or by an external tool. If this external tool is a special tool, it shall be provided with the lift.

EN ISO 8100-1:2026 clauses 6.2.2 g); 6.2.4 k) 7); 6.2.4 v) and 6.2.4 w)

The instructions shall include at least the following information:

- configuration record of parameter settings of software relevant for safety functions referenced in the Table below;
- specific instructions for verification of the safety functions listed in the Table below.

Annex

ISO 8100-1:2026 table 25 with EN 81-20:2020 references

ISO 8100-1:2026, Table 25		EN 81-20:2020	ISO 8100-1:2026, Table 25
Clause	Function	Clause	Functional test procedure needed?
4.3.9	Locking and emergency unlocking of landing and car doors	5.3.9	No
4.4.2.2.1 c)	Prevent car falling during loading/unloading in case handling device is not included in the rated load (not more than 20 mm)	5.4.2.2.1 b)	Yes
4.4.2.2.2 e)	Prevent car falling during loading/unloading in case car size as per Table 7 (not more than 120 mm)	N/A	Yes
4.6.2	Safety gear and its tripping means	5.6.2	No, unless operated by electrical means
4.6.3	Rupture valve	5.6.3	Yes, if other means than bypass valve are used
4.6.4	Restrictors	5.6.4	No
4.6.5	Pawl device	5.6.5	Yes, when pawl device is used for preventing unintended car movement downwards
4.6.6	Ascending car overspeed protection means	5.6.6	Yes
4.6.7	Protection against unintended car movement	5.6.7	Yes
4.8.1	Car and counterweight buffers	5.8.1	Yes, if test is done at high speed
4.11.1.5	An earth fault in a circuit in which there is an electric safety device,	5.11.1.4	Yes
4.11.2	Electric safety devices	5.11.2	Yes, for devices listed in Annex A

ISO 8100-1:2026, Table 25		EN 81-20:2020	ISO 8100-1:2026, Table 25
Clause	Function	Clause	Functional test procedure needed?
4.11.2	Electric safety devices including electronic components	5.11.2	Yes, for devices listed in Annex A which are safety components (certificate).
4.12.1.1.3	Stopping accuracy	5.12.1.1.4	No
4.12.1.2	Load Control	5.12.1.2	No
4.12.1.3	Limiting the speed of the lift machine in case of reduced stroke buffer	5.12.1.3	Yes
4.12.1.6	Control of emergency electrical operation	5.12.1.6	No
4.12.1.7	Protection for maintenance operations	5.12.1.7	No
4.12.1.8	Landing and car door bypass device	5.12.1.8	No
4.12.1.10	Electrical anti-creep system	5.12.1.10	No
a)			
4.12.1.11	Stopping devices	5.12.1.11	No
4.12.1.12.2	Additional electric safety device for automatic rescue operation	N/A	Yes
4.12.2	Final limit switches	5.12.2	No
4.12.3	Alert initiation device and intercom system	5.12.3	Yes
4.12.1.1	Normal operation	5.12.1.1	No