

ERA activities on Energy Measurement Systems (EMS) in the field of standardization and status on cybersecurity

ERESS FORUM
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1. *Overview and legal basis for ERA*
2. *Energy Measurement Systems (EMS) in the field of standardisation*
3. *Status on cybersecurity*

ERA is working on the points of EC mandate on top of the study:

- Energy saving measures.
- Shortening the TSI texts by reducing details of technical provisions and creating flexibility for compliance.
- Update of referred standards in TSIs.
- Cybersecurity.

ERA TWG on Standardization launched the Ad_Hoc group on the revision on EMS and standard EN 50463.

ERA is working together with the cybersecurity experts of Europe's Rail Joint Undertaking to develop the necessary cybersecurity requirements in TSIs.

The work of the ad hoc group was:

- revision the TSI clauses (in Loc&Pas and ENE TSIs) considering the draft EN 50463 series standard.
- Identification of contradictions with the TSI clauses.
- Categorisation of the each of the standards in the series as mandatory / harmonised depending on the TSI clauses.
- Assessment coherency of the TSI clauses/EN 50463 series with the ongoing cybersecurity activities on EMS.

5 meetings were held with representatives of the sector including ERJU cybersecurity experts and experts from the CENELEC WG 37 for EN 50463.

As a result of the Ad-Hoc group activities, clauses of LOC&PAS TSI were updated and also the references to EN 50463 considering the prEN. This exercise also included streamlining the TSI through eliminating the reference to this standard as the harmonised standard gives itself presumption of conformity to TSI (as acknowledged in Annex ZZ standard).

Feedback to CENELEC WG 37 for EN 50463 was also given on time for the consultation process of the prEN.

With this update, the LOC&PAS and ENE TSIs already include improvements to verify that:

- the systems go through metrological verification,
- the systems are properly installed on-board and work properly,
- the metrological requirements are considered in rolling stock maintenance plans.

ERA has also reopened on 7th May the Topical Working Group (TWG) on Interfaces Rolling Stock/Fixed Installations to tackle Change Requests from the sector, initially for the interface with ENE subsystems. This will be the forum to address the relevant recommendations of the AS-03 study for the LOC&PAS and ENE TSIs.

ERA launched last 8th May **the Topical Working Group (cybersecurity ERA Technical Documents)** to adopt [two of the ERJU cybersecurity specifications](#) into ERA Technical Documents (TDs).

- SP-SEC_Secure Communication Specification_1.1_Released.pdf
- SP-SEC_Shared Cybersecurity Services Specification_1.1_Released.pdf

This process is to be concluded at the beginning of summer 2026. This will allow to have a database of cybersecurity requirements which ERA will use to make reference to from the TSIs (TSI update recommendation 2026).

With regards to the ENE TSI, on top of discussions in the mentioned ERA Ad-hoc group, joint sessions have been held with ERJU + CEN/CENELEC to study inclusion of cyber requirements in the standard.

- It is pending the review of PrEN 50463 and the identification of which requirements are acceptable versus insufficient, and translate gaps into ENE TSI draft 2026.



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