



Update from ERA

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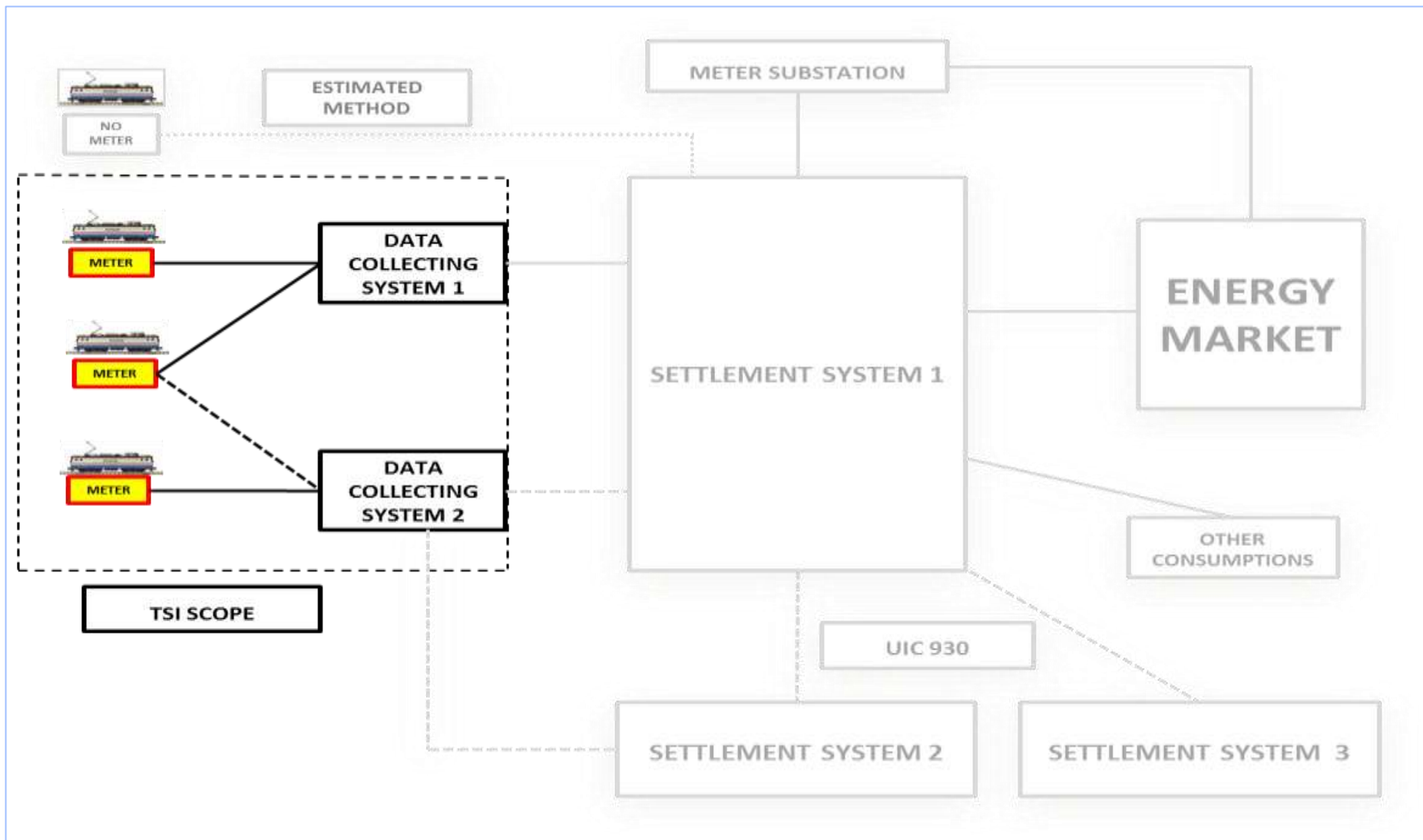
- 1. Current status Legal framework**
- 2. TSI ENE / LOC&PAS**
- 3. Closure of the open point in ENE/LOC&PAS**
- 4. Settlement system. Responsibilities**

- Commission **Delegated Act** on TSIs (Technical Specifications for Interoperability)
 - Adoption ~ June 2017
 - Published ~ September 2017

- fpr EN 50463 approved 31/03/2017

- TSIs vote ~ Jan 2018

TSIs: current status: LOC&PAS and ENE TSI



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LOC & PAS TSI: ON-BOARD EMS

- ❑ *4.2.8.2.8 of LOC & PAS TSI contains the **requirements** for on-board **EMS** intended to produce and transmit the **CEBD** to an on-ground energy **DCS**.*
- ❑ **APPENDIX D - ON-BOARD ENERGY MEASUREMENT SYSTEM**

Legal part, article 3:

*The fitment of the on-board EMS is **mandatory** for **new, upgraded and renewed** vehicles intended to be operated on **networks** equipped with the on-ground energy DCS as defined in ENE TSI.*

ENE TSI:

On-ground energy data collecting system (4.2.17)

- ❖ *The on-ground energy DCS shall **receive, store and export CEBD** without corrupting it. The DCS is **not in** the scope of assessment of **NoBos** (Table B.1)*

Open point:

The specifications for the energy measuring system related to the interface **protocols** between on board-on ground and transferred **data format**.

Groups working on closing the open point:

- › ERA TASK FORCE
- › CENELEC GROUP - EN 50463

Closure of the open point in TSI ENE / LOC&PAS

fpr EN 50463 approved 31/03/2017

EN 50463-4:2017 .

To set out the communication between the EMS and a user on ground the standard defines:

- › the EMS set-up;
- › the application services between EMS and a user on ground (**service layer**)
- › the data structures that the application services use (**data layer**)
- › the message mechanism for implementing the application services (**message layer**);
- › the **application protocols** for supporting the message mechanism;
- › the **communication architecture** for supporting the application protocols;
- › a set of **security mechanisms** for securing the application services.

The **‘energy settlement system’** is the **process** of acquisition and allocation of energy data.

The **‘energy billing system’** is the **financial transaction** inside the supply chain, based on accountancy, taking data collected from energy settlement system.

Note: both definitions come from:

[ERA-INTEROP-ENE-Final Report Traction Current Settlement System.pdf](#)

ENE: settlement system: responsibilities

- › Commission Regulation (EU) 1301/2014 in the article 9 (4) and in the point 7.2.4 of the Annex contains the obligation for Member States referring to on-ground settlement system
- › **Member States** shall ensure that a settlement system capable to receive data from a DCS and accept it for billing is implemented.
- › Time Schedule:



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