



INTERNATIONAL UNION
OF RAILWAYS

IRS 90930: Traction Energy Settlement and Data Exchange

Latest updates

Daniele Arena
ERESS Forum, Luxembourg
15/06/2023

UIC IRS 90930 WG: Timeline

2016-2017: informal meeting to discuss the update of UIC Leaflet 930 (2009)

2018-2019: Formal UIC opt-in project "Revision Leaflet 930"

October 2020: Publication of IRS 90930

2021-2023: "IRS 90930 Maintenance" opt-in Project

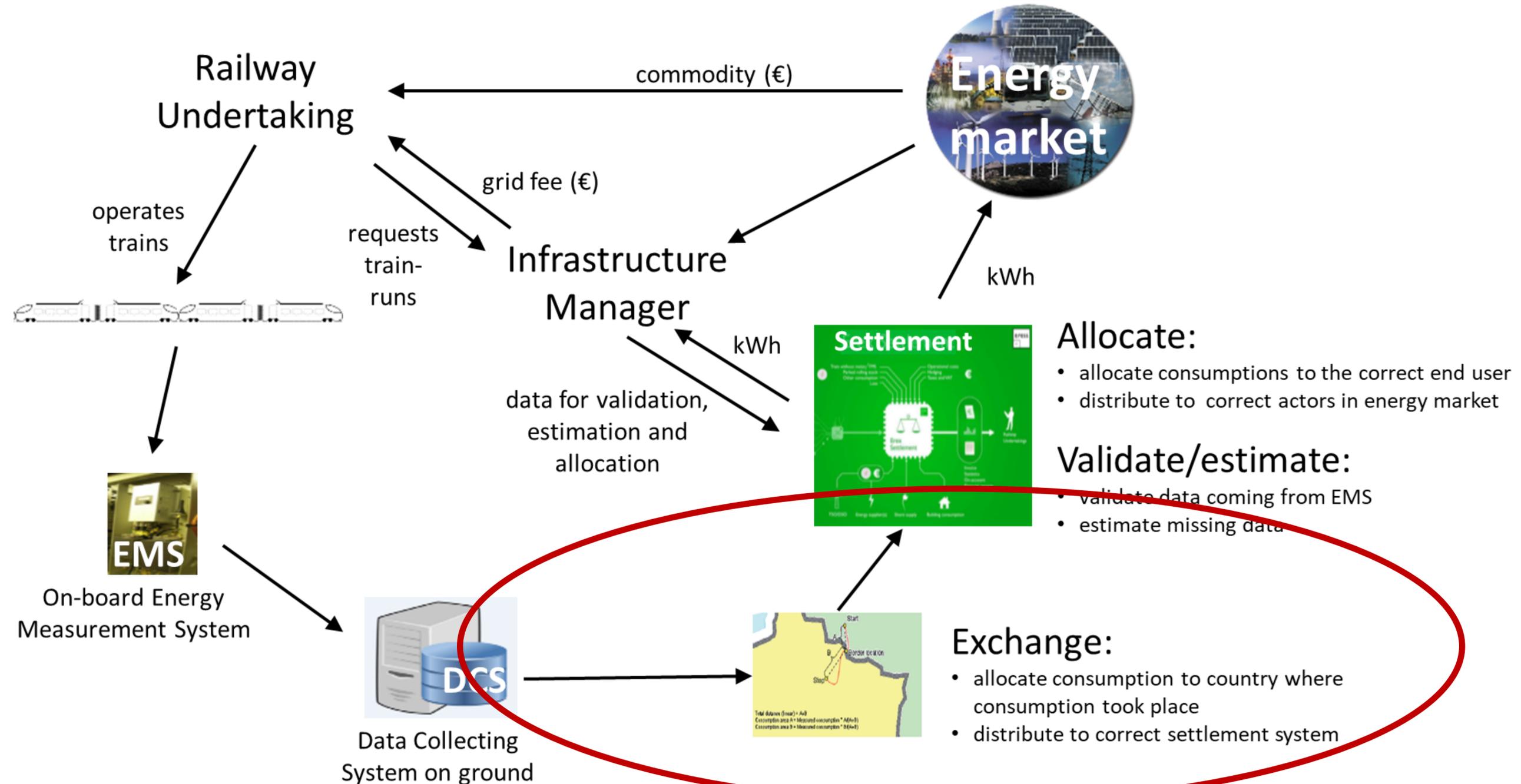
2024-2026 (TBC): IRS 90930 Maintenance Project II

UIC IRS 90930 WG Members

There's still time to join for the 2024-2026 Maintenance Project

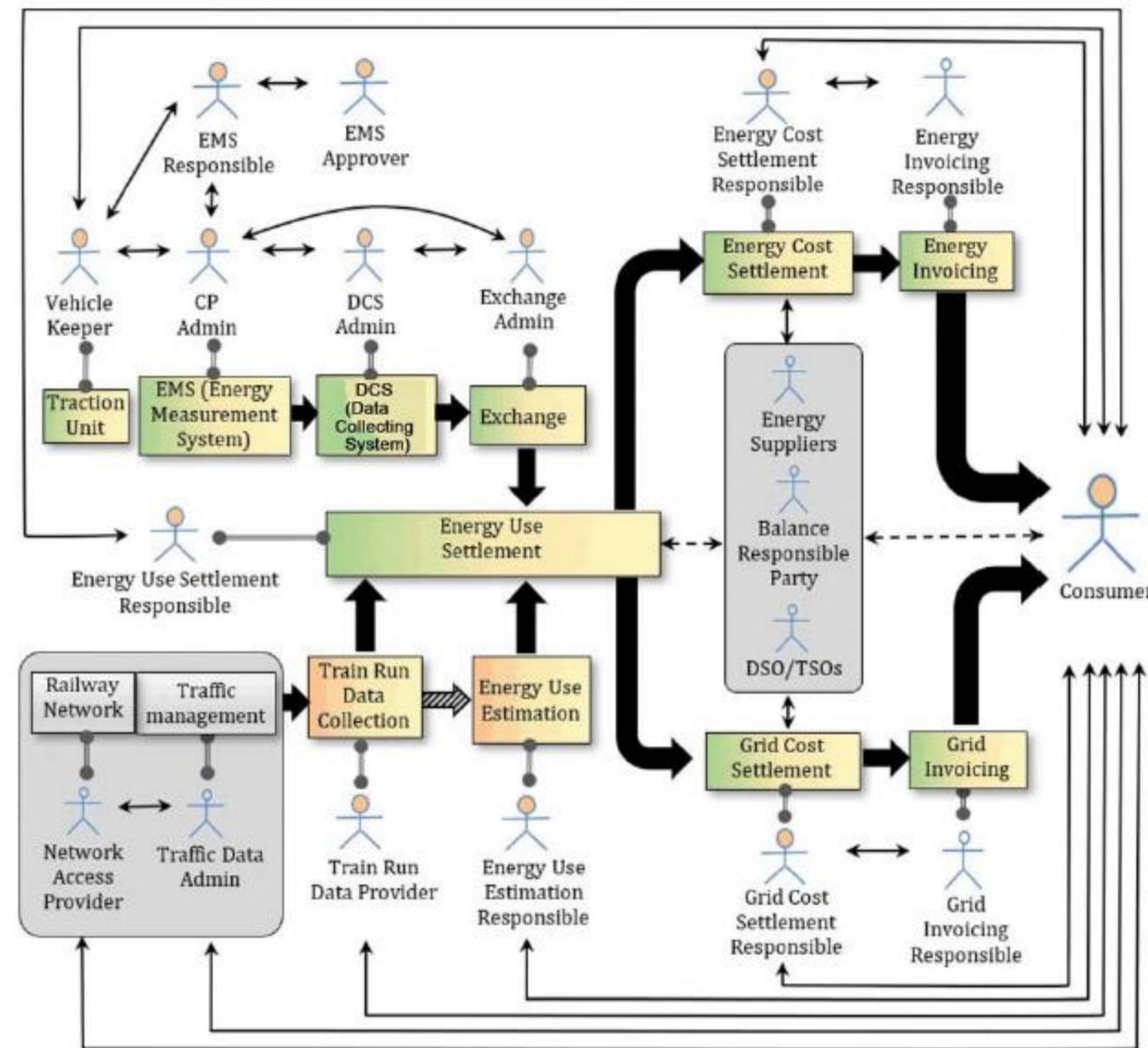


IRS 90930: Area of Action



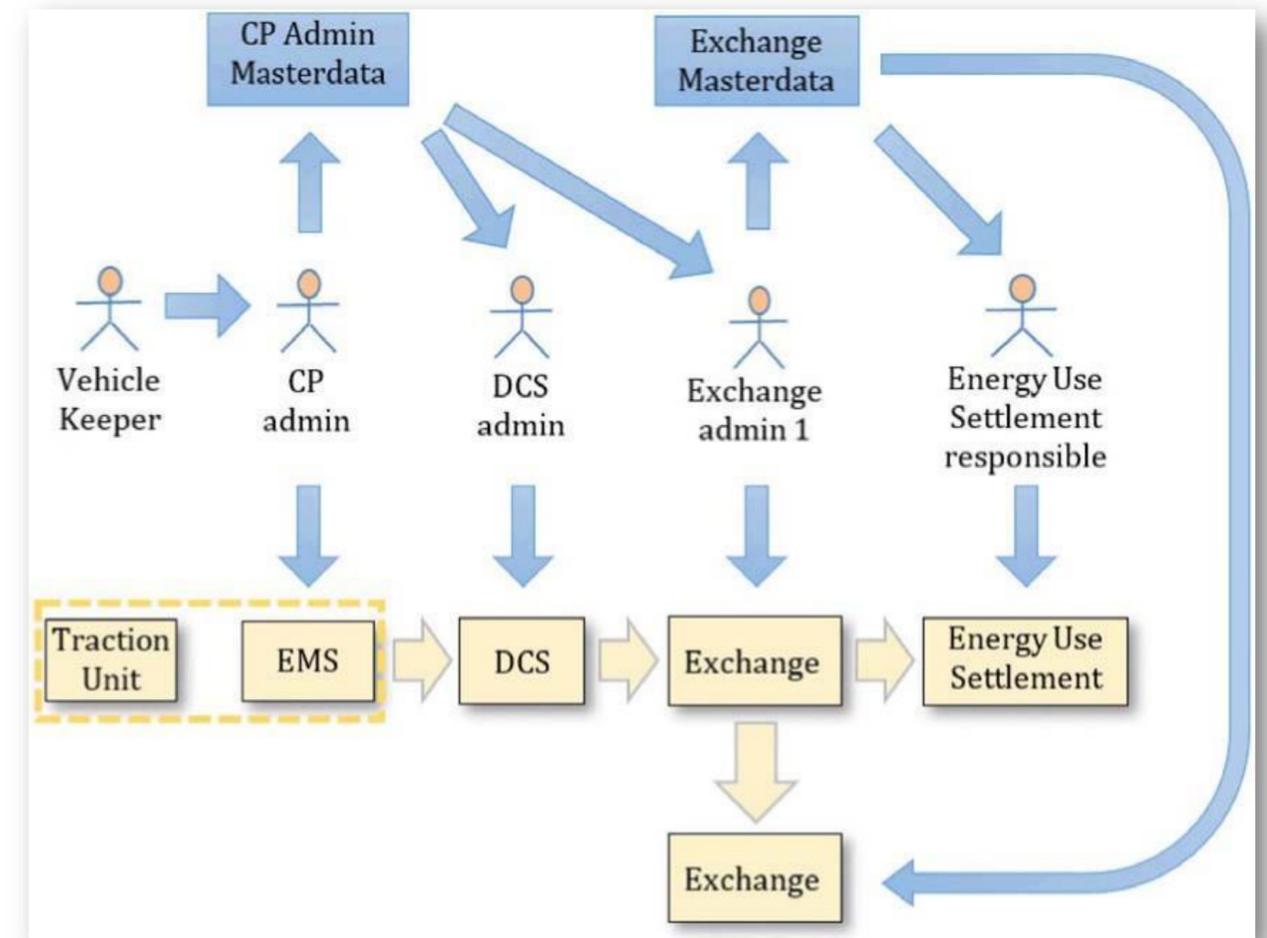
IRS 90930: Roles and Functions in Railway Energy Settlement

- Role Model + Description of Roles and Functions



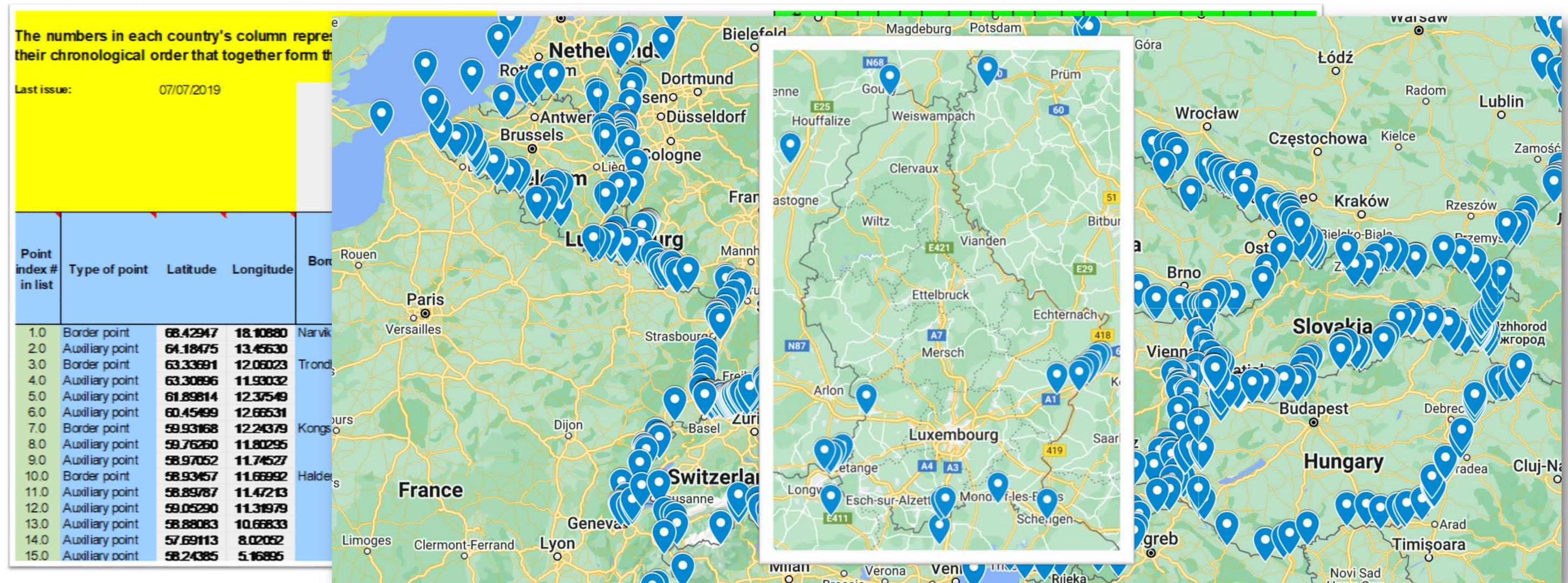
IRS 90930: Data and Data Transfer

- Energy Metering Data
- Masterdata



IRS 90930: Border crossing points

- A list of points for border crossing between countries (related to energy consumption)



IRS 90930 in Sector Declaration

- Sector Declaration defines how the sector commits to be compliant with European Regulation (EC/2018/868)
- It has 4 commitments for Railway Undertakings and 5 commitments for Infrastructure Managers
- Published on 10th November 2020
- Extract from IM commitments:
 - IM shall process data fast in DCS and exchange-function of Settlement and forward data without further delay in accordance with clause 5.4 of IRS 90930:2020.
 - International data exchanges will be in accordance with IRS 90930:2020.
- See https://uic.org/com/enews/article/eu-railway-sector-declaration?page=modal_enews
- **IRS 90930 is free to download:** <https://shop.uic.org/en/3-exchange-of-energy-consumption-data/9565-traction-energy-settlement-and-data-exchange.html>



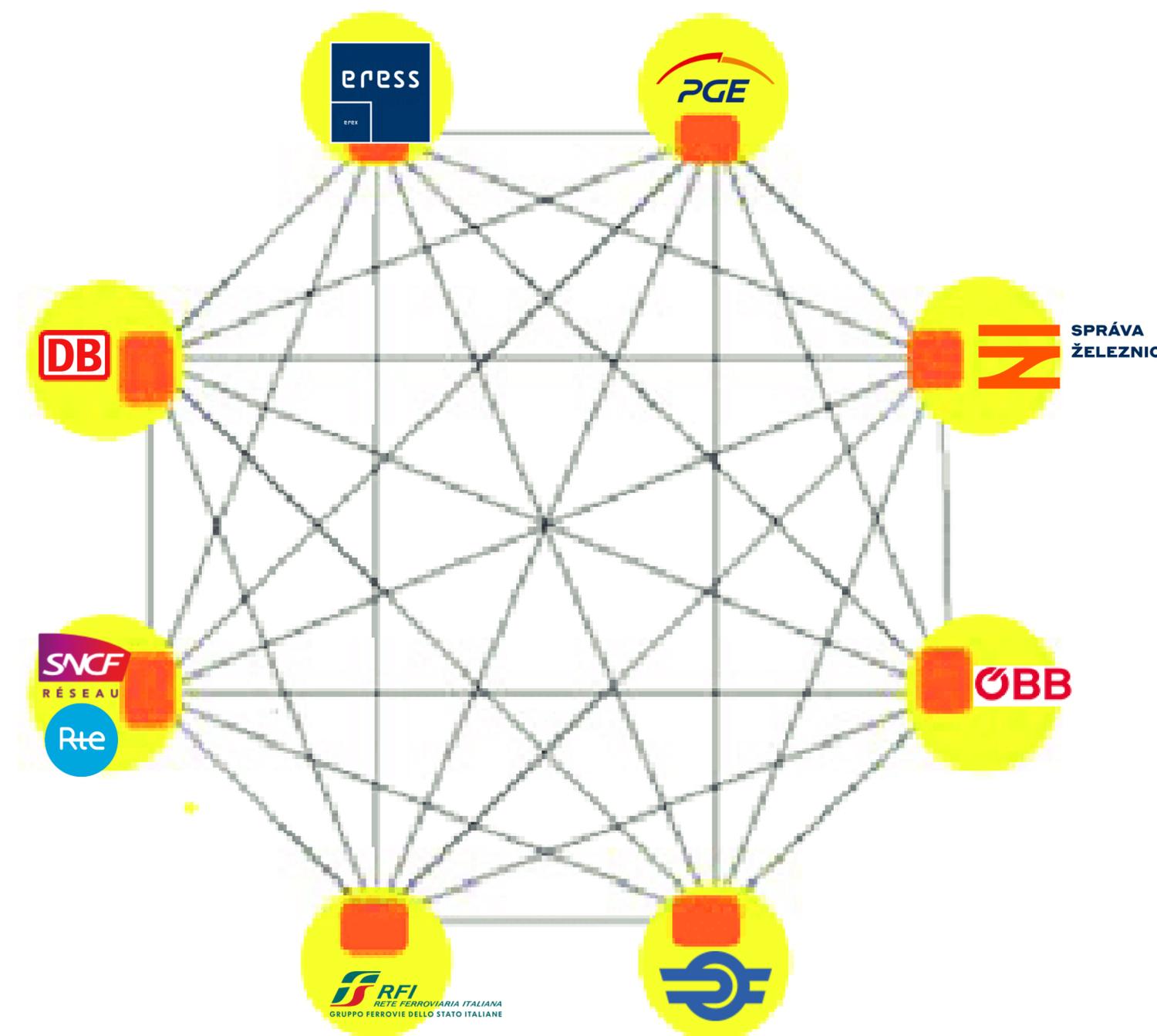
IRS 90930 Maintenance WG

- The WG scope is to address
 - Operational issues (e.g. polygons update, use of Masterdata)
 - Implementation issues (e.g. migrating from UTILTS to XML or starting up an Exchange)
 - Development issues (e.g. new functionality in IRS)
- This includes WG members sharing their status and issues



IRS 90930 Implementation

- Most WG members are busy with IRS 90930 implementation
- Several are at the testing phase
- Some flows are moving into production phase
- Implementation issues encountered are discussed
- If clarifications or additional specifications are needed, decisions are taken by consensus
- WG meetings are also an opportunity for bilateral discussions



Definition of technical details

- Addenda to the IRS 90930
- First one published in October 2021
- Second one to be published end 2023

Addendum to IRS 90930

EMS list in “Request” application services

This document is an addendum to UIC IRS 90930, “Traction Energy Settlement and Data Exchange”, available on the UIC ETF website. It provides clarification regarding the inclusion of a list of EMS in the payload of the “Request” application services defined in the IRS.

Second Addendum to IRS 90930: Content

- Language to be used: English
- Migration from UTILTS to XML
- Transfer of data for multiple EMS
- XML Data Content: additional specs
- Choice of Application Protocol: SFTP
 - Parameters
 - Folders and files: structure and naming
- Replacing and deleting data previously sent
- Request and response messages process

Prefix	Description
AUTCEBD	Automatic transfer CEBD
AUTRDBL	Automatic transfer Reading Block
REQCEBD	Request CEBD
REQRDBL	Request Reading Block
RESCEBD	Response CEBD
RESRDBL	Response Reading Block
AUTMDAT	Automatic Transfer Master Data
REQMDAT	Request Master Data
RESMDAT	Response Master Data
AUTEVST	Automatic Transfer Event Sets
AUTHRTB	Automatic Transfer Heartbeats
AUTEXLG	Automatic Transfer Exchange Logs
REQEVST	Request Event Sets
REQHRTB	Request Heartbeats
REQEXLG	Request Exchange Logs
RESEVST	Response Event Sets
RESHRTB	Response Heartbeats
RESEXLG	Response Exchange Logs



Topics on the agenda and recently addressed

- Review of Appendix A – Masterdata
- Review of Appendix E – Application guide: Exchange cases and methods
- Review of Appendix G – Error Codes List
- Sharing knowledge:
 - Methods of estimating consumption at Energy Use Settlement
 - Input from NoBos on EMS conformity assessment and reverification
- Next meeting: Vienna, 21-22 June



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THANK YOU FOR YOUR ATTENTION

Q&A

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BACKUP SLIDES