



TUTORIAL 4

PowerLine Communications for Smart Metering

Background

- is required: intellectual curiosity (but with no particular technical background)

Aim of the tutorial

- Give an overview about the use of PLC communication for Smart Metering in Europe
- Explain the most used PLC technologies for smart metering in Europe

Content

1. Introduction
2. Smart Metering (giving the power utility perspective)
3. Use of PLC for Smart Metering (pros and cons, broadband vs narrowband, advantages wrt to wireless, etc.)
4. Main NB-PLC standards targeted in Europe : METER AND MORE
5. Main NB-PLC standards targeted in Europe : G3 (G.9903)
6. Main NB-PLC standards targeted in Europe : PRIME (G.9904)
7. Field trials Figures
8. Conclusion

Expected benefits

Participants will gain an improved understanding of:

- What are PLC communication
- Why European DSO have mainly chosen PLC for their smart metering deployment.
- How PLC communications are a solution for smart metering
- Which are the most used communication technologies in European Smart Metering deployment
- What are the main technologies and differences between METER AND MORE, G3 and PRIME.

Who should attend

This tutorial is intended for:

- Project Managers and Grid experts
- People involved in Smart Metering, Smart Grid and Energy Management
- People working for meter manufacturers, SDOs and telecommunication companies

Support material

A copy of all the presentation material used in the tutorial will be supplied to delegates.

About the presenter(s)



Thierry Lys (thierry.lys@erdf.fr) joined ERDF in 2010 and developed the G3-PLC technology.

He is currently in charge of the communication part of the Linky tender (Smart Metering program for France) and he is also editor of the G3-PLC Alliance. Prior to joining ERDF, he ran its own company and worked for cellular industry.

Mr Lys holds an telecommunication engineering degree from ESIEE Paris and a MBA from University Paris 1 Pantheon-Sorbonne



Manuel Jesús de Tellechea (manuelj.tellechea@endesa.es) works for Smart Metering Solutions in the Network Technologies Dpt. in the Enel Group. He has worked for the Endesa Smart Metering project, mainly involved in the standardization activities of the Meters and More technology and innovation projects related with smart metering infrastructure. He is the Secretary of the Product Certification Committee within the Meters and More Association.

Mr. de Tellechea has a master degree in telecommunications from the UPM (Universidad Politécnica de Madrid, 1990) and a degree in Strategic Management in ICT (UPM, 2000)



Alberto Sendin (asendin@iberdrola.es) is telecommunication projects manager at the control systems and telecommunications division of Iberdrola in Spain. He has over 18 years' of experience in the telecommunications sector, and has taken responsibility of the transformation of the telecommunications network in Iberdrola in the last decade. He is founding member of the PRIME Alliance, and has an active role in it. Dr Sendin holds M.S. and Ph.D. degrees in telecommunication engineering from the University of the Basque Country, Bilbao, Spain. He is also a university professor.