

# IEEE P2030 Smart Grid Interoperability Standards Development Task Force Session

## TF3 Summary Report

Hosted by INTEL, Corporation, Santa Clara, CA

**IEEE Standard 2030 Guide for Smart Grid Interoperability of Energy Technology and Information Technology operation with the Electric Power System (EPS) and End-Use Applications and Loads**

**Stefano Galli – Task Force 3 Chair**

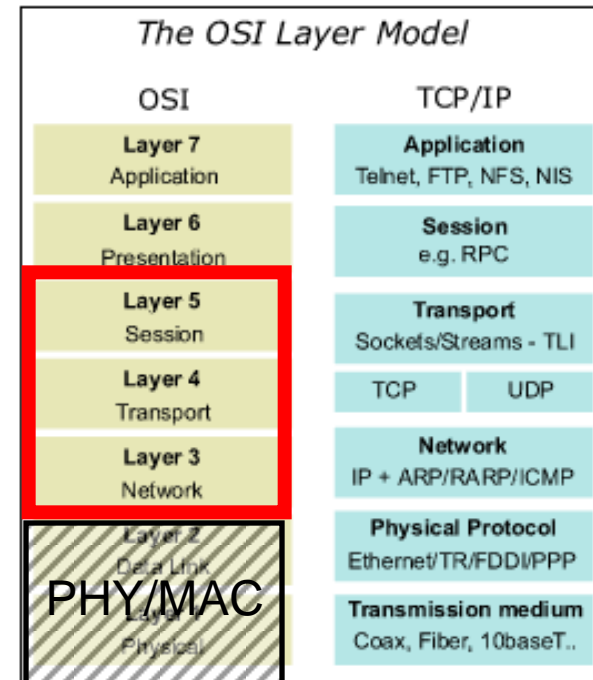
**Bob Heile – Task Force 3 Chair**

**Ben Kroposki – Task Force 3 Recorder**



# TF3 - Communications

Who defines attributes of info? [TF1 or TF2]  
(Where, When, Who, What)



## TF3 -How-

- TF3 will be neutral to PHY/MAC standards used in the Smart Grid
- TF3 will describe layers above PHY/MAC and below Layer 6
- PHY/MAC standards are being developed by other groups
- Interoperability of electric power systems with end use applications and loads should be maintained regardless of the PHY/MAC

# TF3 - Communications

- Discussion on PHY/MAC for Smart Grid Interoperability
  - TF3 will not DEFINE any new PHY/MAC standards
  - TFs may provide requirements to PHY/MAC SDOs through liaisons
  - Leave choice to designer to pick what is best for the application depending on geography, scalability, requirements, latency, etc.
  - Between any two points in the Smart Grid, data will be transported over many PHYs.

PHY/MAC – physical and medium access control

# TF3 - Communications

- Rationale for using IP:
  - addressability
  - common datagram format
  - common transport
  - Security
  - communications across heterogeneous networking technologies
  - comm. across heterogeneous networking administration domains
  - prioritization
- Eventually an IP “light” may be desirable
- IEEE nor government can endorse proprietary communications protocol, but if they offer significant advantages to the development of the Smart Grid, this group should recommend SDO development of those proprietary technologies

# Task Force 3 - Communications

1. **Develop a Preliminary Guide Outline for Task Force**
  - a) **Started by looking and understanding the PAR**
  - b) **Discussed what OSI layers are within TF3 scope, layers 3-5**
  - c) **Consensus on maintaining neutrality with respect to PHY/MAC**
  - d) **Identified major advantages for IP as interoperability enabler**
  
2. **Develop Work Plan for Task Force**
  - a) **Familiarize with the latest NIST report**
  - b) **Work with TF1/TF2 on what information needs to be transmitted, from where to where, and with what requirements**
  - c) **Start identifying threat models**
  
3. **Time line (schedule) for Task Force**
  - a) **Timeline maybe premature to assess, but consensus on intent of meeting before October (July or September).**
  
4. **Make Task Force Assignments**
  - a) **Establish liaison with other groups**
  - b) **Start submitting documents**