

Workshop of the 64th IFIP meeting, 27-30 June 2013
Session 2 (on monitoring) – Felicita Di Giandomenico

- ❑ **GridCloud: Realtime infrastructure to monitor the smart power grid and host advanced power applications – Ken Birman**
 - Adopt a cloud approach to scalable and secure monitoring in “modern” power grid (state estimation)
 - Key design features: redundancy, integrated open-flow network routing scheme, ability to host different applications, consistency
- ❑ **External runtime monitoring for safety of embedded systems – Phil Koopman**
 - Adopt an external monitoring approach to guarantee autonomous vehicle safety
 - Key design features: minimally intrusive; independency; don’t need to build a system model
- ❑ **Realtime SEC&DEP monitoring: make it a bundle – Luigi Romano**
 - Adopt an approach that integrates security and dependability monitoring technologies/facilities (and beyond)
 - Key design features: many system levels monitored, richness of source data, sophisticated correlation analysis

Some issues mentioned in, or inspired by, the talks

- Specification of the safety/dependability/security property, also in relation to operational modes
- Consider evolution of this specification
- Filtering and correlate huge amount of data (possibly coming from a variety of monitoring infrastructures tailored to specific aspects) – implications on real-time
- Coverage estimation
- Heterogeneity of the data to correlate
- Trustworthiness of the source data – some redundancy
- Dependability, safety and security of the monitoring infrastructure itself
- Intrusiveness aspects
- Social, economical and political aspects