Talk abstracts of the 2017 Workshop on Security Frameworks "Cybersecurity through Regulations"

Marcello La Bella, Dirigente Polizia Postale di Catania: "Il sistema nazionale anticrimine informatico e la Polizia Postale e delle Comunicazioni"

Rosario Giustolisi, IT University of Copenhagen, Denmark: A Security Analysis of the Ticket Inspection Ceremony in Denmark

Abstract. We examine the inspection ceremony for the mobile transport ticket in Denmark. We discuss three potential security weaknesses that are ascribable to both human and computer components of the ceremony. The main vulnerabilities are due to the design choices of how the visual inspection ceremony is organised and the lack of information that is stored into the ticket barcode. Those vulnerabilities are significant as attacks can be automated, and rather modest skills are necessary to break the inspection ceremony. We state four principles that aim at strengthening the security of inspection ceremonies and propose an alternative ceremony whose design is driven by the stated principles.

Gianpiero Costantino, CNR Pisa: "Trade-Off Analysis of Safety and Security in CAN bus communication"

Abstract. While safety is thoroughly applied to the development of transportation systems, one of the prominent challenges of the last years is the integration with security concepts, required by the ubiquitous connectivity and increased value in data. A joint safety/security design can expose sometimes to trade-offs, since safety and security requirements may not match perfectly or even be incompatible to a certain degree. On the other hand, well-known solutions or best-practices in one field may create new issues in the other. This paper analyses an example of this joint design, that is the combination of integrity with encryption considering the constraints of a typical CAN network and real-time traffic. The analysis is presented considering different attacker models, packet fragmentation issues and the residual probability of error of the combined scheme.

Luca Distefano, Università di Catania: GDPR vs. Codice Privacy

Abstract. Privacy is one of the main aspects of our society. While personal data is needed to provide customised services to a sinlge user, data processing is regulated to preserve people's privacy. The European Directive 95/46/CE is the legislative document introducing rules for data collection and processing over the entire European Union, contrarily to the inhomogeneous laws that are currently in place in the various member states. In particular, Italy is regulated by the "Codice Privacy" for the time being, and this talk will unfold a compare-and-contrast effort work over the two regulations.

Sergio Esposito, Park Smart: *ENISA's Cybersecurity guidelines and the GDPR.*

Abstract. The European Network and Information Security Agency recently published a detailed set of controls for digital service provides to attain cybersecurity. It consists of 28 controls, each with three levels of security measures to setup to address the control. This talk investigates to what extent and how such a big documents could help investigate compliance to the GDPR as such.