# Hybridization of Open Standardization Models: Typologies and Competition Law Concerns

### WELCOME TO THE SOFTWARE ERA

- → "Software is everywhere" e.g. Internet of Things
- → Convergence of ICT sectors e.g. IT and Telecom Networks
- ⇒ End of traditional allocation of IPRs (patents/hardware, copyright/software)

- >> Impact of 'softwarization' in hardware-based standardization settings
  - = increasing role of open source in the development of the standard

### **HYBRIDIZATION? STANDARDS? "WAIT...WHAT?!"**

#### Different standardization and IP instrumentalization approaches:

>> Consensus-based formal standards - e.g. telecoms networks

Open innovation / Open standardization / Semi-open IPR exploitation (FRAND)

>> Open Source-based informal standards - e.g. information technologies

Open innovation / (Semi) Open standardization / Semi-open IPR exploitation

#### INTERACTIONS BETWEEN STANDARDIZATION MODELS

- **1. Vertical integration** = "now I also develop software implementations"
- 2. Competition and exclusion = winner-takes-all
- 3. Coexistence by specialization by technical sector (horizontal)
- 4. Coexistence by specialization by value chain stage (vertical)

### **CURRENT COMPETITION LAW CONCERNS**

**101 TFUE** = horizontal agreements = "innovation cartels"

Cases: X/Open Group; ETSI/DVSI.

**102 TFUE** = abuse of dominant position = <u>abusive</u> exploitation of IPRs

Cases: Rambus; Huawei v. ZTE.

### **NEW CONCERNS FOR NEW DYNAMICS?**

#### **Hybridization - Vertical integration**

- Consensus-based SDOs also develop technical reference implementations
- Technical specifications + open source-based reference implementations

#### Potential competition relevant effects - 'anti and pro': Keeping the balance

- → Internal deceptive behaviors = "factions' wars"
- → Which competition effects from the open source reference implementation?
- → Ex-post market practices e.g. forking: a rightful risk

## Cool things to take back home...

- → Re-defining (re-tooling) the concept of the standard
- → "Clash of IP cultures" = exclusion (e.g. SEPs) vs. distribution (e.g. OSS)
- >> Rethinking current standardization legal frameworks:
- 1. Public policy: Role of policy makers? Legislator? Public enforcer?
- 2. Private policy: New IPR policies? New standard-focused OSS licenses?

### **iMUCHAS GRACIAS!**

(This research has been co-carried with Vicente Zafrilla Díaz-Marta, this would not have been possible without him)