EDUCATION ABOUT STANDARDIZATION

An ETSI perspective

Tell me and I forget.
Teach me and I remember.
Involve me and I learn.
(Benjamin Franklin)

- **Why 'Education about Standardization' (EaS)**

- **What we have done**
  - including a glimpse on *a very short and simple entry level lesson*
- **What we do**
- **What we will do**

Why 'Education about Standardization' (EaS)

- **Today's Master and PhD students are decision makers of tomorrow**

- **Influence future decision makers to anchor in their mind:**
  - that standardization is a key success factor in ICT
  - that ETSI is the place to go

- **EaS is a long term investment**

- **Visits/guest lectures (Hermann Brand)**
  - Bradford University, Queens University Belfast, Surrey University
  - ICTLabs Summer School (with KTH Stockholm)
  - Uni. Luxembourg (with ILNAS) Certificate programme "Smart ICT for Business Innovation"
- **Target audience: *master and PhD engineering students, and professionals (Uni. Lu)***
- **Observations and findings**
  - There is <u>some knowledge</u> about '*standardized technology*', e.g. 3GPP
  - There is <u>little knowledge</u> about '*standardization*'
  - There is quite much bias and misconception, e.g. governmental bureaucracy limiting innovation, dictates of big industry, too bossy, …

How to make them listen?
How to create interest?

**Don't come up with *definitions and procedures* in the first place!
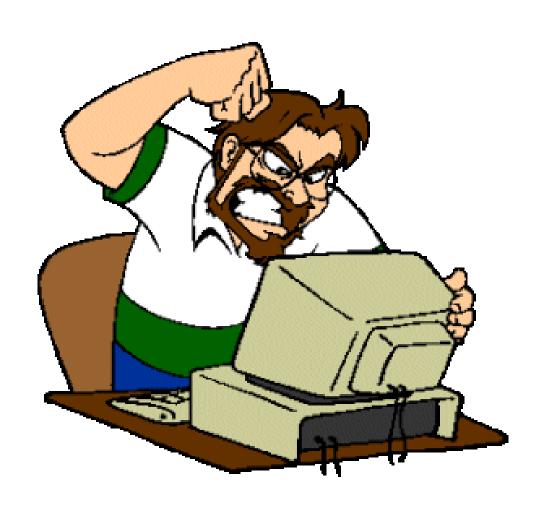Start from THEIR point of view!**

6

Without standards –
Your devices would not work!

Without standards –
Your devices would not work!

You could not afford them!

You could not buy them!

Because

- **Standards ensure interoperability of devices**

- **Standardization is a tool to make markets as large and homogenous as possible to allow for economy of scale**

- **Compliance with standards in support of regulation/legislation implies the right to place a device on the market, that is to offer it for sale**

The opportunity

- **Economic growth is desperately needed in the EU. Innovation and business development is high at the political agenda**
- **There is a trend towards *curricula combining engineering and entrepreneurship***

- **Opportunity to embed lessons/exercises about standardization**

- **Develop a module on education about ICT standardization consisting of several elements to be used in a flexible manner**
  - Suitable for engineering & business undergraduate courses
  - Elements also relevant for MBA level or law degree

What we do – STF 515

- **EC-funded project to develop complete course**
  - 250+ slides split into sub-modules
  - Textbook
  - Lecturer notes & exercises
  - Jan 2017 – mid 2018
- **Subject areas**
  - What's a standard, why do we make standards, who makes them etc.
  - Statutes, bylaws, rules of order with examples (not promoting a specific SDO!)
  - IPR and legal issues
  - Business/market development through standardization (incl. research and innovation)
  - Standardization in support of regulation
  - Micro-economic impact of standardization: impact on a firm
  - Macro-economic impact of standardization

What we will do

- **Continue giving guest lessons/seminars**
- **Clarify formal requirements/process for accreditation**
- **Develop teaching material step by step**
  - Slides, slides with notes, scripts, [book chapters, book]
- **Encourage takeup**
  - Widen review group to include those who teach something about standardization – encourage them to use our work

Thank you for your attention!