

# Today's Standards – Tomorrow's Networks

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*"Standards are not only technical questions. They determine the technology that will implement the Information Society, and consequently the way in which industry, users, consumers and administrations will benefit from it."*

You can hardly put it more to the point than this quote (from a European Commission document). In particular, this holds for communication networks, where compatibility standards are a sine-qua-non.

All networks are based on standards. Some of them are proprietary, the vast majority have been developed by a standards setting body (SSB; either a 'formal' entity such as ISO or ETSI, or a standards consortium such as W3C or OASIS). Future networks will to a considerable extent be based on standards under development today (or in the near future). But is today's standards-setting environment adequately equipped for this task?

To answer this question some important characteristics of the maze of SSBs that collectively develop standards for networking need to be discussed. Some of the more burning ones include:

- Competition and co-operation  
Around 300 standards consortia and hundreds of 'formal' bodies are covering the ground. Competition and overlap of activities are unavoidable; companies are complaining about the number of bodies they have to members to not miss potentially important developments. There is an urgent need for improved co-ordination and co-operation if future problems are to be adequately addressed. How could this be achieved?
- Inclusion of all stakeholders?  
Today's standards working groups (WGs) are typically dominated by large vendors and service providers. In particular, users, consumers, and SMEs are grossly under-represented. Is this a sustainable situation in the light of the challenges to be expected? And if it isn't, what could be done to improve it?
- What about Intellectual property Rights (IPR)?  
While this is rather more a legal issue, it has also major ramifications for the technical work. SSBs need to find means to adequately deal with the issue if they want to prevent future Rambus and Qualcomm cases. Are royalty free standards the way forward? Or is ETSI's approach to cap royalties a better solution?
- 'Open' standards  
What exactly characterises an open standard? This may look like an academic question, but many procurement specification mandate use of such 'open' standards. Also, EU Directives refer to them, so there may also be legal implications. Unfortunately, the current definition of the term has some severe shortcomings – for one, very few of today's standards would qualify. How can this situation be improved?