

Efkon

About Efkon

Founded in 1994, EFKON has focused on the domains of high speed infrared DSRC vehicle interfaces, contact-less smart card based transportation payment systems and multi-lane free flow electronic toll collection.

Today, EFKON AG is a leading provider of ITS electronic payment applications; multi-application central clearing house solutions; vehicle-to-vehicle, vehicle-to-roadside and roadside-to-vehicle communication systems; offering all major electronic tolling technologies such as satellite, CEN DSRC and ISO CALM; provides turn-key/end to end intelligent transportation, e-payment, traffic management, enforcement and traffic telematic solutions.

EFKON has grown rapidly, doubling in number of employees between 2003 and 2008 to exceed 250, before merging into a larger group of companies in 2009.

Efkon and standardization activities

From the foundation of EFKON it was clear that intelligent transport systems would have to be interoperable at an international level in order to enable vehicles to freely cross national borders. Therefore standardization was seen as the only way to work and develop products for ITS.

Efkon is very active in standardization, participating in a number of committees in bodies such as the Austrian national standards body, ETSI TC ITS and TC ERM, CEN TC 278, ISO TC 204 and the Car-2-Car consortium.

➤ *Standardization within EFKON*

EFKON senior management have consistently promoted the fact that standardization is essential to the company, to the development of the market, and that standardization activities are considered an input into marketing. This approach ensures the support of standardization activities even during difficult financial phases.

Standards need to evolve from the research phase to production and to the market. Standardization activities are therefore considered from a business view.

The very high level of involvement of EFKON in standardization is shown by the resources devoted to this task. Approximately 5% of the technical staff is dedicated to standardization activities. EFKON is active in 7 standards committees and attends an average of 25 standard meetings per year. The company is actively influencing the contents of standards, not merely a passive participant. If public funding such as EU FP6 or FP7 R&D projects, or Austrian national R&D funding was available it was considered as the opportunity arose.

ISO TC 204: Head of delegation and equivalent of 3 persons involved in WG16.

CEN TC-278: equivalent of two persons involved.

➤ *The objectives to get involved in standardization*

EFKON originally aimed to achieve combined ETSI/CEN/ISO standards, however this was not possible due to the different working procedures and communities involved in the different bodies. There was some disagreement in the industry on how the industry would develop and what technical solution would be more important. Even in Austria there was not always agreement between the two rival companies in this market.

It was the work within the standardization organisations, during the meetings and technical discussions, that enabled the participants to gain respect for each other. In the long run this generated better relations within the industry. Within the standard group the SME's gained most in the process and this led to:

- joint activities and projects between competitors
- constructive joint work
- work on hidden bugs in standards

Some recommendations on standardization

EFKON provided some suggestions and comments on their experiences in standardization:

- Guidelines on how to use specific standards are missing in the process. Standards committees should consider the development of these guidelines to help SMEs and others who implement and use the standards
- Stakeholder groups could be established and would be a strong factor in further development of the standards.

The different standard organisations are seen to have different functions rather than being direct competitors to each other in the field of standardization:

CEN/ISO is seen as standard enablers and this process is of course driven by the national standard organisations, where EFKON is also participating in the ON (Austrian Standard Institute).

ETSI is seen as essential for developing test standards, this is the one area ETSI is absolutely best within standard organisations. ("The test suites are absolute top")