

***International Workshop on “AUTONOMICS and legal Implications“, Berlin  
November 2, 2012***

The Federal Ministry of Economics hosted a workshop on *“Autonomics: New generations of autonomous, simulation based systems challenging legal framework conditions. An international Comparison”* on November 2, 2012. The workshop was generously supported by the EU.

The workshop concentrated on autonomous respectively automated systems, the challenges concerning the potentials of these systems and their implications. Several, most interesting and informative lectures discussed the main issues and approached the problems of autonomous systems. A formal talk and a panel discussion with reference to the problems stated followed the presentations. The key question was: What are the challenges which might occur when using autonomous technology as far as sociology, culture, ethics and law are concerned. In this context, adequate solutions were also addressed.

From the legal point of view, various areas of concern, strategies and options were outlined. In his lecture, “Legal framework and challenges in Germany and Europe”, Prof. Dr. Dr. Hilgendorf (University of Wurzburg, Germany) referred, in particular, to the challenges facing Germany and Europe when using autonomous systems in regard to civil and criminal liability and data protection. Questions and methods of how to approach these problems with regard to other countries were debated as well. Mr. Kim (Hanyang University, Seoul, Korea) and Prof. Dr. Dr. Hilgendorf addressed and reviewed the efforts of the Korean legislator to create regulations which are applicable to robots and autonomous systems (“Legal regulation of autonomous systems in South Korea on the example of robot legislation”).

Dr. Fitzi (University of Oldenburg, Germany) dedicated himself to the attempts of regulating autonomous systems and their social acceptance in Japan (“Legal regulation of autonomous systems and social acceptance in Japan”). Dr. Smith (University of Stanford, US) reported about the problems and solutions of the already existing regulations concerning autonomous vehicles in the United States (“Legal regulation of autonomous systems in the U.S.”). Prof. Schäfer (University of Edinburgh, Scotland) completed the different perspectives by adding the Anglo-Saxon aspect of “Case Law” in terms of the use of autonomous systems (“Autonomous systems and law – Anglo-Saxon perspectives”).

Apart from the above mentioned statements, Dr. Leroux (CEA – Alternative Energies and Atomic Energy Commission, France) (“The European Green Book project to regulate AUTONOMICS/ROBOTS”) presented the achievements made with respect to compiling a Green Book, the findings and eventual further developments. Mr. Haustein (University of Wurzburg, Germany) put his attention on data security issues when he spoke about “AUTONOMICS and privacy”. The sociological aspect of using autonomous systems and a resulting possible negative attitude among the population was the subject of Prof. Dario’s

(Center for Research in Microengineering, Italy) speech titled “Autonomous systems and robotics as partners”. The ethical and sociological approach to the subject was considered in context with the legal aspects and it was an integral part of all presentations.

The following main facts should be retained:

Although, the different countries pursue various social, ethic and legal basic concepts, it turns out that the real questions, discussed by developers and manufacturers of autonomous systems on one hand, and legal experts and legislators on the other, seem to be identical: Can operations of autonomous systems completely be anticipated? Is there a possibility to insure an operating system which is relatively unpredictable? How should the data collection of autonomous systems be assessed? How do you have to evaluate the relationship between robots and human beings? Will there evolve an ethical conflict between autonomous systems acting like human beings and the human partner who cannot or can no longer see the difference between an autonomous system and a human being? All these questions help to develop and introduce autonomous products which agree to legal requirements.

There is a need for a sociological discourse in addition to the legal reflections. This discussion has to consider the new technology. The question whether the handling of the new technology matches with the existing ethical stance is fundamental for the acceptance of the new technology among the population. The problems and the strategies to cope with are diverse and complicated. It is important to discuss these questions and to debate strategies offering solutions.

This workshop provided the opportunity to create a public awareness of the eventually rising problems which are due to the rapid technical progress. There is definitely a need to lead an interdisciplinary and a cross-border discussion.