PhD Research Project Position
"Deep Packet Inspection and Internet Governance"
Technology University of Delft, Faculty of Technology, Policy and Management
Information and Communications Technology (ICT) Section

Deep Packet Inspection (DPI) is a technology that enables the network operator to analyze Internet packets as they move through the network, and make decisions about how to handle them based on their contents. This research project will examine the deployment of DPI by Internet service providers, and analyze its impact on Internet governance policies and Internet users. The project will explore whether DPI capabilities constitute a disruptive technology that will lead to major changes in the way the Internet is governed and in the operational practices and business models of Internet service providers. The Ph.D. student would attempt to discover the extent to which Internet service providers (ISPs) are deploying DPI and to identify the economic, technical regulatory and political factors that promote and constrain its use. DPI is already being deployed or proposed in areas such as bandwidth management, content regulation, intrusion detection, behavioral advertising and copyright enforcement. The overall purpose would be to scientifically assess the implications of DPI deployment on the privacy, security and freedom of Internet users.

The successful Ph.D. candidate will become an integral part of the scientific staff of the ICT Section. While the focus of the job will be on the specific research project, the candidate is expected to participate in, contribute to and invest in the further development of scientific knowledge in the field of Internet governance. About 80% of the time is allocated for Ph.D. research activities; the remaining time is dedicated to the support of the educational activities of the Section and some minor management tasks.

Requirements
Appropriate candidates for this research position will need to be capable of and enthusiastic about interdisciplinary work. Candidates will need to combine an understanding of networking technology with social science disciplines, preferably economics and/or political science. Applicants should have a master's degree in any relevant discipline, along with strong academic motivation and ambition. The successful candidate must possess the ability to work in a multi-disciplinary environment of economists, political scientists, information scientists and engineers. We are especially interested in candidates with good research capabilities as demonstrated by excellent

study results. Delft University of Technology is a bilingual organisation; a good command of English (written and oral) is thus essential. The position can begin in September or October 2009.

Supervisor

The research project will be directed by Prof. Dr. Milton Mueller, XS4All Chair at TU Delft. To learn more about the project and the situation in the ICT section at TU Delft, contact Dr. Mueller at m.l.mueller@tudelft.nl. To formally apply please send a detailed CV together with a letter of motivation before September 30, 2009 to: ICT Secretariat, Delft University of Technology, Faculty of Technology, Policy and Management, P&O department, attn. Ms. Eveline Zeegers, P.O. Box 5015, 2600 GA Delft, The Netherlands. Or apply online: to e.m.l.zeegers@tudelft.nl.

The **Technology University of Delft** is a multifaceted institution offering education and carrying out research within the technical sciences at an internationally recognized level. The Faculty of Technology, Policy and Management contributes to sustainable solutions for technical challenges in society by combining the insights of engineering with the humanities and social sciences. The University is located in the historic town of Delft, about 50 km south of Amsterdam and near The Hague.