

# ECOS Solutions at the Hessian Ministry of Justice, for Integration and Europe

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*Holger Hofmann*  
Senior Counsellor and  
Head of Information Technology Department

HESSSEN



# The ECOS Secure Boot Stick at the Hessian Ministry of Justice

Many authorities do not actively encourage telework. The Hessian Ministry of Justice, however, provides its employees with solutions from ECOS Technology to enable remote access from their personal computers to the centralized IT systems and important applications. This results in maximum flexibility and satisfaction by maintaining highest security standards.



Dr. Henning Müller, judge at Hessian Justice

Judicial officers, judges, prosecutors from Kassel to Darmstadt: More than 10,000 employees work in the judicial system of Hesse. Responsible for them is the Ministry of Justice, Integration and Europe, based in Wiesbaden and one of the eight departments of the state Hesse.

## Rising demand for telework

For the Hessian Ministry of Justice, as with many other authorities, the subject of telework has come to immediate attention. Many employees demand to at least work partially from home. The ministry does strongly encourage this development with according pilot and model projects in Hesse - not only in concept but also from a political point of view. Besides a higher grade of employee satisfaction and additional flexibility further advantages are expected due to recent studies and empirical experience.

A special role has fallen to the approximately 2,000 judges and prosecutors in the state. These employees' presence is not mandatory and they can freely divide their working time for e.g. preparation and review of current trials to a certain extent.

Most basic for these and other employees is the remote access to the IT-systems of the ministry, and the Hessische Zentrale für Datenverarbeitung (HZD) with their data center in Hünfeld near Fulda. It is self-explanatory that given the sensitive nature of personal data of citizens involved, highest security standards and requirements to the data protection have to be met especially when court trials are concerned.

### »Loan Your Own Device« instead of expensive hardware

Until recently, this challenge was met by issuing specially configured laptops with a VPN solution installed to the local hard drive. Not only the high expenditure of about 1500-1700 Euros (1.990 - 2.255 Dollars) per device and the set-up and administration efforts spoke against this approach in the long run. Adding weight to the matter was the desire of employees to utilize their own hardware while on the road or at home.

Holger Hofmann, Regierungsdirektor (Senior Counsellor) and Head of Unit in the Department of Information Technology of the Hessian Ministry of Justice:

*"Especially in light of future widespread employment of the so-called eAkte (electronic file) it became clear that telework would be gaining an increased importance. Considering the factors effort, flexibility and expenditure, strong arguments against the further issuing of dedicated hardware by the Ministry were presented. We therefore approached the HZD with the request to find a suitable way to enable employees a secure remote access to our systems from their own private computers. In a slight modification to the well-known Bring Your Own Device concept, we came up with the motto Loan Your Own Device which means that the employee's private computer is converted to a official computer for his professional work, thus loaning his device to us. We think it a good possibility to cater to the various needs of our employees. The opportunity to alternating telework or home office is in majority's cases - today's gasoline prices in mind - equal to a pay raise. Of course, this offer is a "Give and Take" - a broad expansion of the service of alternating telework must be sustained and supported by the staff. "Lending fees" do not fit into our concept."*

### Remote access with two-factor-authentication

As an IT-service provider of the Hessian state government HZD has also the function of the central body for acquisitions. During the course of the market analysis, experts came upon the ECOS Secure Boot Stick. Most prominent have been the functionality and ease of use. Via an USB stick, a specially hardened and secured Linux environment is started, from which a highly secure access to the server is established. The accessing PC or notebook serves only as a hardware platform: installed operating systems and software on the hard drive or storage media remain untouched.

Through this sealed-off system a use on compromised or contaminated PCs bearing malware poses no security risk. A total division of the two systems is guaranteed. The Secure Boot Stick provides also a secure 2-factor-authentication for the login process by requiring the personal user details such as the password and also the associated stick to function.

### Officially inspected and approved

The Secure Boot Stick was deemed safe and suitable by the Hessian Data Protection Supervisor and the Security Officer for IT solutions in the Hessian Justice system. Thus, a rollout went unopposed.

The initial pilot project involved around 100 Secure Boot sticks, which were primarily issued to judges, prosecutors and judicial officer. The latter benefit from a Hessian model project considering the subjects of "flexibility of working hours and teleworking for judicial officers." An independent time management comparable to judges and prosecutors was the declared goal.

## Work from anywhere

Employees equipped with the stick may e.g. access specialized judicial applications like *Eureka* or the software *Normfall-Manager* remotely on their office desktop from anywhere and anytime to view data concerning trials or law suits. The (ECOS) Secure Boot Stick ensures a total division between private and professional use of the accessing computers - a particularly important aspect for the Ministry of Justice regarding legal reasons. Another important aspect could now be fulfilled: there is no form of access to the personal computer by an administrator.

*"The feedback from the staff has been very positive in the test-phase from the beginning on," says Hofmann. "It was a great advantage that we already cooperated with the different departments from an early stage on. One of the greatest benefits for us and our colleagues from the HZD was, that practically no support is needed, because of the self-explanatory nature of the sticks. Even personnel with little or no technical understanding could be trusted with the plug & play principle. A small leaflet accompanying the stick to the hands of the employee explains the steps for an initial start. If the concept of a boot menu at the start-up of the PC is understood, one can get quickly used to it. In most cases no additional support is needed."*

## Further expansion in the course of electronic files and E-Justice ACT

About 200 Secure Boot Sticks are in use across the state. But this is only the beginning. According to the current plans a gradual expansion to other areas of personnel, especially in the middle-ranking level and the majority of employees is envisaged. For this, additional 1.000 sticks are already scheduled. The expansion focuses heavily on nationwide introduction of the electronic files,

with a schedule until 2016 or 2018. It creates the basis for many employees to work productively from anywhere as all required data are available electronically. This development is the direct consequence of the E-Justice Act, which came to force in June of 2013 by the Bundestag (federal diet), encouraging the electronic legal service.

## Quick queries via web application: Mobile Office stick for bailiffs

In a future step, the Ministry of Justice is planning, together with ECOS, to optimize the integration of around 340 Hessian bailiffs. In the beginning of 2013 the "Reform of Investigations in Matters of Foreclosure" came to force and has led to a significantly increased number of queries due to new regulations. Those queries, for example at the registration office or the commercial register will be accessible via an appropriate web application.

To meet the ever-changing conditions and needs to accelerate procedures and processes the issuing of the ECOS Mobile Office Stick to Hessian bailiffs is being reviewed. This security solution is also based on a USB-stick and comes with functions granting access to web applications and specialized applications strictly on application-level. The main advantage lies within the safe access out of a sealed off "sandbox" coupled with two-factor authentication and the fact that the solution is fully independent of software installations.

*"We are very pleased with the chosen path," Hofmann concludes. "The ECOS Secure Boot Stick is a vital part of our strategy for the alternating telework and technical aspects of the access from home. It allows our employees a maximum of flexibility and productivity when working from home or on the road. At the same time sensitive data is safely protected. We are already planning ahead in the medium-run. Initial thought revolves heavily around the integration of tablet-PCs for Decision-makers in our staff."*