

## User Report

### e-applications at the Federal Office of Plant Varieties: A technology serves as an international model

#### The challenge

##### Submission and processing of applications at the BSA

The German Federal Office of Plant Varieties (Bundessortenamt - BSA) in Hannover, as an independent superior federal authority within the portfolio of the Federal Ministry for Nutrition, Agriculture and Consumer Protection, is responsible for the authorisation and protection of plant varieties together with all associated affairs. The BSA checks applications submitted by plant cultivators for each new variety to determine whether the requirements for granting the status of protected plants or approval for a plant variety have been fulfilled. Varieties which successfully pass the tests have good prospects of being used in agriculture and horticulture. Around 1200 applications are processed every year. In the past, the application procedure was associated with considerable manual effort for all those involved.

##### A stony path on the way to approval

To receive approval for a new variety of maize or wheat, for example, cultivators used to complete the paper-based applications by hand and submit several copies together with various attachments by post. The BSA also invested many working hours, and therefore money, in transferring the data received in this way into the department's own system. Due to the complex rule code, about 15 per cent of all the applications contained mistakes and had to be corrected by BSA staff, adding another 2 hours to the processing time for each application.

#### The goal

##### Wanted: Intelligent electronic form with signature functionality

An internal IT economic feasibility study quickly demonstrated the benefits of a technical modernisation of the procedure. Additional impetus was given by the German government's e-government initiative BundOnline 2005,

#### BSA Bundessortenamt



Bundessortenamt

#### The benefits

- Extremely user-friendly and a lighter workload
- Simple integration in existing systems
- Legally binding and the best possible data security
- First certification world-wide in compliance with Common Criteria EAL 4+
- Automatic further processing of form contents
- Media-consistent workflows for faster processes
- Development of potential sources of savings (material, working hours, etc.)

#### The success

- 840 hours spent on recording data saved every year
- Error quota cut by 95 %
- Elimination of 360 hours for correcting mistakes
- Global reference project serving as a model

## The customer



Bundessortenamt

The German Federal Office of Plant Varieties (Bundessortenamt - BSA) in Hannover, as an independent superior federal authority, is responsible for the authorisation and

protection of plant varieties together with all the associated tasks. It checks applications submitted by plant cultivators for each new variety to determine whether the requirements for granting the status of protected plants or approval for a plant variety have been fulfilled. Other responsibilities of the BSA include being involved in the ongoing development of the legal framework for plant varieties and seeds at national and international level.

The BSA Web site:  
[www.bundessortenamt.de](http://www.bundessortenamt.de)

## What the customers say



*"Our solution makes us the global leader in electronic application processing at this time. (...) Just recently the BSA system was chosen by the International Union for the Protection of New Varieties of Plants as a reference project. The presentation in Geneva met, without exception, with a positive response and caused an international sensation. That's why we hope to set the future standard for the international exchange of data."*

Udo von Kröcher,  
President of the Federal  
Office of Plant Varieties



*"In addition to the combined online and offline functionality of the form solution, what we particularly liked was the perfect integration of the OpenLimit technology as a simple add-on for Adobe Reader."*

*"A functional pilot solution including the electronic signature went live after just a few days."*

Dr. Uwe Meyer,  
IT section leader at the BSA  
in the section biostatistics,  
information processing and  
communications technology

which set the goal of placing all Internet-capable services online. However, a FormsForWeb solution introduced in 2005 at some federal authorities was not able to meet the BSA's requirements, so a search was started for a new alternative: A reliable and user-friendly form solution with online and offline functionality which would simplify the application submission process, reduce the application error quota, and automate the processing of applications to as great an extent as possible. Special attention was paid to a legally binding electronic signature solution designed to obviate the need for applicants to install sophisticated software and to guarantee the highest possible degree of security.

## The solution

### A convincing alliance - OpenLimit & Adobe

Having requested tenders for the project and examined those that were submitted, the choice fell on the signature technology from OpenLimit in conjunction with the form modules of its solution partner, Adobe. Dr. Uwe Meyer, IT section leader at the BSA in the section biostatistics, information processing and communications technology, states the main reasons for this decision: "In addition to the combined online and offline functionality of the form solution, what we particularly liked was the perfect integration of the OpenLimit technology as a simple add-on for Adobe Reader."

### The key to a secure and media-consistent workflow

The signature software from OpenLimit is a core module in the overall BSA solution. It is only the legally binding, certified electronic signature and its automated authentication that enables applications to be submitted and processed in a media-consistent manner. The Federal Office of Plant Varieties' data, as well as that of its customers, is ideally protected.

The technical requirements for cultivators are minimal: To be able to complete and digitally sign the application forms on a PC, all users need in addition to Adobe Reader are the free OpenLimit Reader, an activated signature card and an off-the-shelf card reader.

## The implementation

### Pilot project in just a few days

In November 2005 the BSA, together with the German National Association of Plant Cultivators (BDP), started an initial pilot project conducted on the basis of the approval procedure for maize, one of the most complicated varieties with regard to the documentation that has to be submitted. "A functional pilot solution including the electronic signature went live after just a few days," says Dr. Meyer praising the project launch. After a second pilot project for wheat also ran smoothly, the new intelligent electronic application forms were introduced for all varieties of plants as of May 2007. The old forms remained in public circulation until the end of the year to ease the transition for the users.

### In regular operation since 2008

Only the new e-forms have been made available from a password-protected online portal since January 2008. Applicants can choose whether they want to use the media-consistent variant including the digital signature or the so-called 2D barcode solution, in which forms completed on-screen are printed and then signed by hand. Electronically signed forms are sent online to the BSA and then processed here fully automatically.

## The success

### The figures speak for themselves

With the introduction of this electronic procedure, perceptible savings were achieved at the BSA right from the very beginning. Previously, on average a BSA employee required 40 minutes to record an application. Around 840 processing hours are saved every year thanks to the introduction of the e-forms. Because an increasing number of cultivators use the electronic signature variant, and in the medium



term application checks from other European countries are to be sent electronically, the number of hours that are saved will rise even further. The second success factor is the vastly improved quality of the data. 95 % fewer processing errors mean the elimination of 360 working hours for corrections per year, and enquiry calls back to the applicant are now an exception.

### True added value for cultivators

KWS Lochow GmbH is the market leader among German cereal cultivators and participated on the BSA's pilot project for wheat. The company is now profiting from the new technology every time it applies for approval for a plant variety. Dr. Erhard Ebmeyer, head of wheat cultivation in the Research and Development department, describes the prime advantages: "OpenLimit offers an elegant and streamlined solution. Thanks to the intelligent forms and the electronic signature function, we can draw up our legally incontestable applications faster and more easily and submit them just before the application



*"OpenLimit offers an elegant and streamlined solution. Thanks to the intelligent forms and the electronic signature function, we can draw up our legally incontestable applications faster and more easily and submit them just before the application deadline. (...) This is of huge economic significance, particularly where time-critical applications are concerned."*

*Dr. Erhard Ebmeyer,  
Head of wheat cultivation  
in the Research and  
Development department,  
KWS LOCHOW GMBH*

