

# A Unified Process for Admissions to Higher Education in Sweden

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## Keywords

Admissions process, course search, admissions system

## 1. EXECUTIVE SUMMARY

Swedish universities and university colleges have, together with The National Agency for Services to Universities and University Colleges (VHS), developed a national admissions system (NyA). The NyA system supports the whole admission process, including a web based search form where students can search for, and apply to, courses and study programs. The NyA system is used by virtually all Swedish universities and colleges for admission to undergraduate courses and programs.

### 1.1. Background

The development project of NyA started in 2001 and the system was fully deployed in 2006. With the deployment of NyA one central admissions system and 38 local admissions systems was phased out.

### 1.2. The NyA system

The NyA system is made up by a Java Swing application for admissions officers, a web application used by the applicants and a communication framework used for information exchange with external systems.

### 1.3. The admission process

The admission process using NyA consists of a number of steps or sub processes. The process starts with the transferring of courses from the local course databases to the admissions system. After some initial preparations in the system the courses are published on the web to enable course search and application. As soon as an application is sent electronically it is processed in the system, both by automated system processes and manually by admissions officers. When all applications are processed the admissions selection takes place in two selection rounds. The eligible applicants are ranked according to their qualifications and notified of the result. The applicants are required to reply whether they want to accept their offered courses. Those applicants who did not reply are removed and the result of the admissions is then transferred to the study documentation systems of the universities and colleges.

## 2. INTRODUCTION

Swedish universities and university colleges have, together with The National Agency for Services to Universities and University Colleges (VHS), developed a national admissions system (NyA). The NyA system supports the whole admission process, including a web based search form where students can search for, and apply to, courses and study programs (course/courses will be used below for study programs as well as single subject courses). The NyA system is used by virtually all Swedish universities and colleges for admission to undergraduate courses and programs.

The NyA-system replaced one central system used for national admissions to undergraduate programs used by the VHS (National Agency for Services to Universities and University Colleges) and 38 local systems at the universities and colleges used for admission to single subject courses and certain outside the joint program admission conducted by the VHS.

The development project of NyA started in 2001 and the system was deployed in two stages. In 2005 NyA was used the first time in the national admissions to programs, thus replacing the central admissions system. In 2006 NyA was used for admissions to single subject courses as well, and the local admissions system LANT (the admissions module of the study administrative system LADOK) was phased out.

## 3. THE NYA SYSTEM

### 3.1. An overview of the admission process

The admission process supported by NyA consists of a number of steps or sub processes. The process starts with the transferring of courses from the local course databases to the admissions system. After some initial preparations in the system the courses are published on the web to enable course search and application. As soon as an application is sent electronically it is processed in the system, both by automated system processes and manually by admissions officers. When all applications are processed the admissions selection takes place in two selection rounds. The eligible applicants are ranked according to their qualifications and notified of the result. The applicants are required to reply whether they want to accept their offered courses. Those applicants who do not reply are removed and then the result of the admissions is transferred to the study documentation systems of the universities and colleges.

An overview of the admission process is given in figure 1 below

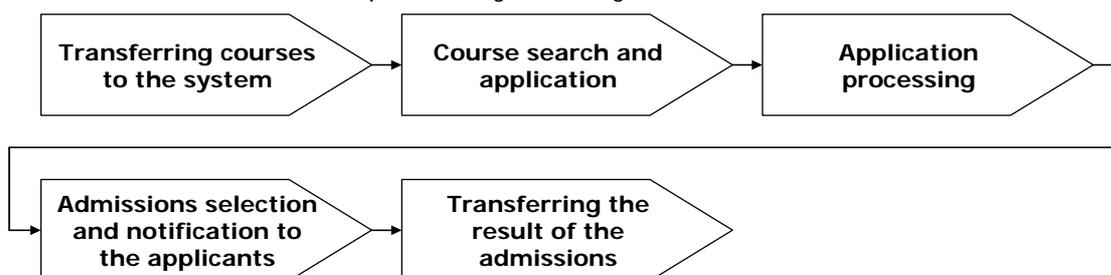


Figure 1

The parts of the process will be presented in further detail in 4 The Admission Process below.

### 3.2. Parts of the system

The NyA system can be described as made up by three logical system parts:

1. A Java Swing application used by admissions officers and system administrators.
2. A web application used by the applicants for course search, application, follow the progress of their application and accept offered courses
3. A communication framework. The NyA system communicates and exchanges information with a number of external systems: course databases and study administrative systems at the

Higher Education Institutions as well as systems at other governmental agencies, for example Statistics Sweden and the Swedish National Board of Student Aid.

### 3.3. Information flow in the process

During the admission process the NyA system exchanges information with different external systems. In the early stages course information is transferred to NyA from the local course databases at the institutions using XML formatted files. When the applicants have applied their school leaving certificates is collected from the national database for leaving certificates (BEDA) and their academic credentials are collected from the study documentation system (LADOK) where he or she has studied. In the end of the admission process the admissions result is sent to the study documentation systems at the institutions concerned. Together with the result of the admissions, course information which was updated in NyA is sent to allow updating the course information in the study documentation systems. Figure 2 below presents an overview of the information transferred to and from NyA during the process.

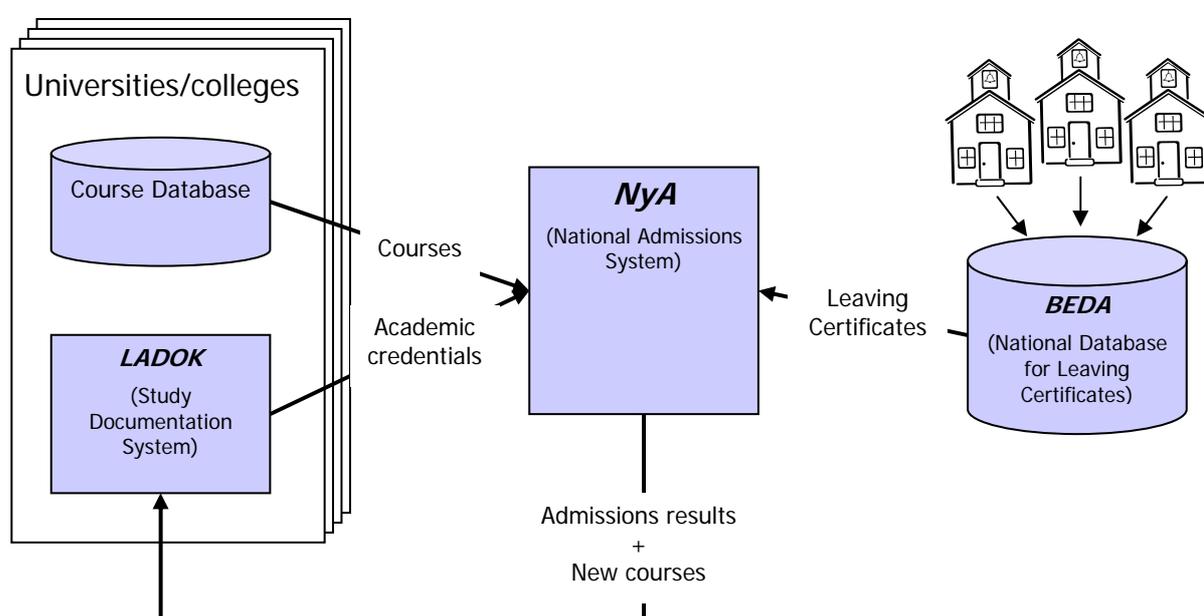


Figure 2

## 4. THE ADMISSION PROCESS

### 4.1. Transferring courses to the system

The first part of the admission process is to make courses from the institutions available to the system. The courses are transferred to the NyA system as XML formatted files from local course databases at the different universities and colleges. The system administrator then sets up an admission round and defines in the system the institutions and courses that should be associated. The admission round is used to administer admissions to courses with the same application period etc.

Once the courses are saved in the system and connected to an admission round they are available for student search and application.

### 4.2. Course search and application

Courses at practically every Swedish higher education institution are published on the web site [www.studera.nu](http://www.studera.nu). The web site, which is Swedish for "Study now!", can be considered the student

interface to the application system NyA. At [www.studera.nu](http://www.studera.nu) the student can search among courses at different levels in different subject areas. The site is available in Swedish as well as in English.

The student can also apply online to any course marked as open for application. After applying the student can follow the progress of their application and accept offered courses.

In the admissions for the autumn term of 2008 which had its application deadline in April 2008 there were 292 400 applicants. Out of these 270 700 were Swedish nationals or long term residents in Sweden (i.e. they had Swedish civic registration numbers). Around 95 percent of the applications were done using the web form at [www.studera.nu](http://www.studera.nu).

### **4.3. Processing the application**

As soon as an application is sent electronically a number of automated system processes come into action. The applicant's address is collected from the national registration database, his or her school leaving certificate is collected from the national database for leaving certificates and the applicant's academic credentials are collected from those universities or colleges where he or she has studied. Other qualifications, for example work experience or foreign school leaving certificates, are sent in by the applicant and the documents are scanned and stored electronically in the system for subsequent registration. Every time a document is scanned in to the system it is marked for reviewing by an admissions officer who will register those qualifications that can be registered.

When the documents associated to the application has been reviewed and registered the applicant's qualifications are matched with the entrance requirements of the courses in the application. This matching process is done by the system according to rules set up in requirement models which can be associated to the courses. Where the system cannot accurately match the entrance requirements to the qualifications of the applicant the system marks those courses, thus enabling an admissions officer to manually assess the qualifications

### **4.4. Admissions selection and notification to the applicants**

In this part of the admission process all the eligible applicants are ranked according to their qualifications in relationship to the admissions criteria for the specific courses. The selection is made in two selection rounds. After the first round the applicants are required to reply whether they want to accept their offered courses. In the second round those who have not replied are removed and the course place is offered to the next on the reserve list.

The applicants are notified according to how they applied. If they applied by paper the notification of admission will be in a letter sent to their home address. The web applicants will get an email telling them to log on to the web to see the result of the admissions.

### **4.5. Transferring the result of the admissions**

After the second selection round, the result of the admissions is sent electronically to each of the universities and colleges concerned. The admissions result is subsequently loaded into the study documentation system of the institution. The universities and colleges can also choose to include course information in the admissions result file to update the course information in the study documentation system.

## **5. FURTHER DEVELOPMENT OF NYA**

The NyA system has been in full use for three years and new functionality is being added continuously and there is a steady stream of suggestions for improvements from the systems users.

Especially in the area of admissions to international courses (i.e. courses in English for international applicants) there are a lot of improvements to be done, for example developing a web interface for teachers and administrators at the academic departments. There is also much manual work done with late applications (i.e. applications submitted after ordinary dead line) which demands for better system support for that part of the admission process.