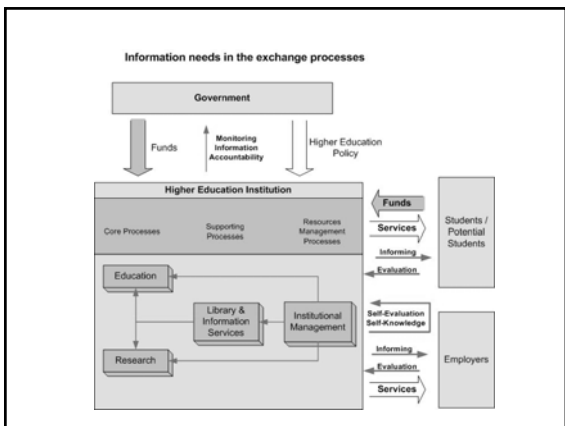
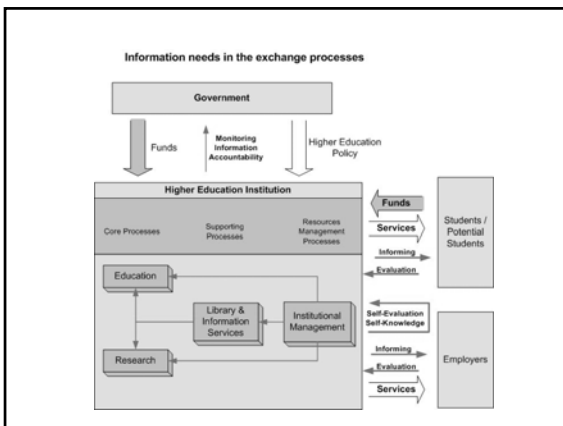
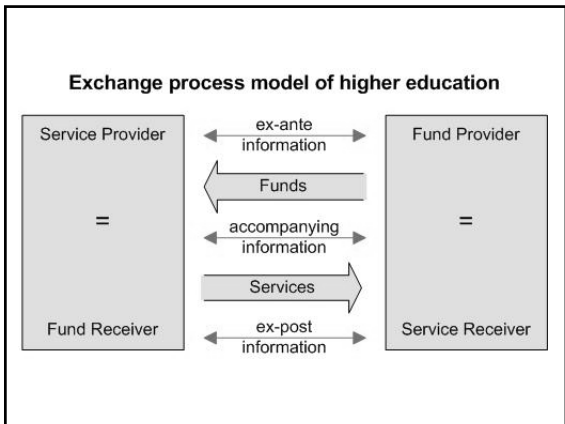


- ### Structure of the Presentation
- Information flows in Higher Education
  - Information Facilitators
  - Information for Management, Information for Decision Making
  - Information and its sources
  - Possible information systems and relations among these systems
  - The overall concept of Higher Education Information Systems in Croatia

Do we need an information system only dedicated for quality assurance processes ?  
 (i.e. for external accreditation, evaluation and audit)



### Information Systems needed

- To inform potential students and employers of graduates

### Information Systems needed

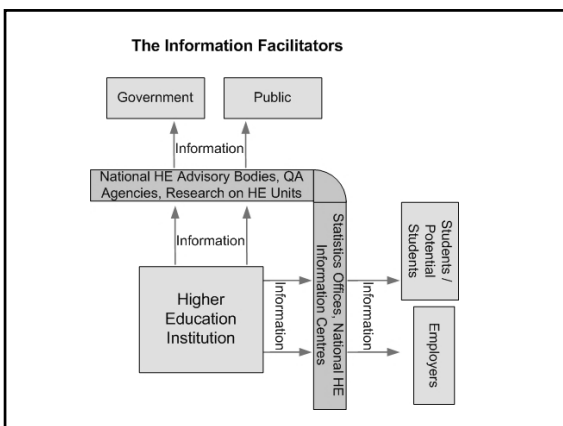
- To inform the government for higher education policy decisions

### Information Systems needed

- To provide self-knowledge of the institution (self-evaluations)

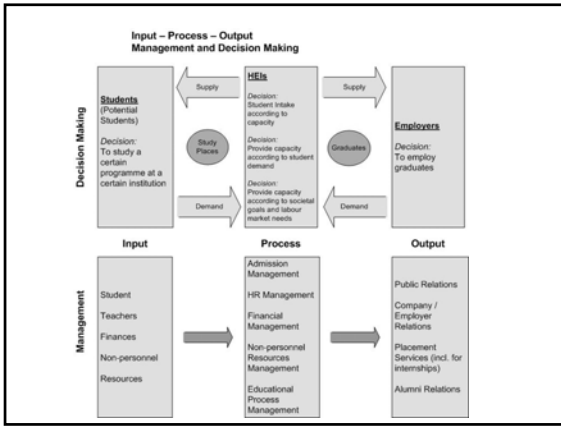
### Information Systems needed

- To support the educational and resources management process



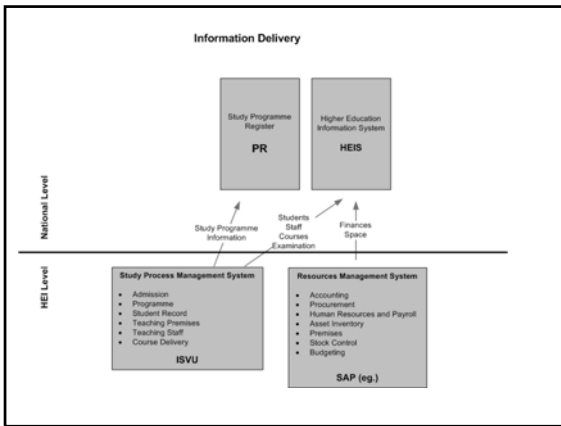
- ### Information Facilitators in Croatian Higher Education
- Policy Advisory Body: National Council
  - National Quality Assurance Units: Council and Agency
  - National Statistics Unit: Central Bureau of Statistics
  - Higher Education Information Centre: ?
  - Research on Higher Education Unit: ?

Higher Education Information Systems

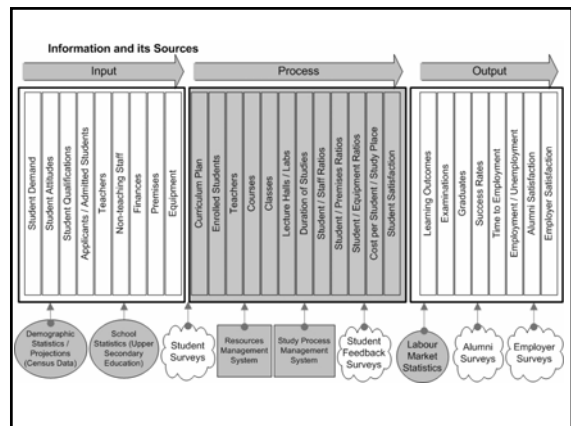
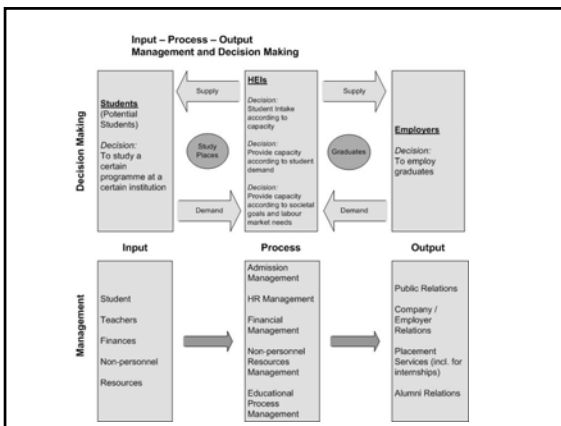


### Information Systems in Croatian Higher Education

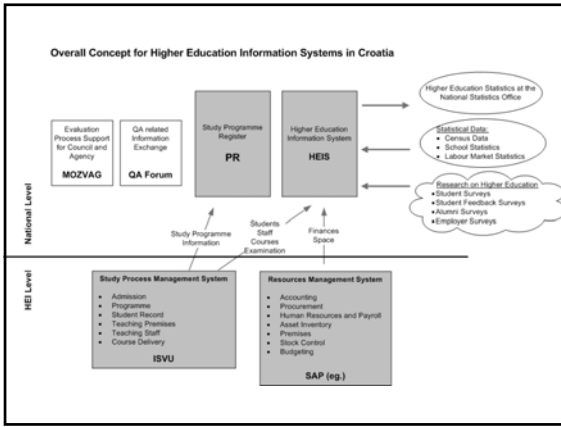
- For Decision Making:
  - Students/Employers: Study Programme Register (PR)
  - Government: Higher Education Data Base (HEIS)
  - Institutions: ISVU
- For Management
  - Educational Process Management: ISVU
  - Resources Management: ? (e.g. SAP)



- Snapshots from ISVU to be sent to HEIS once a year or once a semester at fixed dates from all programmes and institutions
- See handout: Report: Student Profile of the Programme



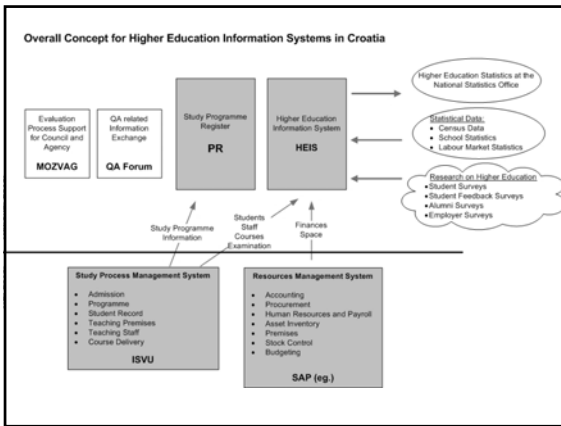
Higher Education Information Systems



**Information Matrix**

|  | Information for            |                         |                                     |  |
|--|----------------------------|-------------------------|-------------------------------------|--|
|  | Management                 | Decision Making         |                                     |  |
|  | 1. The Educational Process | 2. Institutional Policy | 3. National Higher Education Policy | 4. Informing Potential Students and Employers / Informing the Public |
| 1. Individual Participant in Educational Process | ISVU                       | ISVU                    | HEIS                                |  |
| 2. Individual Study Programme                    | ISVU                       | ISVU<br>HEIS<br>PR      | HEIS<br>PR                          | PR   |
| 3. Provider of Educational Service               | ISVU                       | ISVU<br>HEIS            | HEIS                                | PR   |
| 4. The Higher Education System                   | HEIS                       | HEIS                    | HEIS                                | HEIS   |

Information on (vertical axis)



*Let's have a break*

Higher Education Information Systems 2

System Specifications/System Design for Croatian Higher Education Information Systems

In-house Seminar  
CARDS 2003  
Dr. Edgar Frackmann

- Information and Quality Assurance**
- Information that is thought to be self-knowledge (self-report)
  - Information that is thought to inform the evaluators

### Information and Quality Assurance

- Should the information be generated and updated only for the quality assurance procedures?
- Shouldn't it be available permanently as so-called self-knowledge of those being responsible for the educational processes?
- Shouldn't this be the same information to be provided permanently to the stakeholders of the educational processes?

### MOZVAG Restrictions

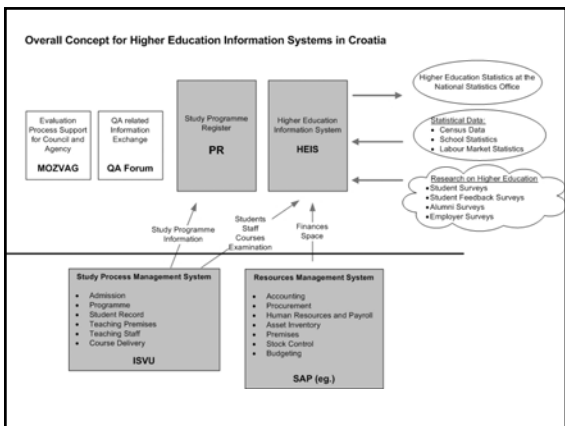
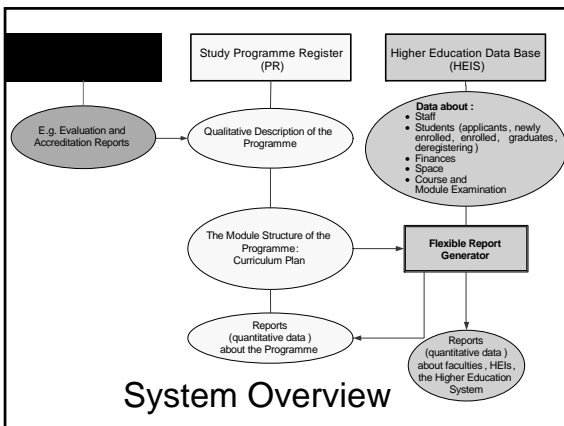
- Only process support (workflow system)
- Information on study programmes only in non-structured text files
- Few data, few quantitative data

### MOZVAG Benefits

- MOZVAG is a national level information system
- MOZVAG is a Study Programme Register on national level
- MOZVAG is accepted as a national level information system
- MOZVAG is filled in the course of legally based processes
- MOZVAG has proved to be a useful tool for QA processes

### What the new system should achieve:

- Contain and present homogenously structured qualitative and quantitative information about the study programmes
- Contain and flexibly present in reports quantitative data on higher education, i.e. on input, processes and output of study programmes, Faculties and Higher Education Institutions



### Study Programme Register (PR)

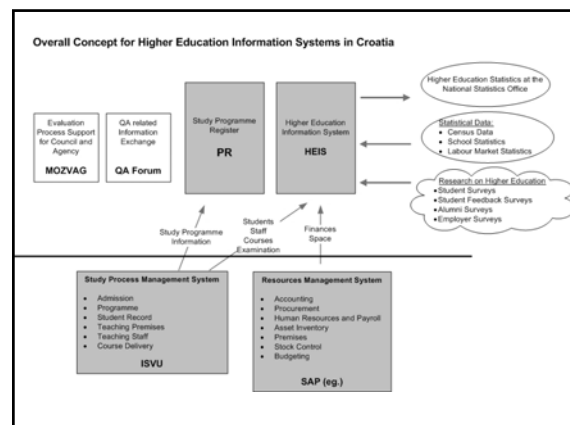
- To inform the potential students in competition for the best high school graduates to enrol in the respective programme/institution
- To inform potential employers of the graduates in order to facilitate the employment of the graduates

### Higher Education Data Base (HEIS)

- Contain data about staff, students, finances, space, courses, examinations
- Flexible report generator
- Provide accountability information
- Inform the general public
- Provide the Central Bureau of Statistics with Higher Education Data
- Provide Council and Ministry with decision related information

### Students?:

- Applicants
- Newly enrolled students
- Enrolled students
- Graduates
- Deregistering students



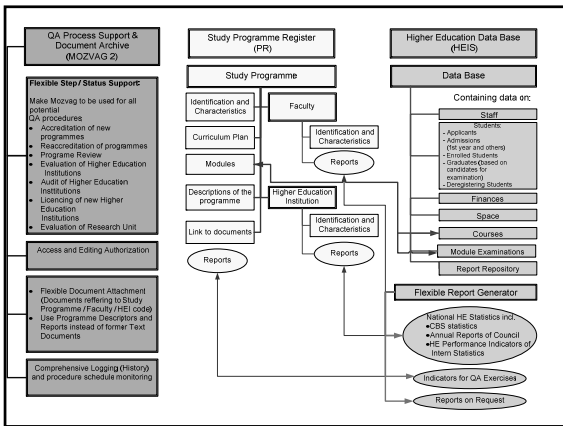
### QA Process Support (MOZVAG 2)

- To help the Agency, the Council and the Higher Education Institutions to jointly manage the QA processes as efficiently as possible
- To make the relevant QA related documents accessible

### Before Development starts: To-do-List

- Write System Specifications/System Design (including data flow definitions)
- Achieve consensus about system functionality
- AZVO having the assignment of the responsibility for the system
- Consensus with HEIs to fill Study Programme Register
- Consensus with HEIs to deliver data to HEIS
- Legal basis for the obligation of HEIs to fill PR and feed HEIS
- Financial commitment of the Ministry
- Contract for the development of the system
- Detailed System Design together with developer

Higher Education Information Systems



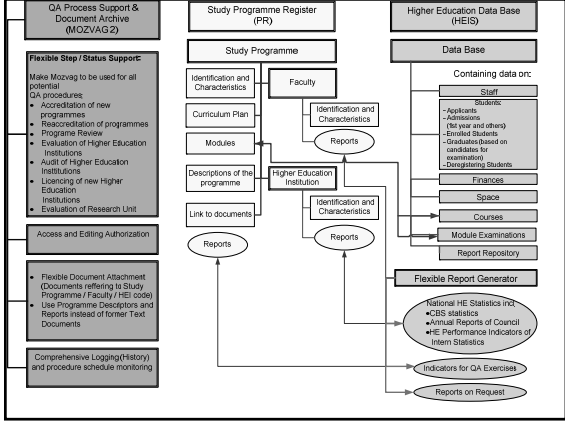
- ### Information Units Hierarchy
- A Higher Education Institution consists of Faculties
  - Faculties offer Study Programmes
  - Study Programmes consist of Modules
  - A Module can be studied and is offered in a concrete semester or more than one semester in the form of Courses
  - A Course may be a lecture and/or a seminar and/or exercises

- ### Study Programme Register
- Identification and Characteristics of the Programme (see handout)
  - Description of the Programme (see handout)
  - Curriculum Plan (see here)
  - Module Description (see handout)
  - Study Programme related reports (see handout)
  - Reports for the QA procedures (see handouts)

### Curriculum Plan of the Programme

| Module  | Weekly Hours per type of course and semester |   |   |   |   |   |   |   |   |    | Total hours per semester week | Type of assessment/ exam for Module | Credits |
|---|--|---|---|---|---|---|---|---|---|----|-------------------------------|-------------------------------------|---------|
|   | 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |                               |                                     |         |
| Code  |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| Title   |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| Compulsory Modules                                      |  |   |   |   |   |   |   |   |   |    |                               | Classification needed               |         |
| Elective Modules  |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| Total hours weekly                                      |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| ECTS credits compulsory                                 |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| ECTS credits elective                                   |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| ECTS credits total                                      |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| Description of options with regards to elective courses |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| Abbreviation:   |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| L: Lecture  |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| S: Seminar  |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |
| Practical Exercise                                      |  |   |   |   |   |   |   |   |   |    |                               |                                     |         |

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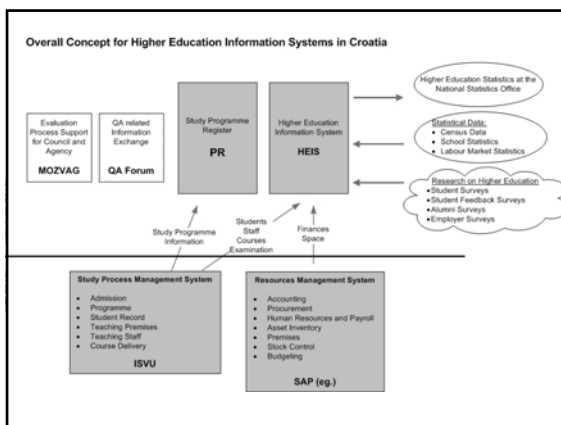


## Student records

- Example see handout

## All Programme Identification fields in the students records have to be subdivided:

|  |   |
|--|---|
| Main Programme<br>(main in the sense, that in this student record it is reported about the student applying or being enrolled in this programme) | <u> Programme Code </u>   |
| Main Programme consisting of:<br>(in case of possible combinations):   |   |
| Partial Programme 1:   | <u> Programme Code </u>   |
| And  |   |
| Partial Programme 2:   | <u> Programme Code </u>   |
| Second Programme:  | Programme Code (just for information that the student is enrolled also in another programme. This field is empty, if this is not the case. In case this field is filled, then a second student record exists, where this programme is the main programme) |



## QA Forum

- There should be a broad information base related to QA
- The Forum discussion should be initiated by the Agency
- The open question and answer part of the platform should be guided by the Agency

## QA Forum: Information Base

- News
- Calendar of events
- Laws and regulations
- Procedures and forms
- Activities of Council and Agency
- Annual Evaluation plan
- Description of Croatian QA experiences
- Foreign Experiences
- Link to Croatian HEIs
- International Links
- QA in the Corporate World
- Literature Pool

## QA Forum: Theme related Forum

- Work in Progress
- Student Surveys
- Teacher and courses evaluations
- Monitoring student progress
- Use of ISVU for QA
- How to generate data on length of studeies, drop-out, success rates, retention/attrition
- Assessment of educational outcomes
- Curriculum development
- Establishing alumni links
- Labour market studies
- What is self-knowledge
- Indicators for educational quality?
- Organize institutional QA
- SWOTs analysis
- QA and strategic planning

QA Forum: Q&A Forum

Guided by the Agency

*That 's it, Thank you*