

#### AUSTRIAN ACADEMY OF SCIENCES

October 2007 ESF MO forum on evaluation



#### EVALUATION PROCESSES AT THE AUSTRIAN ACADEMY OF SCIENCES: Experiences and future perspectives



# AGENDA

- The Austrian Academy of Sciences (AAS)
- Research at the AAS
- Research-adequate quality assessment at the AAS
  - Internal Evaluation
  - External Evaluation
  - Intellectual Capital Reporting (ICR)
- ICR, evaluation and strategic controlling: perspectives



# The Austrian Academy of Sciences (AAS)

- Founded in 1847
- Autonomous status: legal entity under public law, "under the special protection of the Federal Republic of Austria"
- "Its mission is to promote the sciences and humanities in every respect and in every field, particularly in basic research."
- 3 major activities:
  - A learned society
  - An organisation performing research: 66 research facilities, approx. 1.100 employees in research and administration
  - An organisation promoting young scientists



### **Research at the AAS**

- Autonomous: oriented towards basic research flexible
- Heterogeneous: covering diverse research fields and missions
- Initiatives for new trend-setting research areas
- Complementary research activities (with regard to Austrian universities)
- Strengthening strengths
- Room for long-term research
- Ensuring excellence based upon quality assessment and evaluation



# **Research-adequate quality assessment at the AAS**

- Internal evaluation
- External evaluation
- Intellectual capital reporting •
- (currently being reorganized)
- (established)
  - (new)



### **Internal Evaluation**

- Yearly internal evaluation of each research facility or research center by SAB
- SAB-Members: elected for 5 yrs., *external instead of internal experts*
- Preliminary information of SAB: annual report (*partially standardized*)
- Meeting of SAB with heads of research facility/center
- Recommendations to the section's presiding committee



# **External Evaluation**

- External ex-post evaluation of research facilities since 1995
  - Proactive initiative of the AAS
  - Assessment based on medium-term research program
  - External, independent experts from abroad
  - Evaluation cycle: approx. 5 years
- Evaluation = platform for discussion on
  - the (future) research areas, contents and strategies
  - the structure of individual research fields incl. allocation of budget
  - the implementation of specific recommendations



# In the period 2002 to 2007, the AAS executed the following evaluations of various fields of research:

- Particle Physics and Mathematics
- Information Sciences
- European History to 1500
- Austria, the Danube Region and Europe
- Social Sciences
- Solid-State Physics, Biophysics and Earth Sciences
- Asian Research and Social Anthropology
- Austrian Academy Corpus
- European Languages and Literature



### **External Evaluation Procedures**

- First step: selection of research units to be evaluated
  - More than one research unit
  - Either research units working in similar fields
  - Or research units similar in size, organizational structure, or life cycle phase

#### Second step: composition of evaluation team

- AAS asks external scientific institutions to propose possible foreign researchers for leadership of evaluation committee
- AAS selects one expert as head of ad-hoc evaluation committee
- This person selects further members of evaluation committee (flexible size of evaluation committee)



- Third step: site visit
  - Preliminary information: annual reports plus written general selfassessment of research units concerned
  - Typically one day on-site inspection
  - Presentation and discussion
  - Involvement of young researchers

#### Fourth step: evaluation report

- Draft report by head of evaluation committee a few weeks after sitevisit
- Research units concerned are invited to respond
- Evaluation team prepares final report, to be presented to the AAS's presiding committee
- Non-binding recommendations
- Forthcoming: responsibility for external evaluation to be transferred from presiding committee to research advisory council



### Intellectual capital reporting (ICR) - internal use

- Target: Improving research-adequate quality assessment and controlling (P-D-Check-Act)
- Main focuses:
  - Providing 'objective' data input, output, outcome as a sound basis for futureoriented discussion
  - Forthcoming: operationalized goals (in correlation with indicators)
  - Checking implementation of strategies and progress of medium-term research program
  - Contributing to ensuring high scientific quality and adequate allocation of ressources
- Document design:
  - Internal report (forthcoming: time series of data)
  - Up to 30 indicators on a flexible aggregation level
  - Narrative parts where necessary



#### **Exemplary Indicators (I)**

- Financial indicators:
  - annual total budget
  - personell costs
  - investments in buildings, equipment

#### R&D indicators:

- staff-related indicators (qualifications, gender, age, distribution, competence in research management, continuing education measures)
- floor space, infrastructure
- involvement of internal and external experts in evaluation procedures
- incoming / outgoing
- cooperation partners
- External functions in research quality assurance, eg. reviewer



#### **Exemplary Indicators (II)**

- R&D portfolio (research fields, running research projects, projects with external partners, degree of interdisciplinarity, project duration)
- third party funds
- scientific publications (peer-reviewed, in indices, oral / poster presentations)
- patents
- popular science
- engagement in academic teaching
- prizes and honors
- presence in media



#### Interplay between evaluation and ICR: perspectives

- ICR provides standardized and 'objective' preliminary information for SAB and/or evaluation committee: **better informed peer**
- Refinement of adequate and (partly) measurable criteria for success general or specific – through feedback of SAB and/or evaluation committee on relevant indicators and goals / targets
- From goal tracking to target tracking, where applicable: monitoring the targetto-plan situation by looking at relevant indicators on a regular basis, facilitating early discussion and intervention when indicators stray from goal trend
- Facilitating clear and **unambiguous evaluation recommendations** by including indicators and measurable targets, improving follow-up



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# **THANK YOU FOR YOUR ATTENTION !**