

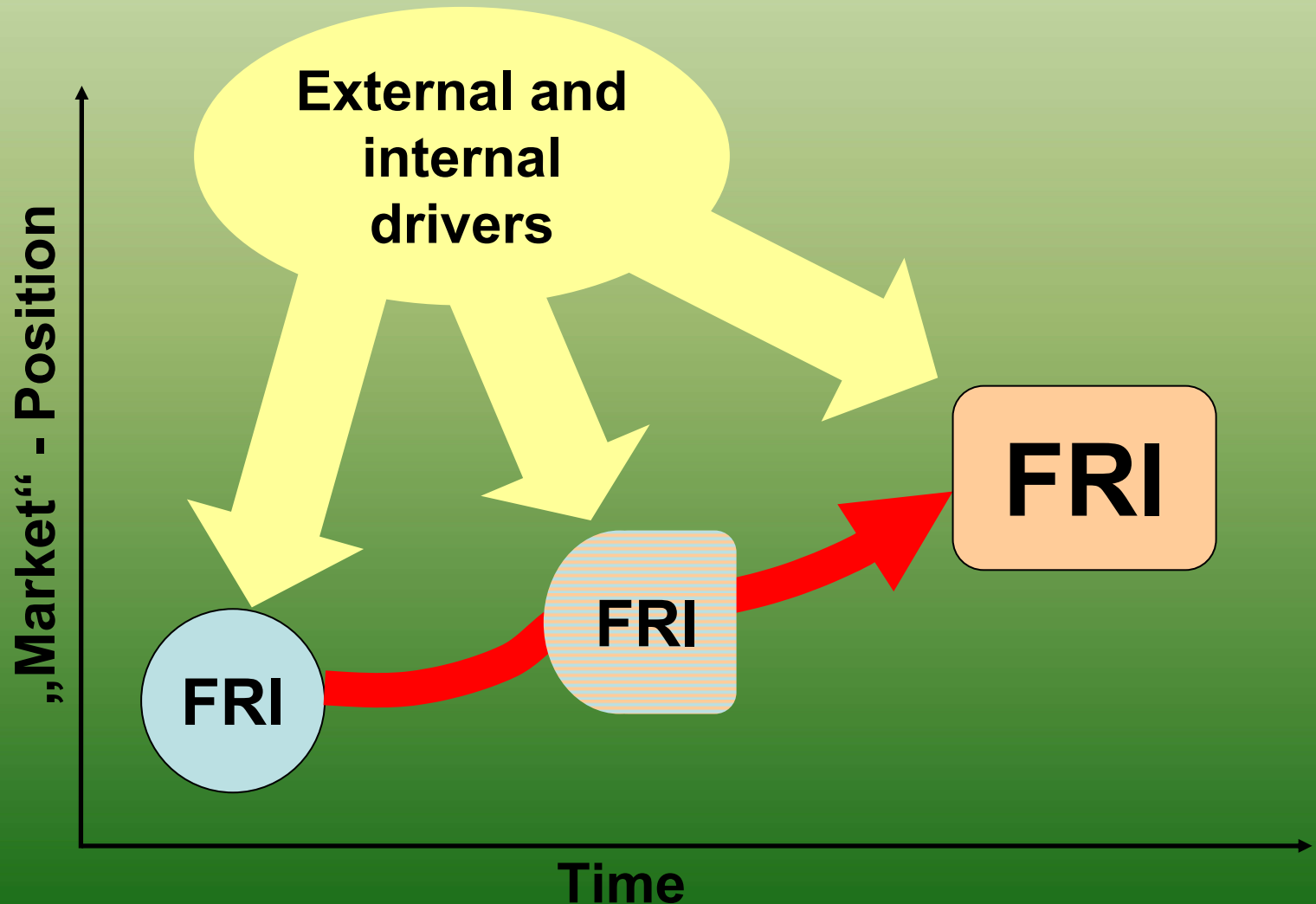
Enterprise Concept and Performance Measurement as Tools for the Reorganisation, Management and Strategic Controlling of a Forest Research Institution

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AUSTRIA



QUALITY at INSTITUTIONAL LEVEL



CHANGING ENVIRONMENT

- **Difficult conditions of public budgets**
 - **Reshaping of the public sector**
 - **Reorganisation of forestry systems**
 - **Competitive public agendas**
 - **Modified club of FRIs**

CHALLENGES for FRI

- **Justify use of public money**
- **Adapt portfolio of activities** (focus on selected tasks)
- **Adjust scientific profile**
- **Optimise use of limited resources** (new management paradigms, increased funding)
- **Proof efficient and effective work**

MANAGEMENT PYRAMID

ENTERPRISE CONCEPT



Operational
Governance

ACTIVITIES of FRIs

**Applied
Forest
Research**

**Basic
Forest
Research**

**Landscape
Research**

**Natural
Hazard
Research**

**Wood
Research**

**Knowledge
Transfer**

**Academic
Education**

**Training
and
Education**

**Services to
Practice**

**Services to
General
Public**

**Forest
Monitoring**

**Services to
Ministry**

**Policy
Counseling**

**Testing and
Certification**

**Enforcement
Authority**

**Forest
Planning**

ENTERPRISE CONCEPT



- 1) Analysis of the External Environment**
(needs/requirements, trends, partners, competitors)
- 2) Internal SWOT-Analysis**
- 3) Vision** (objectives to be reached until 20xx)
- 4) Strategic Tasks** (what, when)
- 5) Performance Indicators** (incl. target values 20xx)
- 6) Resources**

BFW – ENTERPRISE CONCEPT

Mission +

Analysis
Perf

Rese

Depart

Depart

....

Depart



Unternehmenskonzept



Bundesforschungs- und Ausbildungszentrum
für Wald, Naturgefahren und Landschaft (BFW)

FW

aw
cement

toring

ice to
inistry

ice to
ractice



BENEFITS of an EC

- **Agreed guideline** (for board, management, staff)
- **Enabling strategic controlling** (future oriented, complementing financial controlling)
- **Marketing and PR** (convincing stakeholders with a comprehensive concept)
- **Corporate identity** (supporting identification and commitment of staff, common understanding)
- **Agreed basis for assessment of performance**

PERFORMANCE MEASUREMENT

- You cannot manage what you can't measure
- What gets measured gets done
- Measurement influences behaviour (positively)

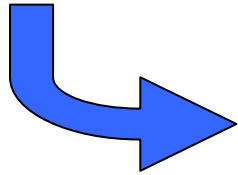
PM-APPROACH for FRIs

Field of Activity	Objectives
Research	
Monitoring	
Knowledge Transfer	
Services to the Ministry	
Services to the Practice	
.....	
.....	

LEVEL of OBJECTIVE

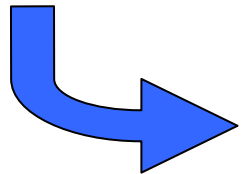
**Outcome-
Impact**

Effects in the external world



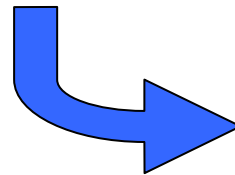
Output

Achievements to obtain effects



Process

Production of output



Input

Resources for the process

PM-APPROACH for FRIs

Subcategories 

Field of Activity	Level of Objective			
	Outcome	Output	Process	Input
Research				
Monitoring				
Knowledge Transfer				
Services to the Ministry				
Services to the Practice				
.....				
.....				

SUBCATEGORIES RESEARCH

Research	Level of Objective			
	Outcome	Output	Process	Input
Research projects		1	2, 3, 4, 5	
Scientific co-operation		9, 11	10	12
Bibliometry		6, 7, 8		
Technology transfer		14, 15, 16, 17		
Training and education of young scientists				
.....				
.....				

EXAMPLES of INDICATORS

Nr.	Performance Indicator	Field	Activity	Objective Level
	Description		Category	
1	Total number of active research projects	Research	Research Projects	Output
2	Share of external funded or co-funded research projects	Research	Research Projects	Process
3	Share of external funding of research projects	Research	Research Projects	Process
4	Share of projects with external partners	Research	Research Projects	Process
5	Frequency of approved project applications	Research	Research Projects	Process
6	Peer-reviewed publications	Research	Bibliometry	Output
7	Presentations at scientific events	Research	Bibliometry	Output
8	Posters at scientific events	Research	Bibliometry	Output
9	International researcher exchange (months/year)	Research	Scientific Co-operation	Output
10	Share of projects started in cooperation with other research institutions	Research	Scientific Co-operation	Process
11	Number of mandates in international scientific organisations	Research	Scientific Co-operation	Output
12	Person months for mandates in international scientific organisations	Research	Scientific Co-operation	Input
13	Number of reviews for scientific journals	Research	Scientific Co-operation	Output
14	Organised scientific events	Research	Technology Transfer	Output
15	Pending patents	Research	Technology Transfer	Output
16	Licence and technology transfer agreements	Research	Technology Transfer	Output
17	Spin-offs/start-ups	Research	Technology Transfer	Output



DRAFT of european NFRIs

Heads of National Forest Research Institutes

Performance Measurement of National Forest Research Institutes

Working paper

H. Mauser

Preface

The heads of european National Forest Research Institutes (NFRIs) had their first international meeting in July 2004 in Vienna. Inter alia the topics benchmarking and performance measurement were discussed and an informal working group on the latter topic established. This working group will elaborate a draft on processes and indicators for performance measurement of NFRIs, based on information interested NFRIs delivered voluntarily on performance indicators already used.

The heads agreed to leave benchmarking up to bilateral agreements between interested NFRIs. A report on such experiences should be presented at the next meeting in 2006, where this topic should be discussed by the heads based on some case studies.

This document is a working paper to facilitate the discussion and further elaboration of a harmonized approach on performance measurement of NFRIs.

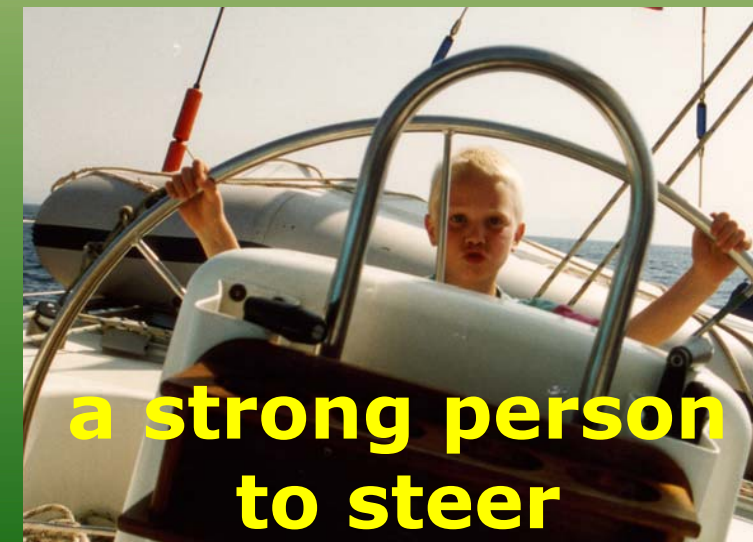
1 Background

1.1 General preconditions

All european NFRIs depend on public funding to fulfil their mission and to conduct their activities. The share of federal budgets differs among the institutions, but is a necessary part of the financial viability of all NFRIs.

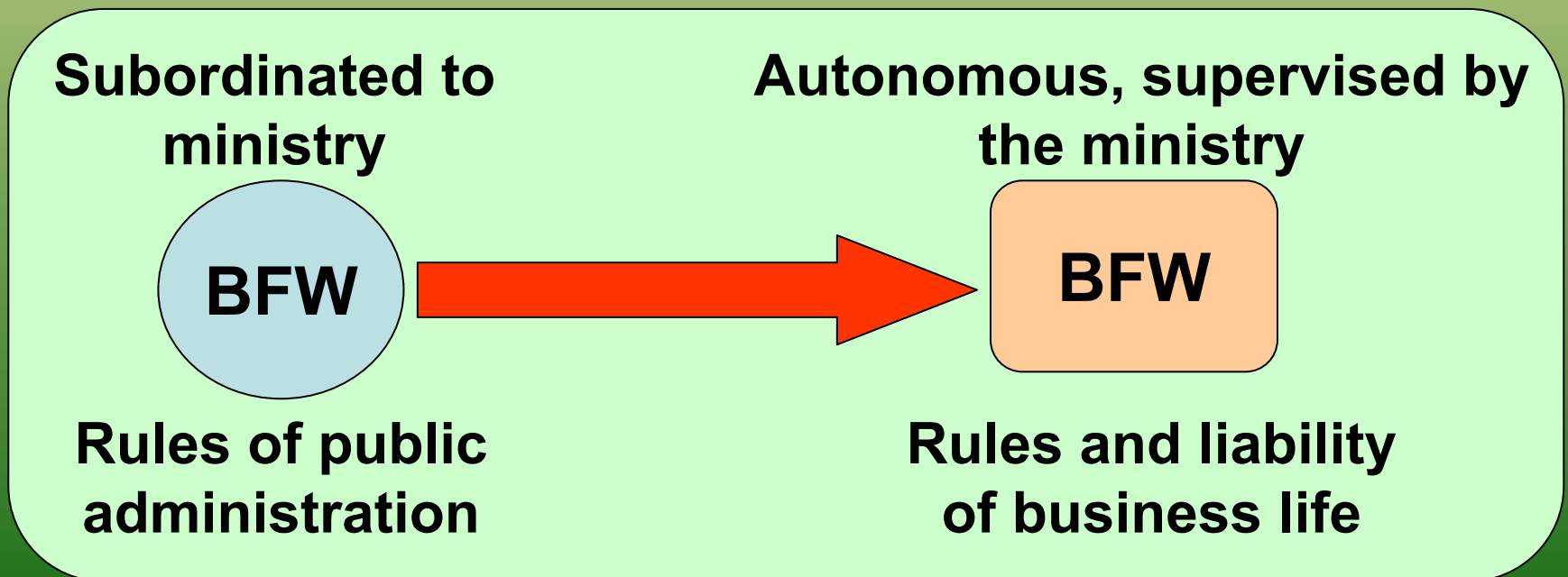
The difficult conditions of public budgets in Europe led to an increasing necessity to justify the use of public money for specific purposes. Therefore, NFRIs face a growing pressure to

The WAY to SUCCESS



CONTENT

- **GENERAL CONDITIONS and CHALLENGES**
- **ENTERPRISE CONCEPT**
- **PERFORMANCE MEASUREMENT**



FOREST RESEARCH INSTITUTE

**Applied
Forest
Research**

Basic
Forest
Research

Landscape
Research

Natural
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