

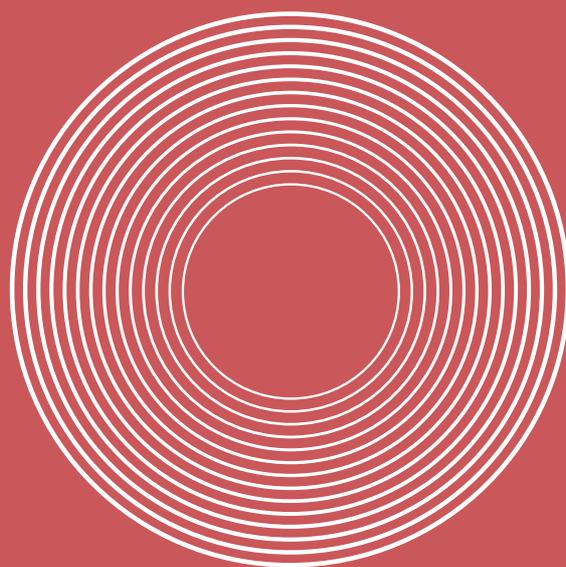
*ÖNB*

OESTERREICHISCHE NATIONALBANK

EUROSYSTEM

# INTELLECTUAL CAPITAL REPORT 2003

“Knowledge for Stability”



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# Foreword

*Today's employees and employers are well aware of the necessity to keep adjusting training and education to the realities of the modern world – and rightfully so. As a guiding principle in this respect, Immanuel Kant's appeal "Have courage to use your own understanding!" has lost none of its urgency.*

*Given the demanding requirements a central bank faces, it is well advised to invest into the education, expertise and know-how of its staff members. As national central banks go, the Oesterreichische Nationalbank (OeNB) cannot be compared to a commercial bank or company, because the economic tasks it has to fulfill go far beyond the demands of the shareholder value principle. Price stability, financial stability and the smooth operation of payment systems, to mention but a few of the OeNB's goals, are public goods that are essential for the general functioning of the economy. Naturally, to meet such important requirements, every link in the chain must be strong. The OeNB's ability to accomplish these challenging tasks – and thus gain the confidence of the public and the business world alike – largely hinges on the successful cooperation of a host of experts and professionals. Building public confidence as a prerequisite for a successful monetary policy, in turn, requires that the OeNB effectively communicates its expert knowledge.*

*Knowledge is an active quality which can be optimized by a sound education, intellectual agility – embedded in a professional corporate infrastructure – and well-targeted motivation measures. In the OeNB's case, knowledge is also a guarantor of stability.*

*Ordinary balance sheets and controlling tools do not suffice to adequately capture intellectual capital like specialized know-how and well-established relationship networks. The OeNB has therefore decided to draw up an Intellectual Capital Report, which pays due attention to these aspects and at the same time indicates potential for improvement.*

*This Intellectual Capital Report aims at making intellectual capital a tangible, manageable and communicable asset. At the same time, it enhances the openness and transparency of the OeNB.*

*Klaus Liebscher, Governor*





# 1. Introduction

*To be able to perform its tasks, the Oesterreichische Nationalbank (OeNB) requires extensive specialist knowledge about its core business as a central bank and about the necessary infrastructure. This specialist knowledge has been accumulated at the OeNB over many years and is constantly being further developed to ensure that the OeNB is able to fulfill its commitment to stability in a dynamically changing environment. Managing intellectual capital – and human and structural capital in particular – is of special strategic importance, and compiling an intellectual capital report appears to be a suitable instrument in this context.*

*Following innovative developments in international accounting, this first Intellectual Capital Report of the OeNB is intended to take stock of the OeNB's intellectual capital and services. In the mid-1990s, Scandinavian enterprises were the first to prepare intellectual capital reports in order to capture their intellectual capital in a more comprehensive manner. As according to international and national accounting standards, investment in human resources, research and development (R&D), customer relationship management, etc. may neither be included in the balance sheet nor identified separately in the profit and loss account, companies have begun to capture this additional information in the structured form of intellectual capital reports. Today, innovative companies and institutions in many European countries prepare intellectual capital reports, which are then published or used internally for management purposes. In Austria, research institutes have played a key role in developing intellectual capital reports; not only nonuniversity research institutions but also universities have now begun to prepare such reports. All the relevant guidelines that are currently available agree that intellectual capital reports should present ratios, strategies and objectives, and illustrate the relations between individual forms of intangible assets. In preparing this first Intellectual Capital Report, the OeNB followed these state-of-the-art standards (e.g. the German Accounting Standards).*

*With the intention of providing information to stakeholders, the OeNB has developed a distinctive model to visualize knowledge-based processes. For the first time, instead of simply stating that employees are the most important asset in this respect, the OeNB has systematically corroborated this statement by using quantitative indicators. As an internationally renowned reference model, the Best Practice Model developed by the Austrian Research Centers (ARC) provided guidance for the compilation of this Intellectual Capital Report.*

*With this step, the OeNB assumes a pioneering role both in the Austrian banking sector and in the European System of Central Banks (ESCB) / Eurosystem.*

*The OeNB's Intellectual Capital Report will be used for internal and external communication purposes and is also intended to serve as a future controlling tool. With its specific focus on forward-looking analysis it perfectly complements the OeNB's Annual Report. In a comprehensive preparation process, knowledge goals were defined on the basis of the OeNB's corporate strategy, and indicators were found to measure the achievement of these goals. This report contains a quantitative description of the OeNB's intellectual capital, business processes and range of services, and uses the indicators mentioned above to map the OeNB's knowledge-based capital.*



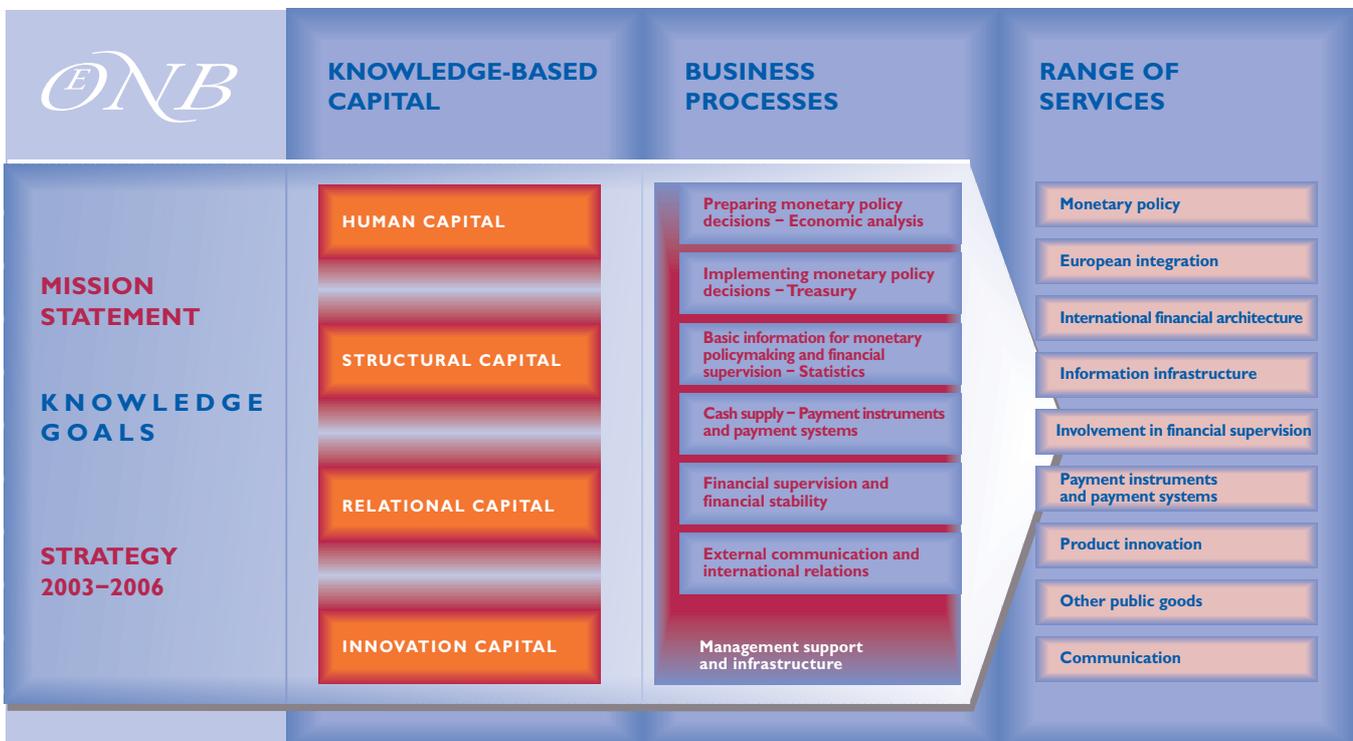
## 2. Intellectual Capital Report Model and Knowledge Goals

As the 2003 reporting year is the first period for which the OeNB prepares an Intellectual Capital Report, the focus of this report is on describing the OeNB's underlying Intellectual Capital Report model and presenting its strategic knowledge goals.

### 2.1 The OeNB's Intellectual Capital Report Model

The OeNB's Intellectual Capital Report makes transparent the stock of knowledge-based capital as well as internal and external knowledge flows. It thus helps document the OeNB's intangible assets, which the Annual Report fails to capture in a comprehensive way.

The OeNB's 2003 Intellectual Capital Report relies on a process-oriented model developed specifically to highlight the close relation between the OeNB's knowledge-based capital, business processes and range of services. The OeNB model refers to intellectual capital as "knowledge-based capital." Knowledge-based capital is an essential prerequisite for handling the OeNB's business processes, which in turn are instrumental for the provision of services. Charts and indicators serve to illustrate the stock and flow of intellectual assets.





## Strategic Objectives and Knowledge Goals

Derived from the OeNB's strategic objectives, the knowledge goals set the framework for using the OeNB's knowledge-based capital, which is composed of four different forms of capital. Working with these forms of intellectual capital creates value added at all corporate levels. In carrying out its business processes and rendering its services, the OeNB makes use of these components to various degrees and in various combinations.

## Knowledge-Based Capital

Knowledge-based capital can be divided as follows:

1. **Human capital** comprises staff expertise and skills applied to business processes. It is described, for example, by indicators such as "percentage of university graduates" or "training participation rate."
2. **Structural capital** refers to organizational and communication structures and to the technical infrastructure. Some of the relevant indicators in this category are "span of supervision," "IT expenses per employee" and "number of subsidiaries in payment systems services."
3. **Relational capital** includes ties with national and international customers and partners. In this context, the OeNB reports e.g. the "number of international bodies with OeNB representatives" or the "confidence index," which is compiled on a quarterly basis by an external polling institute.
4. **Innovation capital** refers to resources with a clear, forward-looking orientation, e.g. the "percentage of staff resources utilized for innovative projects" or "internal R&D expenditure."

Knowledge has a very special feature: It increases when applied and when passed on to others. In this process, knowledge can be both input and output at the same time. If OeNB staff members (human capital) prepare a joint position together with their counterparts at the European Central Bank (ECB) (relational capital) using suitable technical systems (structural capital), they render a service to the OeNB while at the same time enlarging their knowledge base so they can build on it in the future.

This means that knowledge is a good that offers rising profits. Consequently, investment in knowledge-based forms of capital in general has a long-term effect on the quality of business processes and thus on corporate success.

## Business Processes

The OeNB's business processes comprise core processes and support processes: preparing and implementing monetary policy (economic analysis, treasury), providing the basic information for monetary policymaking and financial supervision (statistics), supplying the economy with cash (payment instruments and payment systems), participating in financial supervision, ensuring financial stability as well as engaging in external communication and international relations.

These various processes are interlinked in many ways. Assessing financial stability in Austria, for example, requires input from banking statistics; monetary statistics, in turn, provide the data necessary for implementing monetary policy; macroeconomic analyses contribute to assessing financial stability, etc. The overall output of these business processes consists of the services the OeNB provides in line with its public mandate.



## Range of Services

The range of services illustrated in the Intellectual Capital Report model comprises the following areas:

- Monetary policy: effective participation in preparing and implementing the monetary policy of the Eurosystem;
- European integration: active contribution to European integration and support for EU accession countries;
- International financial architecture: active contribution to the further development of the international financial architecture;
- Operation of a state-of-the-art information infrastructure (including statistics);
- Effective involvement in financial supervision;
- Payment instruments and payment systems: ensuring the secure and smooth operation of payment systems (for both cash and cashless payments);
- Product innovation: further development of products in cooperation with customers and partners;
- Other public goods: provision of services in Austria's economic interest;
- Communication: active and thorough communication (proactive information policy and targeted knowledge transfer).

As the OeNB's Annual Report provides a comprehensive overview of the OeNB's range of services on an annual basis, the Intellectual Capital Report will not refer to this subject area in greater detail.

## 2.2 Knowledge Goals

With a view to the best possible implementation of the OeNB's strategy, knowledge goals focus on establishing and enhancing expertise and skills, structures and relationships that are necessary for the provision of services. The OeNB has formulated four knowledge goals, which reflect the corporate values of confidence, security, stability and efficiency. These objectives help control the OeNB's knowledge-based capital, which is analyzed and interpreted using a selection of relevant indicators. With the help of these indicators, which may refer to several objectives at the same time, it becomes possible to measure the accomplishment of the knowledge goals. While this first Intellectual Capital Report settles for allocating the indicators to the respective knowledge goals, subsequent reports as of the 2004 reporting year will strive to interpret these indicators with respect to the knowledge goals.



## The OeNB's Knowledge Goals

### **“Competence through specialized knowledge”**

The OeNB is an active player in the Eurosystem and has established itself as a highly recognized center of competence in various fields. In this context, it is essential to identify sustainable, future-oriented key topics and to accumulate and further develop relevant, top-quality specialist knowledge.

To implement this strategy, OeNB staff in all business areas must have highly specialized knowledge, particularly as regards the key topics, and must show top-level ability to perform well, a distinctive willingness to learn and high flexibility. Flexible personnel management instruments and targeted training and education measures are key factors in supporting and promoting this requirement.

### **“Confidence through knowledge transfer”**

Public confidence in the top-quality fulfillment of central bank tasks is every central bank's most important good. To keep public confidence at a high level, the OeNB pursues an active information policy. The active transfer of knowledge shall increase public understanding of how a central bank functions and thus contribute to ensuring public confidence.

Active communication with its customers enables the OeNB to continually improve its products and services and to adapt them to market requirements.

### **“Interdisciplinarity through internationality and cooperation”**

The OeNB aims at keeping the Austrian financial market stable and exerting a positive influence on the functioning of the Eurosystem both through strong links between the OeNB's various sections and national and international partners, and through close cooperation within the OeNB group itself.

To fulfill these tasks in the best possible way, the OeNB actively cooperates with its partners in the Eurosystem, with commercial banks, public authorities and scientific institutions, to name but a few.

### **“Efficiency through modern management”**

The OeNB strives to constantly develop and improve its business processes and services. Improvements relate both to economic aspects (i.e. the efficient performance of tasks within the entire group) and to the reliable and high-quality execution of operational tasks, including – as a special focus – the management of operational risks.

The OeNB intends to achieve this efficiency by further developing its know-how in business administration and by using innovative methods and techniques as well as a secure infrastructure.



## 3. Knowledge-Based Capital

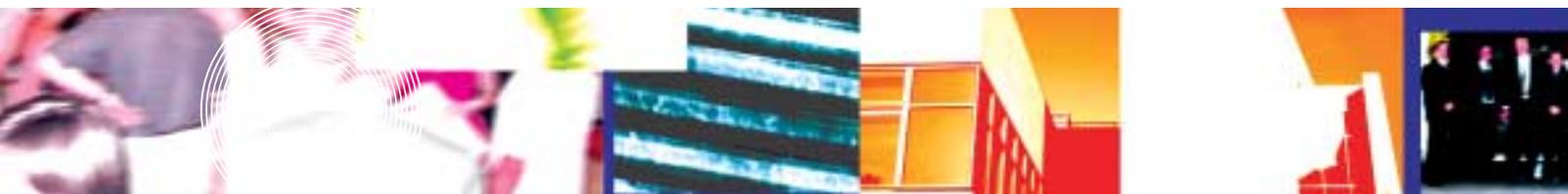
This chapter gives a detailed description of the four components of knowledge-based capital, illustrating them with the help of the respective indicators. For this first Intellectual Capital Report, there are no comparable figures from earlier years; the focus is therefore on 2003.

As of the 2004 reporting year, the report will capture and interpret both the change over time and the development of indicators in relation to the knowledge goals. Target directions have been given for those indicators that can be influenced by the OeNB.

### 3.1 Human Capital

Given that a central bank provides a broad range of knowledge-based products and expert positions, its employees and their knowledge are among its most important assets. The human capital component illustrates staff structures within the OeNB and provides information about the development of staff qualifications.

Indicators	Value 2003	Target	Corresponding knowledge goals			
			Competence	Confidence	Interdisciplinarity	Efficiency
<b>Staff structure</b>						
Headcount (average)	951	▼	●			●
Percentage of women	39.5	▲	●			
Percentage of women in specialist positions	27.0	▲	●			
Percentage of women in management positions	14.8	▲	●			
Percentage of part-time employees	5.6	▲	●			●
Percentage of staff participating in teleworking schemes	1.7	▲	●			●
Fluctuation rate (%)	1.2	▶	●	●		●
<b>Training and education</b>						
Total number of training days per employee (annual average)	5	▶	●			
Training participation rate (%)	70.0	▶	●			
Expenses for training and education per employee (EUR)	2,246	▶	●			
Number of completed and certified additional qualification courses (in-service)	13	▲	●		●	
Number of internal job rotations	29	▲	●			
Number of working visits to national and international organizations	12	▲	●		●	
Percentage of university graduates	32.6	▲	●			
Number of employees with external teaching assignments	15	▲	●	●		



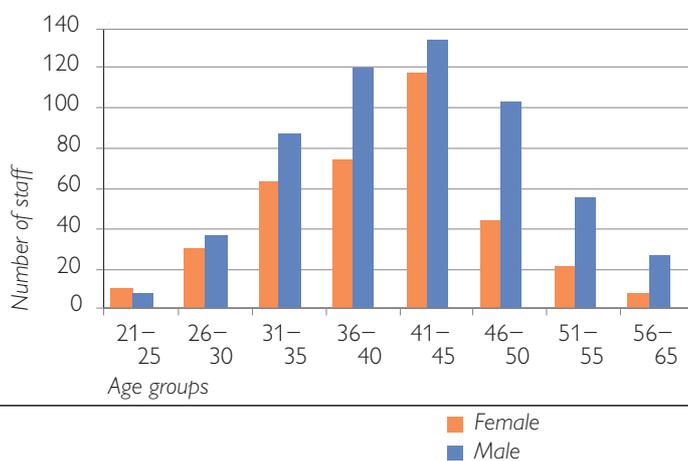
## The OeNB's Staff

In 2003, the number of staff employed by the OeNB in the fields of economic analysis, financial market and risk analysis, treasury, statistics, payment systems, information technology (IT) and support averaged 951. As activities within the ESCB/Eurosystem are highly demanding and framework conditions are changing at an ever greater pace, the OeNB has, over the past few years, mainly taken on employees with university degrees and/or professional experience. This trend is also reflected in the percentage of university graduates among the OeNB's staff, which came to 32.6% in 2003 and is likely to rise further.

The average OeNB employee is 41.08 years old and has been with the OeNB for 14.8 years. This high average seniority makes it possible to accumulate valuable specialist knowledge on the job, which in turn is of long-term benefit to the OeNB.

Sharing their knowledge with others is of high priority for OeNB staff: In 2003, 15 OeNB staff members had teaching assignments at universities, technical colleges and other academic institutions. The involvement of OeNB lecturers at the Joint Vienna Institute, a Vienna-based international training center offering training courses on economic and monetary issues to participants from EU accession countries, is another example of how the OeNB shares its expertise.

### Age Structure of OeNB Staff



## Training – An Investment in the Future

Sound expert knowledge is one of the OeNB's major success factors. Therefore, it is of high strategic importance to keep employees continually informed about the latest findings in their specialist fields.

The OeNB constantly invests in the training of its staff. As a result of the extremely low fluctuation rate of 1.2%, these investments are of direct benefit to the OeNB as the acquired knowledge is immediately applied to its business processes. The OeNB's goal is to continuously improve the technical expertise and the social skills of its employees and to keep them up to date with the latest developments. Training courses are therefore offered throughout the year for all positions and at all levels. In 2003, 70% of the OeNB's employees participated in at least one training course. On average, each OeNB employee invests five days per year in training and education.

OeNB employees are also willing to attend in-service training and education courses in their leisure time. In the reporting year, 13 employees completed additional certified training courses, ranging from balance sheet accounting to post-graduate programs.



Language training has high priority for the OeNB, as foreign language skills (particularly English) are a prerequisite for international cooperation. Over the past few years the OeNB has not only offered a wide range of language courses, but has also cooperated with other central banks in organizing an increasing number of specialist seminars held in English. These efforts also promote international networking between the participants.

The OeNB defines annual priorities for specialist training programs in order to keep its staff up to date with the latest developments in relevant subject areas. In 2003, particular emphasis was put on Basel II. In view of the changes in banking supervision which the new international framework will entail for the OeNB, 110 employees were trained primarily in the fields of banking legislation, bank products, accounting, financial mathematics, statistics, risk management and capital allocation.

Another important activity in this context is the OeNB's training initiative for the newly created product manager positions. This training course specializes in business management methods and marketing instruments. A total of 68 product managers took part in this course in 2003 (see 3.2 Structural Capital).

### **More Flexible Working Hours**

With the intention of retaining the accumulated specialist knowledge in-house by keeping fluctuation as low as possible and by increasing its attractiveness as an employer, the OeNB has introduced a number of new measures to make working hours more flexible and enable all employees to reconcile work and family life.

In addition to the individually variable part-time schemes (providing for the possibility of working at 50% to 80% capacity) that had been implemented in 2002, the opportunity of working at a capacity of 20% or 30% was created in 2003. This should in particular enable employees on leave to remain integrated into the work process. At end-2003, 5.6% of OeNB staff were working part-time.

To increase flexibility even more, the OeNB has created the opportunity to take a sabbatical of either three or six months (e.g. for personal education or training) within a 30-month time frame, with compensation pro-rated.

Flexibility has been increased not only in terms of working hours, but also in terms of physical workplaces by introducing a teleworking scheme. In 2003, 16 OeNB employees opted for spending a certain percentage of their working hours at home teleworking.

### **Management Careers and Specialist Careers**

The specific challenges the OeNB faces in a permanently changing environment require managers to perform efficient management, to ensure the optimal utilization of human resources and to display a willingness and ability to deal with change. For this reason training measures for managers were revised in 2003.

For highly specialized employees, the OeNB offers not only the opportunity to pursue a classical career in management, but also the chance to opt for a specialist career which exclusively concentrates on technical expertise and coordination tasks.



### 3.2 Structural Capital

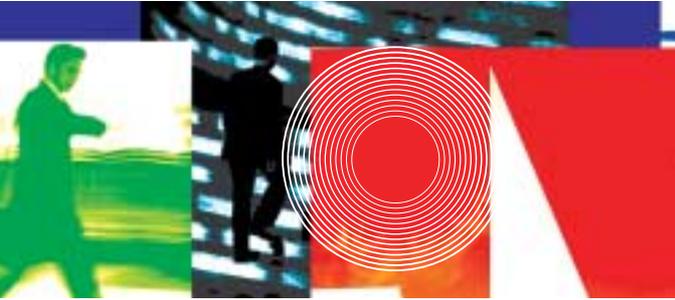
The OeNB's structural capital comprises organizational and management structures as well as its technical infrastructure. The appropriate security and availability of their technical infrastructure is particularly important for central banks as they have to handle large volumes of sensitive data in time-critical settings. Supporting the OeNB in the performance of its tasks, the OeNB's subsidiaries constitute a further important structural component.

Indicators	Value 2003	Target	Corresponding knowledge goals			
			Competence	Confidence	Interdisciplinarity	Efficiency
<b>Management structure</b>						
Span of supervision	8	▶				●
Number of product managers	68	▶	●			●
<b>Technical infrastructure</b>						
IT expenses per employee (EUR)	2,111	▶				●
Number of IT applications	150					●
Availability of the ARTIS payment system (%)	99.38	▲	●	●		●
Error-free payment transactions (%)	99.99	▶	●	●		●
<b>Environmental protection and quality assurance</b>						
Number of environmental controllers	32	▲				●
Number of environmental auditors	9	▲				●
Number of quality auditors	19	▶				●
<b>OeNB group</b>						
Number of subsidiaries in payment systems services	7		●		●	●

#### The OeNB as a Well-Functioning System

The OeNB consists of 44 organizational units (as at December 31, 2003), including divisions, other organizational units (e.g. representative offices) and branches. To produce the best possible output, management must be effective. On average, one OeNB manager is in charge of eight employees – a ratio that corresponds to the typical span of supervision in the finance industry.





### **Customer-Oriented Products and Optimized Processes**

The OeNB takes special care to tailor its system of objectives to customers' needs; to this end, the entire range of OeNB services has been divided into a total of around 130 individual products. In this way, the OeNB is able to meet customers' specific expectations and requirements, to optimize the benefit of products for the customers and consequently to improve customer satisfaction. To live up to this responsibility, the OeNB introduced the concept of product management and appointed a product manager for each of its products in the first half of 2003, primarily with the aim of fostering communication with its customers. In addition to improving its individual products, the OeNB aims at raising its effectiveness as a central bank and optimizing its entire product portfolio.

In addition to this outward component, the OeNB's product management is also geared to specific internal goals, such as the constant improvement of product creation and a rise in the OeNB's overall efficiency. Consequently, the 68 product managers play an important part in this area. In concrete terms, they are expected to identify any existing potential for optimization in the value chains, make use of such potential and thus improve the quality and throughput time of business processes, etc. For this purpose, product managers – just like the OeNB management staff – can draw upon business management data and instruments, ranging from cost accounting to process optimization programs and scenario analyses.

### **Secure and Reliable Systems**

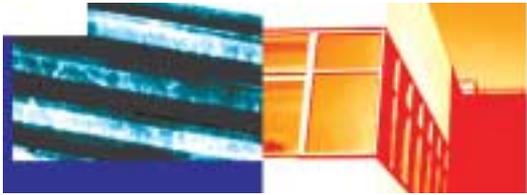
The OeNB is an active partner in the ESCB. To be able to perform its tasks, which comprise ensuring financial stability and strengthening the Austrian financial market, strong links to the ECB and other national central banks are indispensable both from an organizational and a technical point of view. In their daily communication, the OeNB and the ECB electronically exchange and process large volumes of data; these transactions *inter alia* rely on secure data transmission lines, document management systems and databases.

The security and availability of data and data transmission lines is especially important for processing cashless payments (via "eKonto" for commercial banks). Bearing this in mind, the OeNB has begun to make use of digital signatures to ensure that data and IT applications are not only secure but also accessible at any time according to their criticality. For ARTIS, the Austrian Real-Time Interbank Settlement system, this means that errors have to be corrected immediately in order to avert economic damage. In 2003, ARTIS was available for 99.38% of its operating time.

To account for its heterogeneous customer structure, the OeNB employs a modern IT architecture with some 150 different applications, making both use of standard applications and various in-house software solutions that take into account the typical requirements of a central bank.

By establishing a control center responsible for controlling and monitoring IT systems operations, the OeNB has taken another step toward optimization. In 2003, IT expenses per employee amounted to EUR 2,111.

Introduced in 2003, the OeNB's operational risk management scheme quantifies the potential risk for individual critical core processes, thus making it possible to control the OeNB's operational risk. The scheme applies international criteria (referring to systems, processes, persons involved, external events) to assess the effects of failures and provides for the corresponding risk-minimizing measures.



## Environmental Protection and Quality Assurance

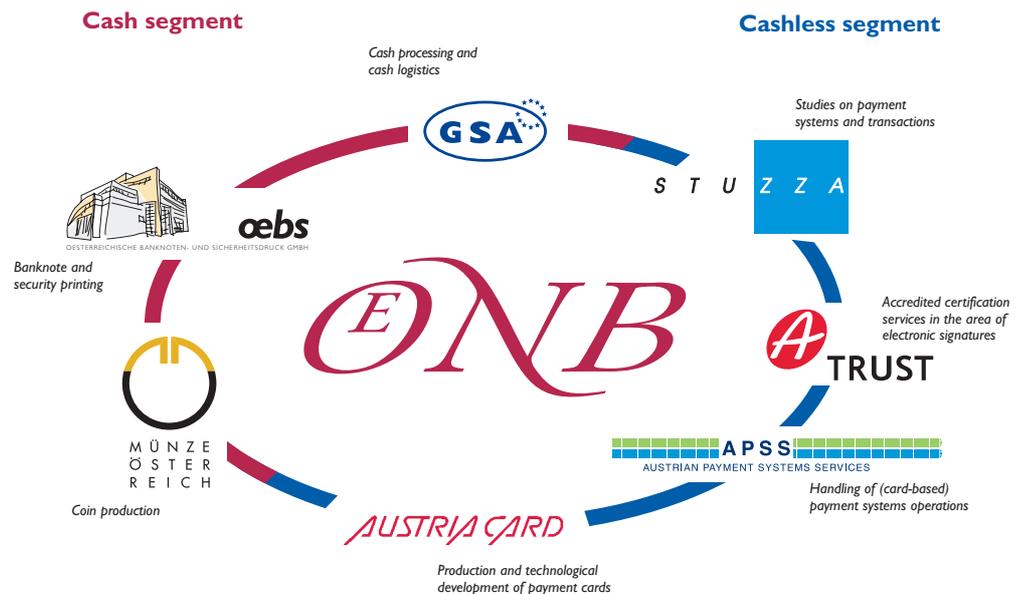
A comprehensive framework of internal rules – ranging from the rules of procedure and staff regulations for all OeNB sections (e.g. IT, security) to the treasury Rule Book, to name but a few – provides guidelines for adequate task performance. Provisions such as the “Guideline for the prevention of insider trading” and the corresponding internal “Compliance Organization” serve to prevent insider trading, as stipulated by the Securities Supervision Act.

ISO-certified divisions and processes (ISO 9001 and ISO 14001) as well as additional business management tools guarantee standardized procedures and the standardized performance of services.

The OeNB’s active interest in environmental protection is reflected, inter alia, in its willingness to qualify for certification according to the EMAS (Eco-Management and Audit Scheme) environmental standards. Currently, 9 internal environmental auditors and 19 quality auditors ensure that the OeNB is in compliance with top environmental and quality standards. In the course of establishing an environmental management system, the OeNB has appointed 32 environmental controllers from all business areas, whose commitment and ideas for improvement shall also contribute to minimizing costs. An outstanding example of environmental protection in 2003 was the large-scale move to using 100% recycled paper, which resulted in considerable cost savings.

## The OeNB and Its Subsidiaries

With the market support of its subsidiaries in the field of payment instruments, the OeNB endeavors to supply cash to Austrian users in an optimal fashion and to ensure the smooth functioning of payment systems. The OeNB’s subsidiaries, in cooperation with the OeNB, engage in operational activities in the relevant fields and have accumulated specialist know-how.





### 3.3 Relational Capital

In the public interest, the OeNB contributes to the design of monetary and economic policy both in Austria and in Europe and thus actively promotes European integration. In fulfilling this role, the OeNB relies on a tight-knit network of national and international relations. In this context, close contacts with customers, partners and the public are just as important as the participation in international organizations.

Indicators	Value 2003	Target	Corresponding knowledge goals			
			Competence	Confidence	Interdisciplinarity	Efficiency
<b>Cooperation and networks</b>						
Number of international meetings hosted by the OeNB <i>(the OeNB acting as a knowledge hub)</i>	43	▲		●	●	
Number of national bodies with OeNB representatives	81		●		●	
Number of international bodies with OeNB representatives (ESCB, etc.)	172		●		●	
Number of technical assistance projects	23		●	●	●	
Number of lectures delivered by OeNB staff	744	▶	●	●	●	
<b>Publications and public relations</b>						
Number of OeNB publications	58	▲	●	●		
Number of papers published by OeNB staff in specialist journals	115	▲	●	●		
Number of scientific papers published by OeNB staff in refereed journals	25	▲	●	●		
Number of press releases	162	▲	●	●		
Number of press conferences	26	▲	●	●		
Number of inquiries to OeNB hotlines	28,500		●	●		●
Confidence index (%)	82.0	▶		●		
<b>Internet-based communication</b>						
Number of individual files accessed on the OeNB website <i>(daily average)</i>	167,100	▲	●			●
Number of newsletter subscriptions	9,631	▲	●			●





## **European System of Central Banks (ESCB)/Eurosystem**

The OeNB's close involvement in the ESCB/Eurosystem calls for building up and maintaining a broad network of relationships to support the active role of its governor in the monetary policy and technical decision-making process in the Governing Council of the ECB. In the reporting year, the OeNB's staff members successfully cooperated with their partners in 603 ESCB/Eurosystem meetings, 13 ESCB committees and 92 working groups to attain common goals and to continuously improve the functioning of the ESCB/Eurosystem.

In 2003, the ESCB/Eurosystem increasingly focused on preparing for the accession of the ten new Member States to the EU. In the process, the OeNB found new partners in the ESCB network. In an intercultural environment, the OeNB staff's interdisciplinary expertise proved to be an essential prerequisite for successfully establishing these new contacts and for reaping their strategic benefit.

The OeNB also participates in Eurosystem-wide research networks; this joint scientific cooperation shall serve both to increase the OeNB staff's specialist knowledge and to generate new expertise. In 2003, the OeNB took part in the Monetary Transmission Network and the Inflation Persistence Network of the ESCB.

## **Relations with the European Union and International Financial Organizations**

In addition to their involvement in the ESCB/Eurosystem, in the reporting year the OeNB management and staff represented Austrian interests in 67 international bodies, such as the EU, the International Monetary Fund (IMF), the Bank for International Settlements (BIS) and the Organisation for Economic Co-operation and Development (OECD).

The OeNB is also involved in fulfilling EU tasks in manifold areas such as economic and monetary policy, statistics, banking supervision, payment systems, etc. Together with the governors of other EU central banks, the governor of the OeNB takes part in the informal meetings of EU finance ministers to discuss strategically important EU-related financial and economic issues. Within the new committee structure according to the Lamfalussy model, the OeNB is also represented in the newly established Committee of European Banking Supervisors (CEBS), the European Commission's most important advisory body in the field of banking supervision.

The governor of the OeNB represents Austria on the IMF Board of Governors, which primarily discusses global economic developments as well as measures and instruments to enhance the prevention and management of international financial crises. Moreover, the OeNB participates in IMF working groups as well as in the Economic Policy Committee (EPC). In the Committee on Monetary, Financial and Balance of Payments Statistics, OeNB staff members actively contribute, for example, to the expansion of the European economic statistical system.

At the BIS, OeNB experts share their expertise in technical committees. Moreover, they provide technical assistance to economies in transition. In 2003, 23 projects on applied economics and financial policy issues were successfully completed.



### **The OeNB's Role in the National Financial and Economic Policy Architecture**

Traditionally, the OeNB is also involved in the coordination of EU tasks in Austria and is consulted on issues falling within its field of competence. Related activities include e.g. briefings for meetings of the Ecofin Council or the European Council. Altogether, OeNB staff members share their expertise in 81 national bodies and working groups.

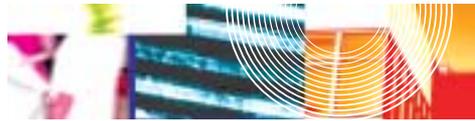
In the field of banking supervision, the OeNB closely cooperates at various hierarchical levels with the Financial Market Authority (FMA), which is in charge of banking, insurance, securities and pension fund supervision. This cooperation helps maintain high quality standards and efficiency in performing supervisory functions.

### **Active Communication and Information Policy**

The OeNB's public relations activities serve as a communications interface between monetary policymakers, Austrian economic policymakers and the public. Like every central bank, the OeNB gears its external communications toward maintaining and strengthening public confidence both in the central bank as an institution and in monetary policy. The tight connections and close cooperation with public relations experts at other Eurosystem NCBs help reach this goal. Confidence is an essential prerequisite for an effective monetary policy; it does not evolve by itself, though, but rather results from the constant implementation of active, strategic public relations activities. In the early 1990s, the OeNB started to build up a public relations network including the Austrian Broadcasting Corporation (ORF), the federal government (Euro Initiative) as well as various labor and industry associations and aid organizations. This successful concept has received several awards. Over the past seven years, the OeNB has achieved a high level of public confidence; maintaining and improving this level is the key objective of the OeNB's public relations activities. The OeNB's confidence index, which is compiled on a quarterly basis by a polling institute, came to 82% at the end of 2003.

The OeNB employs a number of instruments in order to achieve a high degree of public confidence. On the one hand, the OeNB relies on its connections to journalist networks, which were strengthened even further during the euro cash changeover; on the other hand, it organizes well-targeted PR activities – the total number of events came to 281 in 2003 alone, attracting 15,486 participants altogether. In the same year, public relations activities and products included seminars for journalists, regular press talks (altogether 188 press releases and press conferences), 58 OeNB publications, 140 articles written by OeNB staff and more than 700 lectures. In this way, the OeNB presents its range of services and the resulting economic benefits for Austria both to the general public and to specific audiences (banks, the industry, schools and universities, to name but a few).

Moreover, based on the concept of integrated communication, the OeNB utilizes a wide range of information tools that are tailored to the respective target audiences and in line with the corresponding requirements on effectiveness and efficiency. To complement these public relations measures, the OeNB actively promotes social and economic policy research by granting scholarships and generously endorses cultural events with the intention of emphasizing its social responsibility.



### 3.4 Innovation Capital

The OeNB's innovation capital comprises innovative projects geared to increase internal efficiency as well as projects that are of macroeconomic benefit. In addition, innovation capital also includes custom-made IT applications and models such as the business cycle model and the inflation model. When providing expert opinions on applications for research funding by its Anniversary Fund, the OeNB also acquires new know-how, which in turn inspires new ideas. In this sense, research and the opinions the OeNB prepares in connection with research funding also qualify as innovation capital.

Indicators	Value 2003	Target	Corresponding knowledge goals			
			Competence	Confidence	Interdisciplinarity	Efficiency
Percentage of staff resources utilized for innovative projects	10.9	▶				●
Internal R&D expenditure (EUR 1,000)	3,347	▶	●			
Number of research cooperation projects with external partners	44	▲	●		●	
Number of research visits	3	▲	●		●	
Number of opinions prepared for (industrial) research promotion	594		●			
Number of e-business applications accessed per day (average)	545	▲		●		●

#### Internal Research and Development

As a modern central bank, the OeNB is committed to promoting science and research. However, it is also an institution with a considerable innovation capital of its own, as its staff members develop new methods that can be employed in a creative and profitable manner. In 2003, the amount spent on in-house research and development (R&D) totaled EUR 3,347,000.

Moreover, the OeNB carried out 44 different research projects with 28 research cooperation partners in 2003.





### **Optimizing Processes and Organizational Procedures**

The OeNB places special emphasis on all aspects of change management. As part of its operational activities and its strategically important innovative projects, the OeNB develops and implements innovative solutions. In 2003, the OeNB invested 10.9% of its entire staff resources in innovative projects aimed at making processes more efficient and at optimizing the use of resources.

### **Innovative E-Business Applications**

The OeNB provides 20 e-business applications which are, on average, accessed 545 times a day. In 2003, three newly developed e-business applications were added to the OeNB's web presence to serve as further sources of information for customers: the communications platform for professional cash handlers, the GELD.KUNST.RAUM webpage and the CEEC Research Platform. The latter offers selected reports, analyses and studies on Central and Eastern Europe, information on OeNB events and other related services.

### **Changes of Macroeconomic Benefit**

The OeNB strives to promote sustainable innovations in the cash and the cashless payments segments.

In 2003 the OeNB played a particularly active role in the field of cross-border payment systems and in providing fair access to the EBA STEP2 system (a system for intra-EU credit transfers) for Austrian banks. With these activities, the OeNB was able to establish itself as a national hub for intra-EU payments at the earliest possible date.

### **New Processes and Analytical Tools for Banking Supervision**

In view of the continuous changes in the banking sector, e.g. through new financial products and new risk management methods, the OeNB has started a comprehensive modernization project to raise supervisors' risk awareness as well as effectiveness and efficiency in general. As part of this project, the OeNB's off-site analysis of Austrian banks has been extensively adapted according to state-of-the-art scientific methods and restructured in view of the future Basel II requirements. The first step was to determine the state of the art at other European supervisory institutions and central banks through contacts and workshops with practitioners, consultants and certified public accountants. Using the know-how acquired, the OeNB – together with the Financial Market Authority (FMA) and in professional cooperation with university experts – began to develop new processes such as system-supported on-site inspections and related analytical tools. In turn, the comprehensive know-how acquired during the set-up of a risk-based supervision scheme has been made available to the credit institutions. In addition, the OeNB published a Structured Products Handbook in 2003 and started to draw up a series of guidelines on various aspects of risk management, intended to guide banks when implementing the Basel II regulations.



### **New Interest Rate Statistics for Austria and the Euro Area**

The common European monetary policy hinges on reliable statistics. During the past few years, the Eurosystem has made considerable achievements in this field. However, up to 2003, harmonized statistics on the interest rates which credit institutions charge their customers did not exist. Therefore, no reliable information was available on whether credit institutions were passing on Eurosystem interest rate signals to companies and households (i.e. on the transmission mechanism of monetary policy). After several years of thorough preparation, in which the OeNB played an active role, the ECB and the Eurosystem NCBs successfully completed the new interest rate statistics in 2003 and have since published them on a monthly basis. In an effort to make the exchange of information with its customers as user-friendly and smooth as possible, the OeNB opted for conducting a sample survey covering 88 credit institutions instead of a census covering all 800 banks in Austria. The representative sample was determined by means of statistical methods, which ensured that the reporting burden was minimized without impairing the quality of results.

### **Using Innovative Products in Treasury Activities**

The OeNB regards the controlled, risk-minimizing use of derivative products, such as currency options, forward rate agreements, futures or interest rate swaps, as one of the focal points of its business activities. The use of derivative products relies on the continuous evaluation of current market developments with regard to new instruments and techniques and on adequate risk management.

### **Development of an Economic Indicator**

In 2003, the OeNB published the first gross domestic product (GDP) estimates based on a new economic indicator. The OeNB's economic indicator draws on the results of two econometric models, a state space model and a dynamic factor model. The state space model uses six selected indicators (ifo business climate index, credit volume, number of vacant positions, exports, wholesale prices, interest rate differential) to estimate GDP. The dynamic factor model employs a set of 143 indicators, from which it extracts the major driving forces behind the business cycle by means of dynamic time series.





### **Research Focus: Central and Eastern Europe**

In 2003, the OeNB continued to successfully use the comparative advantage it enjoys thanks to its analysis and research expertise on Central and Eastern Europe and, in particular, its research focus on exchange rates and fiscal and structural policies in this region. Over the past few years, the OeNB has further consolidated its leading position in this field and has thus become an important reference point and highly specialized adviser not only within the Eurosystem, but also for the NCBs of the acceding countries and for economic policymakers at the national level.

The focus in 2003 was on “exchange rates.” Given that some EU acceding countries strive to introduce the euro within a relatively short period of time, the OeNB has built up comprehensive expertise on numerous related economic issues, such as the analysis of exchange rate strategies, the calculation of equilibrium exchange rates and the assessment of progress made toward real and nominal convergence.

As part of the Eurosystem’s forecasting process and an input to establishing an economic framework for the euro area, the OeNB also prepares economic forecasts covering the most important Central and Eastern European countries.

### **Promotion of Science and Research**

The OeNB has traditionally been a committed promoter of research, extending, e.g., funds from its Anniversary Fund, which in the past mostly went to projects in economics, medicine, social sciences and the humanities, and awarding two scholarships each year. In its efforts to promote research and to stimulate the economy, the OeNB prepared a total of 594 expert opinions in 2003.





## 4. Business Processes and Services

By generating, processing, transferring and, ultimately, using knowledge, the OeNB aims at ensuring the best possible performance of its tasks. To this end it is vital that the OeNB performs all the core functions of a central bank for the Austrian financial market. In the end, however, a central bank's performance efficiency depends on how it implements these core functions in a host of business processes. Therefore, by employing knowledge-based capital, the OeNB endeavors to create efficient, high-quality business processes and to provide a fully functional and powerful infrastructure using professional support processes. The ESCB also strives to coordinate its individual business processes and to develop them further to identify best practices.

Its core functions as a central bank form the basis of the OeNB's Intellectual Capital Report model (see chart in chapter 2).

Moreover, the Intellectual Capital Report model shows that, from a methodological perspective, business processes are the intermediate step which ultimately leads to the provision of OeNB services. The type and scope of services to be rendered by the OeNB are largely defined by law. OeNB services cover the following key areas: safeguarding price stability and financial stability and supporting economic policy in general, both at the European and at the national level. In managing its business policies, the OeNB sees to it that the services rendered, in their entirety, ensure that the OeNB reaches its objectives and fulfills its mandate.

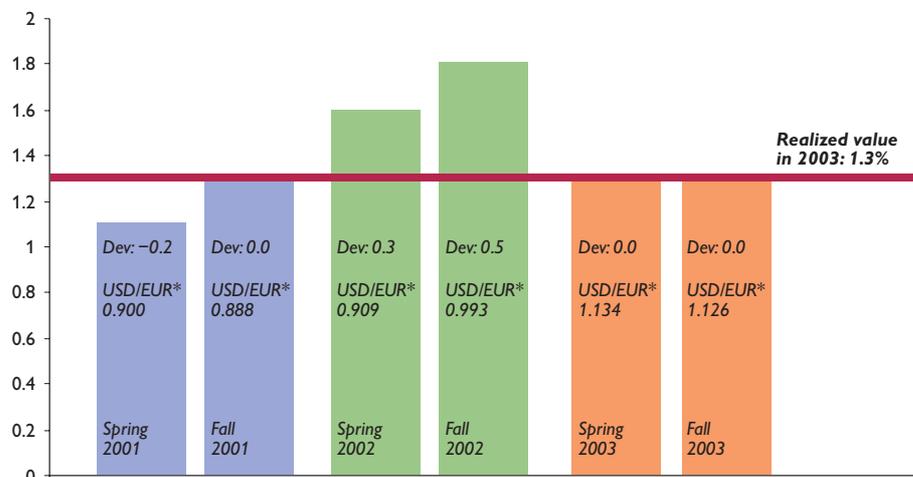
By way of example, individual business processes are presented below to illustrate the complexity of tasks and consequently high demands on the specialist knowledge and experience of the involved OeNB staff members.

### 4.1 Price Stability – A Primary Objective

The primary objective of the ESCB/Eurosystem is to ensure price stability in the euro area. Economic forecasts help perform this task. Twice a year, the OeNB publishes a macroeconomic forecast for Austria, which also includes a forecast of the inflation rate based on the HICP (Harmonized Index of Consumer Prices). The following chart compares the values projected at various points in time with the actual inflation rate in 2003. It illustrates the high accuracy of the OeNB's inflation forecast very well.

**2003 HICP Inflation:  
Forecasts Made at Different Points in Time vs. Realized Values**

(Deviation and USD/EUR exchange rate assumptions)

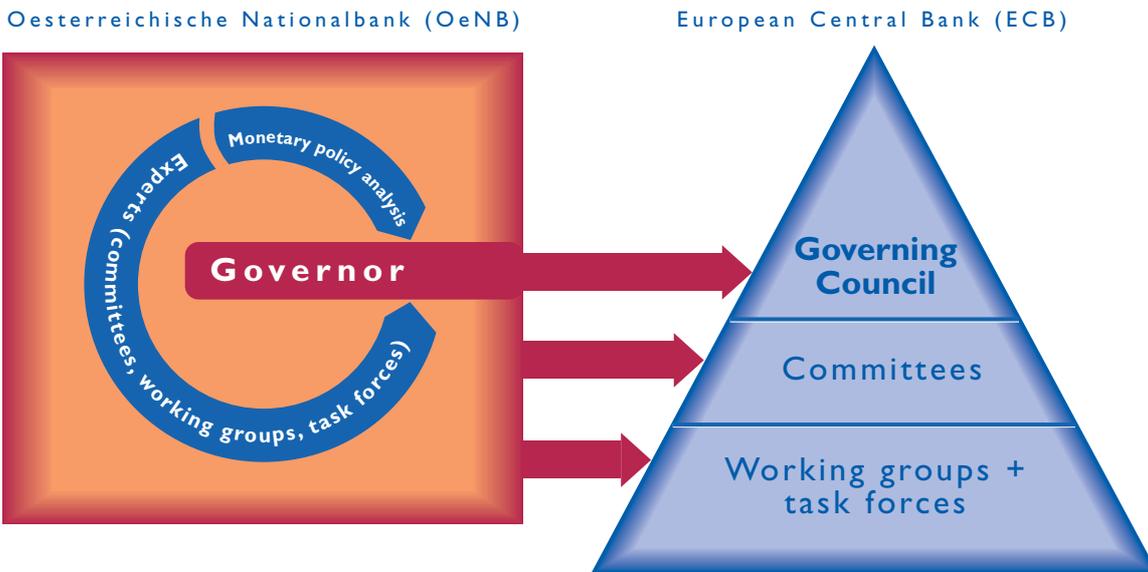


Source: OeNB.

\*) Underlying USD/EUR exchange rate assumption.



### 4.1.1 OeNB's Role in Decision-Making in the Governing Council of the ECB



The highest decision-making body of the ESCB/Eurosystem is the Governing Council of the ECB. It comprises the members of the Executive Board of the ECB and the governors of the euro area NCBs. As a rule, the Governing Council meets twice a month; any possible changes in key interest rates are discussed at the first meeting of each month. The topics covered by Governing Council decisions range from monetary policy issues to the operative tasks of the Eurosystem and the NCBs. Numerous interdisciplinary analyses and the coordination of tasks both at the OeNB and within the network of its partners in the Eurosystem support this continuous decision-making process.

Prior to Governing Council meetings, OeNB staff members inform the governor of the OeNB on the current monetary policy situation, analyzing a wide range of macroeconomic and monetary aggregates with a view to the Eurosystem's monetary policy strategy and discussing them in detail with the governor.

In addition, experts from various divisions of the OeNB contribute their expertise in the relevant business areas (foreign exchange management, public relations, banknote printing, cash supply, statistics, controlling, accounting, legal aspects, etc.). The exchange of information and experience with other NCBs and the ECB helps support the OeNB's position in the Governing Council meetings.



#### 4.1.2 The OeNB's Role in Implementing Monetary Policy

There is a great variety of monetary policy instruments used for refinancing purposes within the ESCB, such as open market operations (with a focus on regular tender operations), standing facilities (i.e. funds available to commercial banks at their own discretion) and the minimum reserve requirement as an important pillar of the operational framework of monetary policy. Key activities in this context are the handling of tender operations, the preparation of daily liquidity forecasts based on the analysis of Austrian banks' capital flows, and the management of eligible assets available for monetary policy operations.

In addition, the ECB has entrusted the Eurosystem NCBs – and thus also the OeNB – with managing parts of its foreign reserves. The ECB, however, determines both the currency distribution and the investment instruments to be used. Moreover, the OeNB (like the other Eurosystem NCBs) is subject to the ECB's terms and conditions regarding credit and market risk. Within this framework, however, the OeNB may use its own market assessments to generate additional income and thus engage in a competition with the other Eurosystem NCBs. To be able to assess market developments correctly, the OeNB thoroughly analyzes economic and political developments as well as market participants' behavior.

#### 4.2 The OeNB's Role in Ensuring Financial Stability

One of the OeNB's core functions is to maintain the stability of the Austrian financial market. To this end, the OeNB must closely monitor the development of financial intermediaries, and banks in particular, in order to identify potential problems in good time.

Supervisory statistics provide current and reliable data on credit and financial institutions and thus form the basis for sound analyses. All Austrian credit institutions (currently around 900) regularly report data on their business operations to the OeNB. The OeNB then examines these data, which have to be reported electronically, as to completeness and plausibility. As a service provider, the OeNB is required by law to process these data for the Financial Market Authority (FMA) and to guarantee automation-supported access to the data at any time. At the same time, the OeNB needs these data to prepare expert opinions, analyses and on-site inspections with a view to curbing market and credit risks. In 2003, the OeNB inspected 27 banks. As an additional service, the OeNB regularly provides statistical data to numerous international organizations, such as the IMF, the OECD and the BIS, and to international working groups.

Twice a year, the OeNB publishes its Financial Stability Report, which analyzes the potential risks in the Austrian financial market and gives an overview of the current stability situation. Sound statements on financial stability require a host of in-depth analyses, e.g. on the cost/income situation of all Austrian banks, on loan growth or on loan quality. Moreover, it is necessary to provide information on developments in the real economy, such as the debt-equity ratio or the number of corporate insolvencies, which might have a negative impact on financial stability. This helps identify potential problems at the earliest possible stage.



### 4.3 The OeNB's Role in the Processing of Payments

In line with its statutory mandate, the OeNB provides efficient and reliable payment and settlement systems for intra-EU payments and for transactions with non-EU countries. The OeNB both handles interbank payments and acts as a competent partner in building an efficient and uniform payment infrastructure for the Austrian financial market.

The European payment market is divided into large-value and low-value transactions. Given the high security and system requirements, the settlement of large-value payments is the responsibility of the NCBs, which operate a payment system specifically created for this purpose: TARGET (Trans-European Automated Real-Time Gross settlement Express Transfer system). The OeNB provides access to ARTIS, the Austrian component of TARGET, and continually works on further improving this system.

For the handling of retail payments, the OeNB as a neutral institution provides all Austrian commercial banks with low-cost access to EBA STEP2, a clearing system operated by the Euro Banking Association (EBA). STEP2 is the first and only Europe-wide clearing infrastructure for intra-EU payments of up to EUR 12,500. By providing commercial banks with EBA STEP2 access, the OeNB ensures that the Austrian financial market remains competitive, creates synergy effects by avoiding parallel structures and, consequently, reduces costs. More than 85% of domestic banks already settle their intra-EU payments via the EBA STEP2 access provided by the OeNB, making the OeNB the direct STEP2 participant serving the second largest number of banks (as indirect STEP2 participants) across Europe.

The OeNB sees considerable potential for savings in the area of national clearing systems and through the centralized processing of domestic payments. In these areas, the OeNB intends to cooperate with the commercial banks in setting up a payment system infrastructure and a national Automated Clearing House (ACH). Experts estimate the economic benefit of such a collaboration to amount to between EUR 60 million and EUR 100 million a year.



## 5. Summary and Outlook

The OeNB's first Intellectual Capital Report is the result of a pilot project aimed at presenting the OeNB's intellectual capital in a clear and structured manner. While central banks are usually associated above all with cash, gold and foreign exchange reserves, which are captured in detail in balance sheets and annual reports, their intangible assets are of no less importance. Apart from supplying the population with counterfeit-proof cash and managing gold reserves and reserve assets, the main task of a central bank is to actively contribute to ensuring price stability, financial stability and a functional payment system. These tasks demand a high degree of specialized expertise and a network of national and international cooperation.

Based on international conventions and a Best Practice Model, this Intellectual Capital Report sets out four knowledge goals that are in line with the OeNB's mission statement and its current strategy. Keeping the OeNB's special mandate in mind, these objectives are:

1. competence through specialized knowledge
2. confidence through knowledge transfer
3. interdisciplinarity through internationality and cooperation
4. efficiency through modern management

The Intellectual Capital Report divides knowledge-based capital (the OeNB's most important good) into four categories – human capital, structural capital, relational capital and innovation capital – and analyzes it accordingly. The report uses selected indicators to illustrate each of the categories. Of course, this first Intellectual Capital Report depicts only the status quo of 2003, as no comparable figures are available for previous years. However, this first stocktaking already shows the OeNB's strengths in terms of human capital, its strong national and international ties and its considerable power of innovation. All these factors account for the OeNB's outstanding position within the ESCB and guarantee a consistently high level of confidence with the Austrian public.

To make it easier for the reader to understand the complex and rather abstract range of services the OeNB provides, the Intellectual Capital Report briefly presents four selected business processes and the services related to them. These processes and services comprise ensuring price stability by helping prepare Eurosystem monetary policy decisions and, subsequently, efficiently implementing these decisions at the national level through monetary policy instruments; actively contributing to the maintenance of financial stability by producing the necessary supervisory statistics and by participating in banking analysis and supervision; and providing the Austrian economy among an efficient payment system.

In the future, the OeNB's Intellectual Capital Report will be updated, revised and published once a year and will serve to complement the traditional corporate balance sheet. The further development of the indicators included in this report will be subject to continuous scrutiny; also, the entire concept behind the Intellectual Capital Report stands to be improved in the light of future experience. This approach makes it possible to examine whether the objectives, which are linked to numerous indicators, have been achieved and to analyze potential deviations.

The Intellectual Capital Report will thus become one of the major tools of modern corporate governance within the OeNB; its importance is bound to increase even further in the future.

# List of Indicators

Indicators	Definition
<b>Human Capital</b>	
<b>Staff structure</b>	
Headcount (average)	Average headcount throughout the reporting year
Percentage of women	Number of female staff relative to total number of staff
Percentage of women in specialist positions	Number of women in specialist positions relative to total number of specialist positions. Specialist position: For highly specialized employees, the OeNB not only offers the possibility to pursue a classical career in management, but also to opt for a specialist career which exclusively concentrates on technical expertise and coordination tasks.
Percentage of women in management positions	Number of women in management positions relative to total number of management positions
Percentage of part-time employees	Number of staff with a part-time contract relative to total number of staff
Percentage of staff participating in teleworking schemes	Number of staff with a teleworking contract relative to total number of staff
Fluctuation rate (%)	Number of staff who left the service of the OeNB (excluding retirements) relative to total number of staff
<b>Training and education</b>	
Total number of training days per employee (annual average)	Number of days dedicated to training and education relative to average number of staff
Training participation rate (%)	Number of staff who took part in at least one internal and/or external training and education course in the reporting year relative to average number of staff
Expenses for training and education per employee (EUR)	Expenses for training and education (including travel expenses) relative to average number of staff
Number of completed and certified additional qualification courses (in-service)	Number of staff members who, on their own initiative and mostly outside working hours, completed doctoral programs, post-graduate programs or specialized courses in the reporting year
Number of internal job rotations	Number of staff members who, for at least three months, worked in an organizational unit other than their own
Number of working visits to national and international organizations	Number of staff who, for at least one month, worked at the ECB, at other NCBs, EU institutions, the IMF, the OECD or with ministries or OeNB subsidiaries
Percentage of university graduates	Number of staff with a university degree (excluding post-graduate studies) relative to total number of staff
Number of employees with external teaching assignments	Number of staff who have teaching assignments at universities and/or other academic institutions
<b>Structural Capital</b>	
<b>Management structure</b>	
Span of supervision	Number of staff relative to number of management staff at all levels
Number of product managers	Number of product managers responsible for one or more OeNB products
<b>Technical infrastructure</b>	
IT expenses per employee (EUR)	Costs for IT equipment per employee
Number of IT applications	Number of standard IT applications and in-house software solutions
Availability of the ARTIS payment system (%)	Operating time during which the ARTIS payment system was available
Error-free payment transactions (%)	Number of error-free payment transactions relative to total number of payment transactions
<b>Environmental protection and quality assurance</b>	
Number of environmental controllers	Number of contact persons for environmental issues
Number of environmental auditors	Number of staff assessing the effectiveness of the OeNB's environmental management system according to EMAS (Eco-Management and Audit Scheme) standards
Number of quality auditors	Number of staff assessing the effectiveness of the OeNB's quality management system according to ISO-9001 standards

Indicators	Definition
<p><b>OeNB group</b></p> <p>Number of subsidiaries in payment systems services</p>	<p><i>Number of subsidiaries cooperating with the OeNB in the cash payments and cashless payments segments</i></p>
<p><b>Relational Capital</b></p>	
<p><b>Cooperation and networks</b></p> <p>Number of international meetings hosted by the OeNB (the OeNB acting as a knowledge hub)</p> <p>Number of national bodies with OeNB representatives</p> <p>Number of international bodies with OeNB representatives</p> <p>Number of technical assistance projects</p> <p>Number of lectures delivered</p>	<p><i>Number of events (meetings, conferences) with international participants organized and hosted by the OeNB in the reporting year</i></p> <p><i>Number of national bodies (committees and working groups of national organizations) whose meetings were attended by OeNB representatives in the reporting year</i></p> <p><i>Number of international bodies (committees, working groups and task forces of e.g. the ESCB/Eurosystem, EU, IMF, BIS, OECD or of other international organizations) whose meetings were attended by OeNB representatives</i></p> <p><i>Number of projects during which the OeNB provided expert technical assistance to other NCBs and to economies in transition</i></p> <p><i>Number of lectures delivered by OeNB staff for external audiences at in-house or external events</i></p>
<p><b>Publications and public relations</b></p> <p>Number of OeNB publications</p> <p>Number of papers by OeNB staff published in specialist journals</p> <p>Number of scientific papers published by OeNB staff in refereed journals</p> <p>Number of press releases</p> <p>Number of press conferences</p> <p>Number of inquiries to OeNB hotlines</p> <p>Confidence index (%)</p>	<p><i>Number of nonrefereed contributions published by OeNB staff in specialist journals</i></p> <p><i>Number of contributions published by OeNB staff (authors or co-authors) in scientific journals (e.g. Journal of Money, Credit and Banking, etc.) refereed by anonymous referees (Peer-Reviewed Journals) and in conference proceedings refereed by anonymous referees (Refereed Conference Proceedings)</i></p>
<p><b>Internet-based communications</b></p> <p>Number of individual files accessed on the OeNB website (daily average)</p> <p>Number of newsletter subscriptions</p>	<p><i>Number of documents downloaded from the OeNB website</i></p> <p><i>Number of subscriptions to the newsletter published by the OeNB's Economic Analysis and Research Section</i></p>
<p><b>Innovation Capital</b></p>	
<p>Percentage of staff resources utilized for innovative projects</p> <p>Internal R&amp;D expenditure (EUR 1,000)</p> <p>Number of research cooperation projects with external partners</p> <p>Number of research visits</p> <p>Number of opinions prepared for (industrial) research promotion</p> <p>Number of e-business applications accessed per day (average)</p>	<p><i>Staff resources utilized for innovative projects relative to total staff resources</i></p> <p><i>Research and development expenditure as defined by Statistics Austria</i></p> <p><i>Research cooperation projects deal with scientific issues; typical partners for research cooperation projects are scientific institutions, universities and the research departments of other NCBs</i></p> <p><i>Research visit: visit of at least three months at other NCBs or scientific institutions, mainly for research purposes</i></p> <p><i>Opinions prepared by OeNB staff on projects submitted to the OeNB's Anniversary Fund, on applications for loans under the European Recovery Program (ERP), on applications for changes to ERP loans and on project applications submitted to the Austrian Industrial Research Promotion Fund</i></p>