



## **Centre for Education, Training and Central Bank Cooperation**



Annual Report 2007

If you have any questions or further suggestions relating to this report, please contact Mr Michael Schiedermeier, Tel +49 69 5808 5116.

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## **The Training Centre over the past year: presentable results, promising prospects**

The Centre for Training and Central Bank Cooperation ('Training Centre' in the following) has been operating within a new framework for a year now – with very remarkable results. This first annual report starts by describing basic and specialised training courses and cooperation activities offered by the Bundesbank. The high take-up ratio among Bundesbank staff – due, last year, in part to the training sessions for the new cash processing machines in particular (see page 11) – demonstrates how much interest there is in ongoing professional career development. There is also a lot of demand for our external training courses, for example the advanced Basel II seminars, which are certified by the Committee of European Banking Supervisors, or, of course, for the range of activities offered by Technical Central Bank Cooperation (TCBC), which organised almost 300 seminars and workshops, attended by some 3,700 central bank staff from 91 countries (see page 15).

This report firstly illustrates the wide range of training opportunities on offer, but also – more prosaically – makes clear that the Training Centre serves an exclusively derived function. In other words, its tasks are directly related to the Deutsche Bundesbank's main areas of activity, or, to be more precise, to its strategic positioning as it is palpably reflected in the five pillars. The support function performed by the Training Centre is by no means secondary, even though the term 'support' is sometimes understood in such a sense. The Bank can fulfil its tasks adequately, especially in the ESCB, only if its employees have access to state-of-the-art training facilities. This includes both the ongoing provision of technical expertise – key innovations have been made in virtually all areas of activity – as well as making available effective access to knowledge about new methods in addition to supporting employees in their capacity to assess and evaluate. It is the Centre's task to teach these skills relying on modern approaches to training.

Building on these principles, the Centre quite naturally strives to tailor courses to the requirements of its clients – mainly Bundesbank departments, regional offices and branches. In developing the Centre's new organisational structure – which was designed to combine all the Centre's activities and thus allow a productive division of labour as well as an efficient specialisation – we therefore launched a wide-ranging project to determine the future requirements profile. Our survey was based on structured questionnaires, which not only provided room for

additional information, but specifically requested such comments. The key finding was that it is, above all, a high degree of technical expertise as well as proven implementation skills which employees will have to possess in the future.

Given this demand profile, the Training Centre's courses will be focused on effectively meeting these requirements. The Centre's work can generally be split into two functional blocks. First, there are the training courses that are rigorously structured in accordance with guidelines, career path and examination regulations. This category includes vocational training schemes, the programme of the Deutsche Bundesbank's university of Applied Sciences (*Fachhochschule*) as well as trainee courses for University graduates and a qualification programme for aspiring civil servants. Second, there is also demand for more project-like training measures which, essentially, have no strictly laid-down format – say, courses in connection with the above-mentioned European training for banking supervisors or virtually all TCBC courses. In addition, the TCBC offers projects which are rather more advisory in character.

“Form follows function” is a well-established organisational principle. This is therefore the guiding principle for re-organising activity lines within the Training Centre.

The advantages of this approach became evident – in practical terms – in the Training Centre's first year. Just a few examples might serve for illustrative purposes. Having a trainer with a thorough grasp of his subject is a necessary, but not a sufficient condition for a good programme. First and foremost, trainers also have to be able to put their message across. With this request in mind, the Bundesbank's University of Applied Sciences, in cooperation with experts in didactics from the University of Koblenz-Landau, has developed a programme on presentation and teaching techniques. These courses will be made available to all teaching staff. This means that, within the Centre, TCBC and the Training Division will also have access to this offer.

TCBC has developed the content for an information platform, which is designed to render the range of training offered more transparent, first and foremost within the Bank. This platform is interactive, allowing criticism to be expressed or suggestions to be made.

TCBC and the Training Division are preparing a conference on financial market stability to be held in the autumn. The conference will focus on conveying assessment skills: “How should a training course be structured to prepare banking supervisors to meet the new challenges?” “What are, more specifically, the challenges involved?” “What training programmes are appropriate?” In this,

we are also complying with the wishes of the ECB's Human Resource Conference, which has identified the urgent need for a broader, international range of seminars.

Since the decision was taken to develop a bachelor degree programme, the Bundesbank's University of Applied Sciences in Hachenburg has developed a modularised programme based on the Bank's five pillars (reflecting the major areas of activity). (Hachenburg has a dedicated "bachelor room", in which ideas are collected, written up on white boards and continuously developed.) The practical training modules we offer are built around this programme. The programme has also been critically assessed by external reviewers and is now at a stage where we can commission an accreditation agency. Open issues, which are minor only, do not concern the programme's substance but relate to career regulations and career paths for civil servants.

The Training Division, in cooperation with the Goethe Business School, is designing a modularised programme for the training of European banking supervisors – which is an offer within the framework of the so-called 'Prada Initiative'. The project met with a very positive response when it was presented in Frankfurt University's Faculty of Economics and Business Administration in mid-May. Its nucleus is formed by the course programme that we are proposing in cooperation with the Austrian National Bank. However, the new project strives to incorporate significantly more analytical input, for which we have been able to attract, in particular, Goethe University, Frankfurt am Main, as well as professors from the universities of Mannheim and Munich as permanent cooperation partners.

As responsibilities for the University of Applied Sciences are also incorporated into the Training Centre's new statute, its organisational structure will – form again following function – be adapted accordingly, with two functional areas under a single management. The concept of the Training Centre has been discussed in great depth in a series of seminars and workshops. We held a meeting with all Training Centre staff, a seminar with middle managers, which is to be held once a year in future. In addition, the Centre's executives meet once a month. As soon as the discussion turned to products and content, it very quickly became clear how productive and suited to its core purposes cooperation within the Training Centre is. All the instances of projects mentioned here were subjected to the test of criticism within this forum.

Our colleagues have realised that a minimum size is necessary to work effectively. This allows a division of labour and purposeful specialisation. It produces a better product – and, most importantly, satisfied clients. In particular,

the more than 600 bank staff involved in examinations and teaching or providing advisory services also played a key role during the reporting year. Their commitment ensures that central bank expertise is disseminated within the Bank and shared with our external clients and partners.

I would like to take this opportunity to thank sincerely all those who have helped to make the wide-ranging activities of the Bundesbank's Training Centre so successful.

Professor Hans-Helmut Kotz  
Member of the Executive Board

## Initial training

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The Bundesbank trains the majority of staff that it requires itself. This is predominantly due to the fact that precisely those employees that work in the Bundesbank's core areas, for example, banking supervision and cash management, require skills which are either not so readily available at this high level on the market or not at all. *In-house training* enables the Bank to tailor training programmes to its own needs and set relevant focal points. In addition, experience has proven that the combination of training and subsequent employment by the same company strengthens the link between employee and employer. In 2007, the Bundesbank had a total of 508 trainees; broken down by career path, there were 35 in the Higher Service, 204 in the Upper Intermediate Service and 269 in the Intermediate Service (see table 1).

The civil servant training programme for the *Higher Service*, which had 24 participants in the reporting year, lasts 21 months and provides a general grounding. The trainees are given a comprehensive overview of the Bank as a whole and then sit a career development examination. By contrast, the fast-track trainee programme, which had 11 participants in 2007, is limited to one year, takes place exclusively at Central Office and concludes without an examination. Both programmes require a university degree or masters in economics – for the civil servant initial training programme, a degree in law is an alternative – and are aimed at gleaning potential managers for the Bank. Both training options have a well-balanced mix of theory-based lectures and practical modules in various departments. The fast-track trainee programme was designed to be shorter in

response to a request for a faster pace and a greater degree of flexibility.

However, it is already clear that the Bundesbank's wide range of training programmes attracts, in turn, a highly demanding type of applicant. Accordingly, the Training Centre is constantly updating its syllabus. In 2007, for example, a brief practical introduction to econometrics was included in both Higher Service training programmes. This aims at providing a basic knowledge of econometrics to take account of the growing requirements in this area. On completion of the programmes, this knowledge can be extended in further training measures.

The growing international composition of both the contents and the persons involved is characteristic of the training programmes. Lecturers include ECB employees and participants include employees of other euro-area central banks. To increase the international nature even further, the Training Centre is to be used in future to train potential Bundesbank managers in selected training programmes alongside "TCBC customers" – to the advantage of both parties.

In 2007, 204 people benefited from the *Upper Intermediate Service* training programmes, the majority of which (185) at the Bank's own University of Applied Sciences. Alongside Bank trainees, a number of civil servant trainees from the Federal Financial Supervisory Authority (BaFin) studied at the Bundesbank's University and received their acceptance into the civil service. The Bank also worked together with the universities of cooperative education (to be known as "dual universities" in the future) in Stuttgart and Mosbach (Baden-Württemberg) to train IT

professionals. The universities converted their syllabuses to the Bachelor system at the start of the 2006 winter semester. Last year the Bank trained eight information technology engineers (university of cooperative education) / Bachelors of Engineering in Information Technology and 11 business informatics specialists (university of cooperative education) / Bachelors of Science in Business Informatics. To qualify for the three different Upper Intermediate Service training programmes, applicants must have a senior school-leaving certificate or a certificate of aptitude for higher education.

The training programme at the Bundesbank's University of Applied Sciences is also earmarked for conversion to the Bachelor system. However, owing to the extensive nature of the preparations required (and the complexity due to the special features of civil service law), this could still take some time. Training at the Bank's own University of Applied Sciences currently lasts between two and a half and three years, depending on the level of prior knowledge. The Bachelor programmes at the universities of cooperative education always last three years. All Upper Intermediate Service training programmes contain alternating theory and practical modules. Trainees at the University of Applied Sciences follow a general training programme where they learn the entire scope of the Bank's activities. Trainees at the universities of cooperative education concentrate mainly on information technology.

In 2007, the Executive Board resolved to recommence the civil servant training programme for the Intermediate Service (Banking Operations Service) in October 2008 to absorb the demographic effects of the re-

Table 1

Initial training		
Item	2006	2007
<b>I Applications for the selection procedure</b>	5.265	4.139
Higher Service	971	450
of which Trainees	544	287
Upper Intermediate Service	1.333	1.083
Sandwich courses <sup>1</sup>	86	225
Vocational training	2.875	2.381
<b>II Trainee intake</b>	194	192
Higher Service	20	28
of which Trainees	3	12
Upper Intermediate Service	73	66
of which University of Applied Sciences	67	59
Vocational training	101	98
<b>III Applicant ratio<sup>2</sup></b>	27,1	21,6
<b>IV Persons in initial training<sup>3</sup></b>	494	508
Higher Service	30	35
Upper Intermediate Service	186	204
Intermediate Service	278	269
<b>V University of Applied Sciences</b>		
Students <sup>3</sup>	170	185
Hours of tuition	6.401	6.236
<b>VI Civil servant career examination candidates</b>		
Higher Service	18	19
Upper Intermediate Service	61	42

<sup>1</sup>Students of Informatics at the University of Cooperative Education in Mosbach and students of Business Informatics at the Stuttgart University of Cooperative Education <sup>2</sup>Applicants for the selection procedure per vacant position <sup>3</sup>Reference date 31 December of a given year

cruitment freeze in this career path. This programme has not been offered during the past few years. It will restart with 30 participants who have either a school-leaving certificate from a lower secondary school plus an apprenticeship or a school-leaving certifi-

cate from an intermediate secondary school. In this two-year programme, the Bank will prepare trainees for their subsequent activities, whether this be in cash-processing, mail sorting and distribution or general administration.

Training for *trade and commercial vocations* currently focuses on four different positions. With 100 trainees annually, the largest group consists of office communication assistants and office assistants. At first glance, these job titles may appear to be interchangeable; however, the positions they describe are significantly different. While office assistants learn such “classic” skills as stockkeeping, office communication assistants concentrate on communication media, in particular on the use of IT applications. Central Office and all Regional Offices award places on training programmes, the decision as to which position to opt for depending *inter alia* on the range offered by the local Chamber of Industry and Commerce and whether the contents of the training programme can be put into practical use at the Bank.

As the Bank’s need for staff with these particular qualifications is – as in previous years – far lower than the number of trainees, only one-fifth of the trainees were employed full-time on completion of the training programme. The remaining trainees were offered six-month contracts. The Bank is thus making a vital contribution to tackling the problem of youth unemployment. Even if a large number of trainees do not receive a permanent contract, completing a vocational training programme significantly improves their chances on the labour market.

Job cuts made by the Bank since 2002 as

part of the structural reform have been accompanied by intake restrictions for training programmes due to staff surpluses. The training programme has since had to be revived. The number of people on training programmes at any one time is likely to rise from approximately 500 now to more than 700 over the next three years. An increase of this magnitude raises more than just organisational issues. All Bank employees are requested to play a more active role in the training of younger members of staff. The outlook is rather bright as employees are more than willing to do this alongside their regular business activities.

At the same time, monetary union and the international elements of central banking activities as well as a rapidly changing environment call for the training programmes to be constantly adapted to the Bank’s requirements. A number of changes in the recent past have been mentioned above. The next fields to be tackled are the implementation within the Bank of the planned reworking or grouping of commercial office positions and changes in the Bachelor programmes of the universities of cooperative education as well as changes to the training programme for the Banking Operations Service.

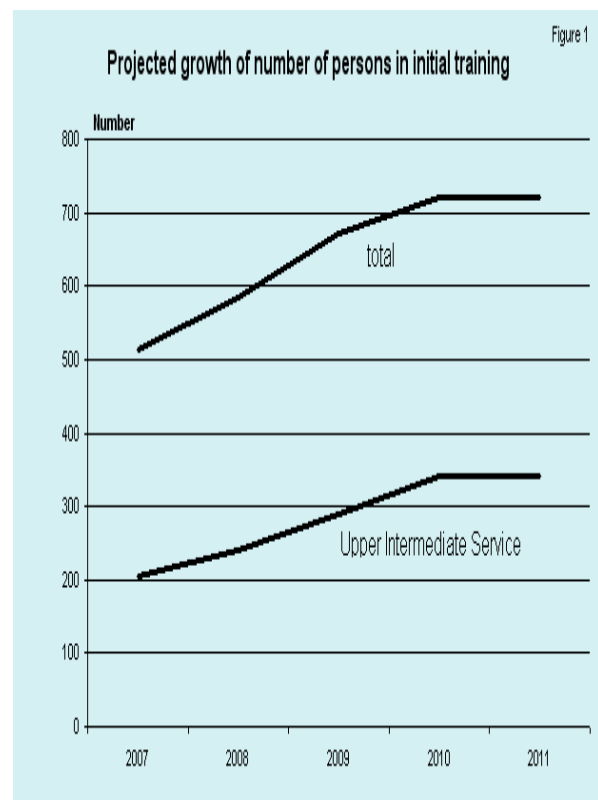
### **University of Applied Sciences**

In 2007, 59 civil servant trainees for the Upper Intermediate Service started their training programme at the Bundesbank’s University of Applied Sciences, compared with 67 in 2006. Together with nine new starters from BaFin, figures are again approaching an *intake level* that ensures normal utilisation of the University. The

Executive Board has already agreed an intake quota of 100 students for October 2008-April 2009 (plus up to 16 students from BaFin), which is in line with the average intake in the 1990s and will ensure that the University's facilities are used to full capacity. On a positive note, in 2007 only two Bank trainees and one from BaFin left the University before completing the programme. In 2006, 16 people dropped out; in retrospect, this can be seen to be an exception. In total, the Bundesbank's University had 185 students at the end of 2007, compared with 170 in 2006.

As a knock-on effect of the comparatively low intake quota in the past few years, the number of *full-time lecturers* was reduced again in 2007. The University currently employs 11 full-time lecturers. However, as the Deputy Vice-Chancellor's teaching load is reduced by half owing to the extent of administrative tasks and another teaching post is currently restricted to 50% capacity, the University at present has the equivalent of only ten teaching members of staff (13 in 2005). The University therefore no longer has enough teaching capacity to offer parallel classes as part of normal teaching. Consequently, an additional full-time lecturer will be appointed in mid-2008 whose main specialist areas will be banking supervision and financial markets.

In 2007, theory and practice were again successfully combined by inviting *guest lecturers* to hold a number of modules. A total of 76 guest lecturers were engaged by the University, eight more than in the previous year. The majority of these guest lecturers (57) came from various Bundesbank departments and lectured on topics where practical experience makes knowledge



transfer more efficient. Seven lecturers came from the European Central Bank, other European central banks or supranational organisations and held their lectures mainly in English. The proportion of guest lecturers tends to increase as the programme progresses as – especially for the topic of central bank operations – the number of practice-based modules rises; in the second phase of the main part of the programme, over 33% of lectures are held by guest lecturers, which is twice as much as in the basic part of the programme.

In the period under review, the University introduced changes in the areas of cash payment transactions and cashless payment transactions. Three *new modules* have been introduced which explain longer-term developments in these core business fields. The objective is to improve the understanding of the dynamic environment and competition to

which the Bank is exposed. Other modules on topics such as credit institutions' business policies and banking supervision have been redesigned.

During the past few years, the results of the *career development examinations* have been getting better and better. With one exception, all results of the current examination diet in the spring of 2008 were satisfactory or better; two-thirds were good. This can be partly explained by the fact that only a relatively low number of applicants from across the entire Bank could be offered a place and the most suitable candidates were selected.

## Further training

A number of positive effects came to light with regard to further training in 2007: *participation in training events* increased by 19% on the year and events organised by the Bank by over 25%. At the same time, the number of employees attending external training events fell by around 7%. This proves that employees continue to have a keen interest in qualification and further training and that further training is taking lengths to replace external services with cheaper internal services, primarily by making use of more internal speakers.

Although almost half of the total growth is attributable to one-off effects in connection with the introduction of the General Equal Treatment Act [*Allgemeines Gleichbehandlungsgesetz, (AGG)*], the result is nonetheless remarkable (the AGG events in themselves were unusual for further training events: they were more like compulsory training in nature). The internal range of training events was used more intensively again and, what is more, with greater cost-effectiveness: costs per participant fell by around 16% and the overall budget for further training remained constant at the previous year's level of € 5.6 million.

No extra staff were added to the experienced and competent *training team* at the Training Centre. The extra work was covered partly by streamlined work processes and non-intrusive, event-oriented customer support. In many cases, the additional work for employees was cost-neutral for the Bank. The introduction of the electronic application processing procedure for training measures at the beginning of the year (workflow integrated in EASy prior to

Table 2

Training		
Item	2006	2007
<b>I Take-ups<sup>1</sup></b>	15,049	17,811
Higher Service	2,302 (15.3)	2,926 (16.4) <sup>2</sup>
Upper Intermediate Service	8,625 (57.3)	9,884 (55.5)
Intermediate Service	3,848 (25.6)	4,662 (26.2)
Lower Service	201 (1.3)	250 (1.4)
Wage earners	73 (0.5)	87 (0.5)
<b>II Take-up ratios<sup>3</sup> as a percentage</b>	120	149
Higher Service	220	275
Upper Intermediate Service	223	237
Intermediate Service	70	80
Lower Service	44	56
Wage earners	18	18
<b>III Take-up ratio<sup>4</sup> as a percentage</b>	51	56
<b>IV Cancellations</b>	1,473	2,160
Cancellation ratio as a percentage	9.8	10.3
<b>V Training costs total, in thousand euro<sup>5</sup></b>	5,600	5,601
per take-up	0,372	0,314
per participant	0,873	0,837

<sup>1</sup>Excluding take-ups by persons who are not Bank staff members -

<sup>2</sup>Take-ups as a percentage of the total - <sup>3</sup>Ratio of take-ups of selected groups of persons in relation to the total number of this group - <sup>4</sup>Ratio of participants in training to staff total - <sup>5</sup>Actual training costs from 2006 of cost type 'seminars/courses' of all cost centres throughout the Bank

employee self-service via SAP) meant that further significant rationalisation options could be exploited owing, in particular, to significantly improved processing transparency.

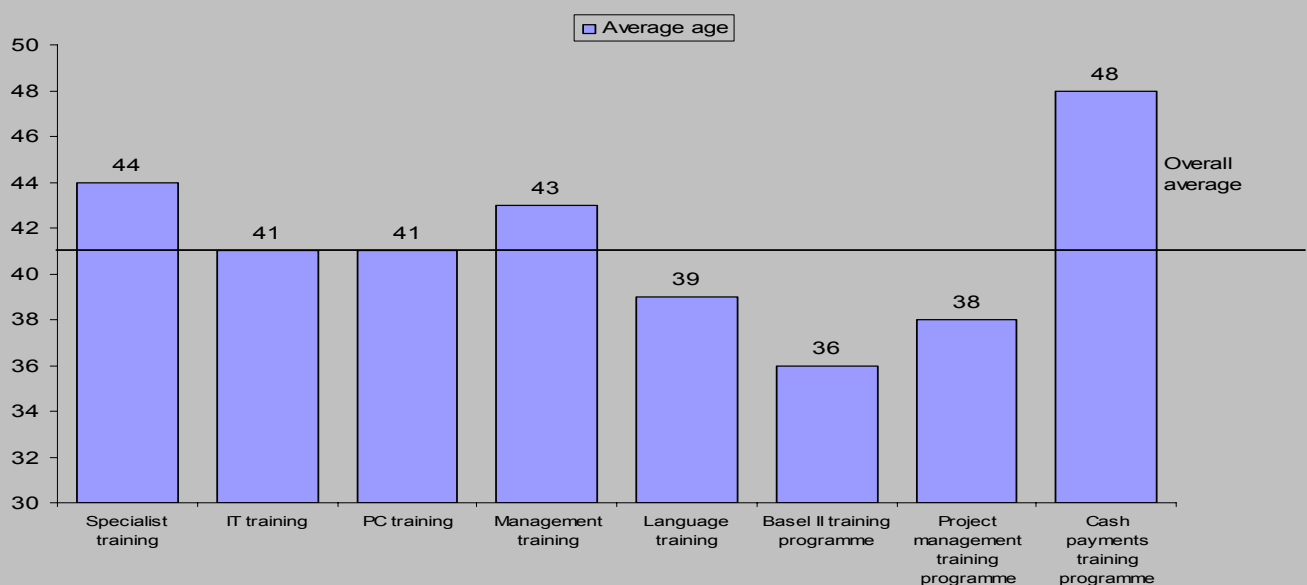
## Training for all ages

Like many other German companies and institutions, the Bundesbank is increasingly confronted with the need to cope with structural change and new developments in banking and technology with a workforce whose average age is continually increasing. This places special demands on the internal training system in order to ensure employees are generally able to carry out the professional tasks required of them.

The age structure of the Bundesbank's staff differs only slightly from that of the German population. Persons aged between 50 and 65 years account for 32% of the Bundesbank's staff, the same percentage as of the working population as a whole. The age structure is influenced by the post-war baby boom up to the end of the 1960s; the 37-49 year age group accounts for almost 50%. Consequently, the labour force reserve of young people employed at the bank is correspondingly low. Under these labour market conditions and at a bank which is shrinking further, it is likely to become more difficult to attract qualified young staff. This means that it will be all the more important to focus attention on older employees and, as a target group, to promote their ability and willingness to learn with a matching training strategy.

Older employees are a significant factor in professional training measures at the Bundesbank. This makes good business sense in view of the short half-life of professional expertise — even in the case of those who are already sixty years of age. The average age of all participants in further training at the Bundesbank is 41 years of age. Of those taking part in training measures, 23% are over 50 years of age. Although this percentage does not correspond to the proportion of bank employees over 50 years of age (32%), it is still considerable. With employees over fifty accounting for just over 30% of those taking part in specialist training and 20% of those taking part in IT training, the openness of employees to new ideas and their desire to maintain their employability is clear.

**Age structure of training participants in 2007**



It is gratifying in view of the greater equality of *access to training* across all areas that participation by the regional offices and branches has risen while the interest in training of employees at Central Office has evened off at a high level. The growth rate of almost 25% for BPS training events among employees at the branches shows that the number of intermediate service employees taking part in training has risen by over one-quarter.

The average training rate at the Bank (training events per employee) has increased to almost 1.5. Since not all employees are “training customers”, many of the just under 6,700 employees took part in several training events in Germany and abroad. While the rate of attendance at some of the departmental training events has risen in double digits (the regional office average is around 1.25), the difference between departments still varied greatly, from 0.77 to 1.73. This gap should be closed in the interest of equal professional opportunities.

Training courses needed to meet the Bank’s requirements last an average of 3.3 days. Including travel time, the total amount of time away from the workplace is approximately four days. This factor, in addition to the above-mentioned direct training costs, is taken into account when estimating the volume of occupational training. Tailor-made training courses for targeted organisational development and courses developed in cooperation with participants are in ever greater demand. The IT Department, in particular, requests seminars designed to link the department’s content and work-related operations with new developments on the market.

Table 3

### Qualification and training in 2007

Item	Take-ups <sup>1</sup>		
	Absolute	compared with 2006 (as %-age)	of which in-house (as %-age)
Specialist training	6.379	77,5	76,4
International training	964	48,8	85,0
IT training	3.791	9,9	77,4
Management training	1.579	19,9	95,8
Qualification programmes <sup>2</sup>	1.335	-20,0	100
of which Basel II	1.116	-12,2	100
Language training	2.982	-1,8	96,0
Other training <sup>3</sup>	1.714	-14,8	80,8
Total	18.744	19,2	83,9

<sup>1</sup> Including 933 take-ups by persons who are not Bank staff. – <sup>2</sup> Includes Basel II auditors, staff liaison teams, cash payments, secretariat, project management. – <sup>3</sup> Includes the following segments: obl. e-learning as part of blended learning, projects, further training courses offered as part of initial training, reimbursements of costs, operational training.

In the *training network*, which comprises the members of the corresponding work unit at Central Office as well as the further training officers and their representatives at the regional offices, some 30 employees organised and, in some cases, designed 1,100 courses on a wide variety of topics in 2007. Furthermore, just under 900 language courses were held, including the corresponding administrative and contractual activities.

Approximately 5% of our customers are now from other institutions. Employees of the Federal Financial Supervisory Authority (BaFin), for example, take part in our courses on banking supervision. Owing to our active role in training within the ESCB (involvement in the corresponding ESCB

bodies and provision of places on courses, usually courses in English), more than 600 participants from throughout the EU take part in our international courses.

The general course *Training for supervisors in Europe* was well received in the world of politics. In May 2006, ECOFIN agreed to promote a joint supervisory culture in the EU by training employees of national supervisory authorities. Of the 3Level3 organisations (Lamfalussy committees), the Committee of European Banking Supervisors (CEBS) is most actively involved in the implementation.

The Bundesbank is well positioned in this process thanks to the *Advanced Basel II* seminars offered in conjunction with the Austrian central bank since 2005. Fourteen events took place in the reporting year, in Eltville and Vienna. They are the cornerstones of the courses currently offered in the CEBS area. A "Steering Committee on Training" has been developing a cross-sector strategy since the beginning of 2007. As part of this programme, BaFin and the Bundesbank held a test course on "impact assessment" in October 2007; a second is scheduled to take place before the end of 2008. This is just a taster of the various activities in this field which is attracting more and more "players". If the latter come from Germany, they seek partnership with the Bundesbank because they value the Bank's experience and expertise.

## Technical central bank cooperation

For a number of years, the courses offered by the Bundesbank in the field of technical central bank cooperation (TCBC) have enjoyed continuously high demand from abroad. Demand more than exceeded available resources again in the reporting period. A total of 3,716 employees from 91 central banks took part in the 282 activities offered by the Centre for Technical Central Bank Cooperation. The EU accession countries and candidates, as well as the successor states to the former Soviet Union, and China were at the centre of activities. In terms of content, the entire spectrum of modern central banking business was again covered in 2007. Current questions regarding financial stability, banking supervision, recent developments in payment systems and good governance in central banks attracted a great deal of interest.

By and large, the Centre for Technical Central Bank Cooperation fulfilled the Executive Board's requirements for Strategy 2012 in 2007, according to which the influence of the Bank should be strengthened at international and ESCB level. For the Centre for Technical Bank Cooperation, this means, in concrete terms, that the share of the Bank's activities in the field of TCBC in relation to the aggregate activities of other central banks in the Eurosystem should at least be maintained and cooperation with the large central banks in the Eurosystem extended. The quantitative target value of 30% has already been met. In view of the tougher global competition in the field of TCBC and the obvious catch-up process in many countries, a concerted effort will have to be made in future to ensure targets are maintained in the long term.

Table 4

TCBC activities in 2007				
Country	Consultancy on-site	Training		Total
		Abroad	Germany	
All participating countries	83	70	129	282
of which				
China	.	6	14	20
Russia	1	4	12	17
Tajikistan	.	10	6	16
Indonesia	2	1	10	13
Ukraine	2	1	7	10
Mongolia	4	1	4	9
Serbia	3	1	5	9
Turkey	7	.	1	8
Egypt	.	3	2	5
Azerbaijan	.	3	2	5
Bosnia-Herzegovina	5	.	.	5
Georgia	1	2	2	5
Croatia	1	3	1	5
Czech Republic	.	.	5	5
Belarus	.	3	2	5

The Centre for Technical Central Bank Cooperation held a total of 21 *international central banking seminars* in 2007, in which around 500 central bank employees from over 80 countries participated. This was an increase in seminars of around 15% on the year. Available personnel and spatial capacity was therefore fully utilised for this cornerstone of TCBC. Owing to the heavy demand, available places have had to be allocated in recent years. In agreement with the Central Office departments, the content of seminars has been adapted to suit current developments and expanded pedagogically to suit participants' needs. The centre for Technical Central Bank Cooperation's standard range of courses includes, in addition to conventional types of seminar,

Table 5

**20 countries with most frequent attendance of international central banking courses**

Country	Number of participants
Russia	25
Georgia	20
Philippines	19
Turkey	19
Cambodia	18
Croatia	16
Bulgaria	15
Poland	14
Kirgisistan	13
Romania	13
Czech Republic	13
Ukraine	13
Armenia	12
Macedonia	12
Serbia	12
Sri Lanka	12
India	10
Kazakhstan	10
Moldova	10
Montenegro	10

more interactive models (workshops, training courses, expert panels).

*Bilateral activities* are projects in Germany and abroad which are tailored to the respective needs of partner central banks. They comprise the majority of our TCBC activities and are considered a particular strength of the Bundesbank's TCBC at international level. Drawing on existing presentations, our experts adapt their material to the particular needs of our foreign colleagues. In the light of the welcome catching-up process in many countries and in view of the constantly changing framework, these Bundesbank projects have developed more and more into a forum for the reciprocal exchange of

ideas about all questions relating to central banking. What was originally, in the narrower sense, technical cooperation based on the concept of knowledge transfer has, with time, become a fruitful exchange for all involved in many cases.

In terms of quantity, the number of bilateral activities was roughly on a par with the previous year. Here, too, the Centre for Technical Central Bank Cooperation is operating at full capacity in terms of resources owing to high demand and the internal reform process at the Bundesbank, which has led to capacity bottlenecks. Unfortunately, individual projects are often postponed or cancelled in this area.

In the area of *third-party-funded projects*, the MEDA project (EuroMediterranean Partnership) with the Egyptian central bank and the CARDS project (Community Assistance for Reconstruction, Development and Stabilisation) with the central bank of Bosnia and Herzegovina were successfully completed at European level within the ESCB in 2007.

The objective of the project in Egypt was to support the Egyptian central bank's internal reform efforts, particularly in the area of banking supervision, thereby helping to support the functional viability of the Egyptian banking system. The project was part of the Egyptian government's efforts to reform its economic structure, particularly in the financial sector. Four national central banks participated in the project in total. Owing to the difficult circumstances in Egypt, the Bundesbank's participation was limited to a total of six seminars with 230 participants on topics relating to banking supervision. It also played a

leading role in developing the content of a training curriculum for the Cairo Banking Institute operated by the central bank.

The initial objective of the project in Bosnia and Herzegovina was a vulnerability analysis of selected areas (banking supervision, macroeconomic analysis and research, financial stability, auditing, monetary policy in a currency board system, payments and statistics). Subsequently, a further project aiming to eliminate the vulnerabilities identified is planned. A total of seven national central banks were involved in this project. The Bundesbank was responsible for financial stability.

The EU twinning project with the Turkish Capital Markets Board under the aegis of the Federal Ministry of Finance was also successfully completed in cooperation with the Federal Financial Supervisory Authority. The aim of this two-year project was to bring Turkish capital market legislation into line with European standards.

At national level, various smaller projects were carried out in cooperation with InWEnt gGmbH (Capacity Building International, Germany) in the fields of banking supervision and financial stability in India and Syria. InWEnt hopes to continue this cooperation.

In the coming years, the main aim of the Centre for Technical Central Bank Cooperation will be to implement the Executive Board's targets within the strategy and maintain its accomplishments thus far. For calendar year 2008, the Centre for Technical Central Bank Cooperation is planning to continue the Bundesbank's prominent role in new third-party-funded projects of the

ESCB, carry out its own EU-financed projects and expand cooperation with partner central banks in Poland and the Czech Republic.

## Outlook

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The Bundesbank's training system will face a number of challenges in the next few years: the consequences of demographic change will heighten competition for qualified young staff and university reforms resulting from the Bologna process will have a profound effect on the various career training programmes. The integration of tasks in the euro area will, for some time, continue to determine the skills profile of Bank employees and thus the requirements of our internal Bank customers. In the meantime, the training systems of other countries in the Eurosystem, which are still geared to meeting national needs, are facing increased pressure to cooperate. And while the number of trainees at the Bundesbank is set to increase rapidly, the number of trainers and examiners from all areas of the Bundesbank is likely to fall.

The Training Centre is one answer to these highly varied challenges as it tweaks the bank's training services to reflect changes in the market and universities. Furthermore, an active approach to training is an attractive quality in an employer. Last but not least, with regard to "education and training at the Bundesbank", the Training Centre will better manage the dwindling training resources and maintain and improve the quality of results. In the ever more demanding European and international environment, the Centre can sharpen the profile of the Bundesbank by concentrating its training on topics for which the Bank is renowned and taking advantage of its head start.