

## TRAINING EUROPEAN STATISTICIANS: AN INTERNATIONAL TRAINING PROGRAMME FOR OFFICIAL STATISTICIANS

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*This paper describes briefly (a) the organisational structure of the TES Institute, which is an non-profit association where 15 European national statistical institutes are represented and (b) the decision making structure involving the statistical office of the European Communities (Eurostat, the Statistical Office of the European Communities) and the Member States of the European Union and the European Free Trade Association. Furthermore, it provides a review of the specialisation streams in annual TES programmes and it discusses the identification of the needs of the principal customers and the different methods of quality control. Finally, the advantages and disadvantages of international training are discussed and some suggestions are made about internationally recognised diplomas for official statisticians.*

### THE INSTITUTIONAL ASPECTS

The TES Institute is a non-profit making association created by the Directors General of the National Statistical Institutes of ten Member States of the European Union and of the four Member States of the European Free Trade Association. As a multinational post-graduate vocational training institute for statisticians, the mission of the TES Institute is to implement truly European vocational training and staff development opportunities at post-graduate level.

The objectives of the TES Institute are (a) to provide training courses and seminars of short duration at post-graduate level, thus offering statisticians opportunities to improve their skills, (b) to provide a forum for consultation on vocational training for statisticians, (c) to support - through training - new European statistical projects, thus disseminating European standards, methods and classifications, and to help future members of the European Union to prepare for their integration into the European Statistical System, (d) to assist in institution building for national or regional vocational training centres and (e) to promote exchanges of skills and experiences between National Statistical Institutions in Europe and beyond.

The training activities of the TES Institute can be classified into two main categories:

- a) The conception, preparation and execution of the annual programmes in the context of Eurostat's project "Training of European Statisticians". These so-called CORE programmes are tailored to the needs of the EU and EFTA Member States and

financed by subsidies of Eurostat, the EFTA Secretariat and the Luxembourg government on the one hand and training fees on the other.

- b) The conception, preparation and execution of other training courses in the context of the “Special Courses Programme”, a programme which groups all ad hoc training activities which have been commissioned to the TES Institute by various agencies. The courses in this group are either executed on a lump sum contract basis (for in-country courses) or on the basis of tuition fees (for regional courses in which various countries participate).

The commissioning agents define their broad objectives and general guidelines about the desired output. The responsibility of the TES Institute is to translate these orientations into concrete and high quality course programmes or individual courses, which satisfy the demands of the commissioning agents. The Scientific Council of the TES Institute is the advisory body, responsible for supervision of the quality of the courses offered in both the CORE and the Special Courses Programme.

#### PROGRAMME STRUCTURE AND CONTENTS OF THE CORE PROGRAMME

The structure of the annual CORE programme is based on the concept of ‘stream’. A stream is defined as a set of interrelated courses covering a certain specialisation relevant to the official statistician. The streams have been designed in such a way that the statistician does not only have the choice between different specialisations (streams) but also within a specialisation between various levels: introductory, intermediate and advanced. The criteria used to define the streams take into account the following aspects: the statistical production process with its various phases, the various target groups which the training programme wants to serve, the subject matter areas and the application areas of the courses to be included in the programme. The choice made here is that the streams reflect the *major missions* of a National Statistical Institute.

The above observations have led to the definition of the following four streams in the TES training programme: *Stream 1*: Data Collection and Survey Methodology, *Stream 2*: Economic Statistics, *Stream 3*: Social Statistics and *Stream 4*: Publication, Dissemination and Use of Statistics.

The most important function of the streams would be to help to orient the future participant in the choice of the relevant courses. The second advantage of the streams thus

defined is that the task of identifying training needs can be carried out in a much more focused way than in the past. A third advantage of the introduction of streams is related to the precise definition of entry requirements. The content description of the introductory course may serve as a detailed description for the entry requirements of the more advanced course.

The training programme aims at serving three different target groups each having special interests and requirements: methodologists, users (of methodology in production), middle management. In view of the specific needs of these target groups the courses specific to a stream have been divided into two categories: the *Central Courses* and the *Specialisation Courses*. The Central Courses are aimed at providing a level of knowledge, which is sufficient for users and middle management or a prerequisite for methodologists. The Specialisation Courses have a dual aim. On the one hand they provide further training opportunities for ‘stand-alone-users’, i.e. users who can not rely on colleagues in methodology departments and on the other hand they aim at advanced training for methodologists.

As the programme should continue to cater for statisticians with a wide range of backgrounds and experiences, the streams should not be interpreted as a fixed set of obligatory courses but rather as a structured set of courses offering an increasing degree of specialisation. Given the background and the training objective of the participant, he/she should be able to make a rational choice at which level to move into the stream and at which level to leave it. A future generalist may wish to pick out a set of introductory courses from the different streams, while a future specialist may wish to follow a series of courses with an increasing degree of specialisation within one stream.

In the future, the successful completion of these variants may result in the awarding of diplomas or certificates of official statistician with options (streams and variants within a stream). This issue is discussed in some detail in International Dimensions Section.

## NEEDS IDENTIFICATION AND QUALITY CONTROL

Quality in vocational training is a multifaceted issue. It concerns in the first place the *goal-orientedness* of the training action, i.e. the question whether the capabilities and

the knowledge the training action is supposed to transfer correspond to the needs of the participants at their workplace. This aspect of quality is related to the design of both the content and the method of the training action.

The other quality aspects are related to the *functionality* of the training action. They concern the academic quality of the teaching and the training material, the didactic competence of the trainers, the organisation supporting the preparation of the future participants and the execution of the courses and the communication process in the classroom (depending on linguistic and technical capabilities of the participants).

Since the beginning of the TES project it was felt that both *goal-orientedness* and *functionality* of the training actions should be subject to continuous scrutiny. The present procedures in place in the TES Institute to control the *functionality* of the training activities consist of (a) the evaluation of the different aspects of a course and the performance of the course staff by the participants and (b) the evaluation of the course by the staff of the TES Institute. These evaluations are fed back to and discussed with the course staff thus helping the training staff and the leadership of the TES Institute to continuously improve the effectivity of the training actions.

To secure and verify the *goal-orientedness* of the training actions is a much more difficult problem, which is directly related to the definition of training goals by the National Statistical Institutes, the coverage of the national vocational training and staff development programmes and the development of a common EU/EFTA training strategy. In other words: one needs to know the goals before one can verify whether the training actions are goal-oriented. Progress in defining common training goals is a prerequisite of paramount importance for the future quality of the TES programme.

The past efforts of the TES Institute to identify the training goals of the National Statistical Institutes and the degree in which these goals were achieved through existing national training programmes have not been very successful. Recently the Institute designed a new questionnaire for institutional evaluation and needs identification. This questionnaire has been tested in 1997 and will be operational as from the beginning of 1998. It is hoped that this questionnaire will shed some light on the training goals and needs.

Finally, it is hoped that the future discussion on internationally recognised diplomas for official statisticians may help to better define the training goals for official statisticians (see also the next section).

## THE INTERNATIONAL DIMENSION

The international dimension of the training activities of the TES Institute entails various advantages and disadvantages. Among the advantages one may count the better use of expertise due to the larger geographical area in which one operates (best current practice). A second advantage is the fact that audience in international training courses is potentially larger than in a national context. This is particularly important for highly specialised courses, which would not be economically viable at a national level. From The perspective of the European Union international training of statisticians provides the ideal platform to pursue supranational goals, such as the harmonisation of standards and methods. Finally, international training enhances contacts between professionals in the same subject area but with different cultures and traditions, thus contributing to a better networking European statisticians.

International training has also disadvantages and encounters specific difficulties: the language problem, the extra costs incurred due to travel, the heterogeneity in the academic and professional background of the participants and the absence of internationally recognised diplomas for official statisticians. The scope of this paper will be limited to the heterogeneity problem and the diploma issue.

The problem of heterogeneous backgrounds of participants in vocational training obviously not only exists in an international training context. Also in a national context, vocational training is much more frequently faced by trainees' heterogeneity than formal education is. Hence what is being said below about heterogeneity in an international context, also applies *mutatis mutandis* to a national context.

In order to avoid that the heterogeneity of background hampers the effective execution of the training course it is imperative to design ways to bring all trainees to a level regarded as minimally required for fruitful participation. This can be done in various manners. It should be born in mind that in the TES courses the participants are adults engaged in a professional career. Therefore the reliance on textbooks to bring to level or to refresh a certain batch of knowledge will probably not produce the warranted results, psychological and time constraints being the most important impediments. The TES Institute is presently engaged in the review and development of distant learning tools aimed at eliminating heterogeneity in background of future participants. These tools are interactive learning software packages, which can be stored on CD or at a website.

Today labour mobility among official statisticians may sound like a contradiction in terms; tomorrow it may not look so far fetched. The ever continuing harmonisation of statistical standards, classifications and methods across Europe will create the opportunities for a greater mobility of official statisticians between National Statistical Institutes, provided that we have developed a body of internationally recognised diplomas for official statisticians. The TES Institute intends to take a major initiative to start an international consultation on this matter. In the next paragraph a number of possible guiding principles have been listed.

The establishment of international certificates for official statisticians should be based on the competence requirements of the National Statistical Institutes concerned. The certificates should be based on the principle of assessment of the ability of the candidate and not on attendance of courses only. There should be certificates for various levels and various specialisations (see also the previous section). International expert groups should carefully define the curriculum of each of these certificates. The awarding of certificates should be based on a system of credit points, to be collected within a certain laps of time. No one institution should have the monopoly on the training for the certificate, but institutions willing to offer courses which are claimed to satisfy the curriculum requirements, should have these courses certified. Conditions should be created to ensure that examinations in different locations or in different institutions are equivalent in coverage, degree of difficulty and assessment criteria. This would create the conditions for a person to collect his/her credit points for a specific certificate both in his/her country and abroad, making use of the certified courses on offer in national or international training programmes.

In Europe the TES Institute could play a role in starting the consultations and in a later stage as regulatory and certifying agency.