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Peer review on the implementation of the European Statistics Code of Practice

Country visited: Liechtenstein

Date: 3 – 5 December 2007

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1. EXECUTIVE SUMMARY

Main findings: The Statistical Office of Liechtenstein is one of four departments of the Office of Economic Affairs (Amt für Volkswirtschaft). The statistical office has 10 employees – there are no regional offices (Liechtenstein has about 35.000 inhabitants).

The tasks of Statistics Liechtenstein are laid down in the Statistical Law (1976, Statistikgesetz: StatG) and the European Economic Area Agreement (EEA). Liechtenstein is a member of the EEA since 1.5.1995.

Based on the EEA Agreement, the member states commit themselves to produce and disseminate coherent and comparable statistics for the description and monitoring of relevant economical, social and ecological aspects in the EEA. For that purpose the EEA members develop harmonized methods, definitions and classifications as well as shared programs and procedures.

The Statistical Law of Liechtenstein is quite old. It was released in 1976 and has never been substantially revised ever since. At the moment of the peer review, a revision was in the parliamentary process. This revision is very important for the Statistical Office of Liechtenstein since the existing law is missing major aspects that are nowadays important in principle but also for the participation in the ESS, e.g. professional independence, objectivity, relevance and accessibility of statistical products and data protection. Even before the legal adoption of the new law, the government of Liechtenstein decided ex ante that the Statistical Office should work on the basis of the Code of Practice (9.10.2007).

The management of Statistics Liechtenstein is supported by the Commission for Statistics. The commission discusses the multi-annual statistical programme, recommendations of users and data providers and makes proposals to the government.

Statistics Liechtenstein co-operates with the National Statistical Office of Switzerland (BFS) and the National Statistical Office of Austria. Since Liechtenstein is a very small country not much co-ordination work in the country needs to be done.

The main findings of the review are as follows:

- The **independence** of Statistics in Liechtenstein is not yet fully assured; however, this will be the case when the new law will be in place. This is foreseen to be the case beginning 2009. The new law will fulfil international standards.
- The mandate for the collection of data is already clearly set out in legislation.
- The human and financial **resources** are tight but sufficient for the current work programme, but not for additional requirements.
- **Statistical quality** is a major concern in the daily work of the office although resource considerations may restrict the scope of statistical work to administrative data and quality reviews may need to be conducted on a regular scale.
- Statistical confidentiality is guaranteed by law and no breaches are known.
- All users have **equal access** to statistical information.
- Impartiality and objectivity are given.
- Accessibility and clarity are generally given although existing methodological background information should be made available to the public and missing methodological information should be completed.

2. INTRODUCTION

With the adoption of the European Statistics Code of Practice, the Statistical Programme Committee (SPC) committed itself to adhering to its principles. At its meeting on 25 May 2005, the SPC endorsed a stepwise monitoring procedure for the implementation of the Code over three years during which countries' self-assessments should be combined with elements of peer review, benchmarking and monitoring on the basis of the explanatory indicators added to each principle of the Code.

During December 2005 / January 2006 the National Statistical Institutes and Eurostat have completed their self-assessments, the results have been summarised by Eurostat in a report submitted to the Economic and Financial Committee in May 2006 which has been published on the Eurostat website.

As a next step towards implementation of the Code, the European Statistical System is organising peer reviews to complement the self-assessments starting with 2006. They are considered a vital element for the implementation of the Code of Practice given their capacity to encourage the sharing of best practice and to contribute to transparency in what is, essentially, a self-regulatory approach. This approach is designed to enhance accountability and to help in building trust in the integrity of the European Statistical System, its processes and outputs.

The Code of Practice peer reviews follow a common methodology focusing on the institutional environment and dissemination part of the Code comprising the following principles: (1) Professional independence, (2) Mandate for data collection, (3) Adequacy of resources, (4) Quality commitment, (5) Statistical confidentiality, (6) Impartiality and Objectivity and (15) Accessibility and Clarity. While an assessment is included in this peer review report, it should be noted that it could not draw on a fully developed common methodology but has rather been based on the Code of Practice self-assessment questionnaire and the peers' experience and background in this area. In principle, the peer review is limited to the National Statistical Institute and its co-ordination role within a dispersed national statistical system. A short document provided by the National Statistical Institute which summarises key aspects of the functioning of the national statistical system is published together with this report.

During a three days visit on-site and on the basis of information material provided by the National Statistical Institute and Eurostat prior to the review, peer reviews produce a report assessing compliance with the Code of Practice at indicator level and in principle following a four point assessment scale. The report includes a refined set of improvement actions covering all principles of the Code which are being used to feed the monitoring process of the implementation of the Code in the European Statistical System.

While the peer reviewers will undertake to base their assessment to the extent possible on factual information, it is worth noting some of the limitations of the peer review process. For example, peer reviewers are dependent upon the resources made available to them (though experienced reviewers can be expected to identify where appropriate information is not forthcoming). In addition these reviews are conducted on a strategic, organisation-wide and system wide basis. Accordingly it is not straightforward to ascertain that certain practices or behaviours or systems operate in all statistical domains.

3. FINDINGS PER PRINCIPLE

Principle 1: Professional Independence

The professional independence of statistical authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, ensures the credibility of European Statistics.

Overall assessment: The Statistical Office of Liechtenstein is one of four departments in the Office of Economic Affairs (Amt für Volkswirtschaft). The tasks are laid down in the Statistical Law (1976, Statistikgesetz: StatG) and the European Economic Area Agreement (EEA).

Professional independence is not mentioned in the law. There is no institutional independence since the statistical office is not an independent agency but a department of an agency.

The Statistical Law is under revision and will be replaced, according to current plans, at the beginning of 2009. The revision focuses on five major topics: legal regulations for the statistical core activities, adaptation to international standards, legal basis for the usage of administrative registers for statistical purposes, closing data security gaps and strengthening the organizational position of the statistical office.

The management of Statistics Liechtenstein is supported by the Commission for Statistics (StatG, Art. 5). The five to eight members of the commission are appointed by the government. Since 2007 the head of the statistical department chairs the commission. The other members are representatives of communes, economic organisations and persons with special statistical knowledge. The members are proposed by organizations they should represent and are appointed by the government. The term of the commission lasts four years. The commission makes proposals to the government on statistical topics.

The commission will be retained in the new statistical law (article 10). Its duties are more clearly specified. Beside other tasks, the commission will evaluate the multi-annual statistical programme before it will be discussed in government and will give recommendations for further directions of the statistical work.

Indicator 1.1: The independence of the statistical authority from political and other external interference in producing and disseminating official statistics is specified in law.

Assessment: Not met

Comments: The Statistical Law issued in 1976 doesn't mention the aspect of independence. At the moment the Statistical Office of Liechtenstein is a department of the Office of Economic Affairs. Therefore, the institutional independence is not given (see Administration Organization Law, article 10, Gesetz über die Verwaltungsorganisation des Staates). Furthermore, this situation sometimes leads to the misunderstanding that the office is only responsible for economic statistics.

Responding to the fundamental changes in international official statistics since 1976, the Statistical Law is now under revision. A new institutional set-up is proposed (Vernehmlassung zum neuen Statistikgesetz, see p. 29 and p. 48: II. article 6) defining that the Statistical Office will be an independent agency under the responsibility of the state administration.

Additionally, article 5 of the drafted new law points out that Statistics Liechtenstein should align its work to the ESS and that a major principle should be professional independence (Art. 5, 2) a).

Therefore, it can be concluded that if the Statistical Law is adopted as planned, the legal basis for professional independence will be given and this indicator will be fully met.

Even before the legal adoption of the new law, the government of Liechtenstein decided ex ante that the Statistical Office should work on the basis of the Code of Practice (9.10.2007).

During this transition period, the statistical office is in practice, albeit not legally independent in its statistical decisions. The head of the Office of Economic Affairs is not interfering in statistical matters, but clearly supports the statistical office in its work. Nevertheless, the head of the Office of Economic Affairs is still responsible for budget negotiations with the government.

Indicator 1.2: The head of the statistical authority has sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies. He/She should be of the highest professional calibre.

Assessment: Largely met

Comments: The nomination of the head of the statistical office is not based on a fixed term. The position is advertised publicly. The head is appointed by the government. At the moment, the position doesn't correspond to one of the highest rankings in the public sector since the office is a department of the Office of Economic Affairs. Therefore, direct accessibility to the government is not assured since the Director General of the Office of Economic Affairs has the formal responsibility for all statistical matters. This will change with the new law once it will be in place (see also 3.5 p. 22; Vernehmlassungsvorlage zum neuen Statistikgesetz). Then, this indicator will be met fully.

Indicator 1.3: The head of the statistical authority and, where appropriate, the heads of its statistical bodies have responsibility for ensuring that European Statistics are produced and disseminated in an independent manner.

Assessment: Partly met

Comments: Due to the institutional set-up of the Statistical Office as a department of the Office of Economic Affairs, full independence cannot be assumed. The Director General of the Office of Economic Affairs is not interfering in statistical matters, since the government decided that Official Statistics Liechtenstein has to take the Code of Practice (see 1.1) into account. For example, if a new law on statistical domain has to be drafted, the department has the sole responsibility for providing the proposal.

Article 5 of the new law specifies clearly that the statistics production in Liechtenstein has to be oriented on the principles of the ESS. Especially, all principles of the Code of Practice are mentioned explicitly. Therefore, with the new law in place, the legal situation will assure that European statistics are produced and disseminated in an independent manner and this indicator will be met fully.

Indicator 1.4: The head of the statistical authority and, where appropriate, the heads of its statistical bodies have the sole responsibility for deciding on statistical methods, standards and procedures, and on the content and timing of statistical releases.

Assessment: Largely met

Comments: The statistical department makes proposals for statistical methods, standards and procedures. If it is necessary from the legal point of view these proposals are discussed with the state administration concerned, the government (in the case of additional resources needed) or parliament (in the case of completely new statistics).

Although, at the moment, the institutional integration does not allow the statistical department to be fully responsible for its own work (see Gesetz über die Verwaltungsorganistion des Staates, article 10), no interference by the head of the Office of Economic Affairs takes place. Content-related influence of the government or parliament may occur indirectly through a reduction of the available budget.

Statistics Liechtenstein is fully responsible for the contents of its publications and Internet releases which clearly indicate the statistical office as authoring authority.

Press releases prepared by Statistics Liechtenstein for press conferences of the government are handled in a different way because these releases are always government releases. Therefore, these releases (two to four per year) are directly issued by the press office of the government.

The timing of statistical releases are planned by Statistics Liechtenstein and pre-announced through a publication plan. The plan is accessible on the Internet (<u>http://www.llv.li/amtsstellen/llv-avw-statistik/llv-avw-statistik-publikationen.htm</u>; <u>http://www.llv.li/pdf-llv-avw-statistik-publikationsverzeichnis_2007</u>).</u>

Indicator 1.5: The statistical work programmes are published and periodic reports describe progress made.

Assessment: Largely met

Comments: Statistics Liechtenstein publishes annual reports. The reports are integrated into the report of the government. The report for 2006 describes the major topics of the year and the progress made. In 2006, these were especially the application of the Code of Practice to official statistics in Liechtenstein, changes in the ESS and new publications.

Indicator 1.6: Statistical releases are clearly distinguished and issued separately from political/policy statements.

Assessment: Fully met

Comments: Statistical releases of Statistics Liechtenstein do not contain political statements. The releases are published as a hard copy or in the Internet.

The Statistical Office does not hold own press conferences. The only type of meeting potentially interpreted as press conference in which statistical data is discussed with the press but also other interested parties in Liechtenstein is organised by government in connection with the bi-annual status of the economy report (Konjunkturbericht Liechtenstein). The head of the statistical office is present in these meetings.

Indicator 1.7: The statistical authority, when appropriate, comments publicly on statistical issues, including criticisms and misuses of official statistics.

Assessment: Fully met

Comments: If misuses or errors occur – for example it was once questioned whether the health costs were calculated correctly – Statistics Liechtenstein contacts the responsible person or institution to clarify the situation, to explain the reasons for problems and to correct them when possible. If the misuse or error concerns data that is fully within the responsibility of official statistics, the head of the statistical office will handle the case. If the misuse also concerns data of other departments of the Office the head of the Office of Economic Affairs will comment on all the misuses.

Principle 2: Mandate for Data Collection

Statistical authorities must have a clear legal mandate to collect information for European statistical purposes. Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for European statistical purposes at the request of statistical authorities.

Overall assessment: Statistics Liechtenstein has the mandate to collect data for statistical purposes. All respondents are obliged to provide the data free of charge. If data is not delivered or wrong data is delivered respondents could legally be imposed to pay fines. This wasn't necessary until now because the response rate is generally very high. For most statistics administrative data is used.

Indicator 2.1: The mandate to collect information for the production and dissemination of official statistics is specified in law.

Assessment: Fully met

Comments: Statistics Liechtenstein has the mandate to collect data for statistical purposes (StatG 1976, Art. 4, 2)a; new law Chapter III). The law obliges all persons and enterprises to participate in official statistics data collection free of charge (StatG, Art. 5, 1; new law Art. 13). Fines could be imposed.

The right to collect data from the state authorities and local authorities free of charge can be decided by the government.

The law focuses only on data collection by questionnaires (see article 7; article 10). The law mentions explicitly that the data collected can be used only for statistical purposes (article 9; new law article 16). It guarantees confidentially (article 9, 3)).

There are no specialized laws for each statistical domain. The office has the mandate to collect data for all statistics enumerated in the Statistical Law. The statistical office could for example add a variable to an existing survey on its own decision, if no additional financial resources are needed. If, however financial resources are needed the government has to be involved. The parliament has to decide on the preparation of a totally new statistics.

Indicator 2.2: The statistical authority is allowed by national legislation to use administrative records for statistical purposes.

Assessment: Fully met

Comments: The Statistical Law handles the use of the population register (Einwohnerregister). No other registers are mentioned. Administrative data may be used. In 2007, 19 official statistics were produced making use of administrative data.

There are procedures established to detect errors in administrative data. If errors are detected, the statistical office and the data supplier work together to find explanations. Errors detected in individual data – like wrong addresses – are not communicated to the state administration.

Administrative data of the central population register (Zentrale Personenverwaltung) can be accessed online by the statistical office with limited access and write permissions. Other administrative data are delivered to the statistical office electronically in batch mode, e.g. by CD, DVD.

Indicator 2.3: On the basis of a legal act, the statistical authority may compel response to statistical surveys.

Assessment: Fully met

Comments: The Statistical Office compels bodies and individual persons to respond to statistical surveys. All respondents are obliged to answer truthfully, complete and in time (Statistical Law, article 6, 1). The obligation applies to sample and population surveys.

Penalties of up to 20.000 SF (about 12.500€ or 3 months prison) can be imposed for failing to provide the data willingly, providing it after the deadline or providing false or incomplete data. The obligation for responding is not cancelled through paying the penalty.

In addition, the data protection law defines fines up to 20.000 CHF (about 12.500€, 2002, article 40) if information is not provided or is erroneous.

The response rate is very good, e.g. in the structural business statistics survey it is about 97% for enterprises and about 86% for individuals. Until today it was not necessary to impose fines.

Principle 3: Adequacy of Resources

The resources available to statistical authorities must be sufficient to meet European Statistics requirements.

Comments: The Statistical office is very small. With only 10 persons employed for the entire range of tasks, it is evident that personnel resources are tight even under the consideration of the limited range of statistics covered by the Statistical Office and the very many exemptions granted to Liechtenstein with respect to compliance to Community statistics. Nevertheless, the work programme can only be carried out by strongly relying on administrative data and the limiting of statistical surveys to those domains that cannot be covered by administrative data.

The tight personnel situation in terms of numbers appears to be compensated to a considerable extent by the personnel's high qualifications.

Indicator 3.1: Staff, financial, and computing resources, adequate both in magnitude and in quality, are available to meet current European Statistics needs.

Assessment: Largely met

Comments: With a total staff of 10 employees, the Statistical Office is very small even in view of the limited range of statistics covered.

The available staff is considered sufficient for the current work program and allows for a limited range of new projects. However, not all statistical requirements of important user groups can be satisfied with the current staffing.

The use of administrative sources, wherever possible, is to a large extent (or basically) determined by the resource situation - although statistical considerations, such as potential sample design in a very small population, also play an important role.

The large majority of the staff has a professional education in subject areas indirectly related to statistics and three members of the staff have academic degrees in statistics or in subject areas with considerable statistical content. The professional qualification of the employees is considered by the management to be sufficient to cover the needs. The reliance on administrative sources seems not to require a full statistical education in order to achieve quality work results.

The management of Statistics Liechtenstein strongly encourages training and the staff participates in ESS training courses and courses of Statistics Switzerland.

Financial resources are considered adequate.

Furthermore, information technology and the dissemination via the Internet are covered by a central service of the state administration. Statistics Liechtenstein contributes with its budget to cover its part of the costs for the IT service.

Indicator 3.2: The scope, detail and cost of European Statistics are commensurate with needs.

For European level reply

Indicator 3.3: Procedures exist to assess and justify demands for new European Statistics against their cost.

For European level reply

Indicator 3.4: Procedures exist to assess the continuing need for all European Statistics, to see if any can be discontinued or curtailed to free up resources.

For European level reply

Principle 4: Quality commitment

All ESS members commit themselves to work and co-operate according to the principles fixed in the Quality Declaration of the European Statistical System.

Comments: Statistics Liechtenstein is subject to particular conditions due to the size of the office. Practically, each employee has a number of subjects to cover. In such a small team there is not as much space for documentation as in larger teams. Nevertheless, there is evidence that Statistics Liechtenstein undertakes considerable efforts to establish a system of regular quality controls, primarily through its end-of-process-reports and the four-eye principle which is systematically applied. The regular meetings with staff in which quality aspects are discussed are an important means for achieving the quality commitment of the staff.

The recent user survey showed a very high degree of users' trust in the quality of the statistics produced. Moreover, all interviews conducted in the framework of the peer review also pointed to this high degree of users' satisfaction with the quality of the statistics produced. The users observed considerable improvements during recent years which have been largely attributed to the new management of Statistics Liechtenstein.

The small size of the country to a certain extent assists in the monitoring of statistical quality as errors become more easily evident to users compared to large countries. There is anecdotal evidence that observed errors are reported to the Statistical Office.

The possibilities for statistical surveys are very limited so that some concessions need to be made with respect to quality by limiting statistical work to administrative sources.

A Total Quality Management project is in operation. However, it concentrates on personnel and organisational aspects rather than on statistical output.

Statistics Liechtenstein recognises the quality criteria of the ESS and gives emphasis to the quality conditions as stipulated by the Code of Practice.

Indicator 4.1 Product quality is regularly monitored according to the ESS quality components.

Assessment: Fully met

Comments: Statistics Liechtenstein has adopted the range of ESS quality criteria and inserted them into the draft new Statistical Law. They are already used for the quality monitoring even before the new law has been legally implemented.

Each publication is systematically validated by a second person, and the preparation of a publication is followed by a so called 'end-of-process-report' which states experiences and comments on quality issues. These are then discussed with all personnel in bi-weekly meetings in order to draw conclusions on the need for future actions.

According to a recently established principle, each publication should contain a chapter on methodology and quality of the statistical data contained in the publication.

For the important central population register (Zentrale Personenverwaltung) a particular monthly quality process is in place to clarify all detected inconsistencies.

Within the Internet, users are given the possibility to provide feedback on the statistical data.

There is anecdotal evidence from incidences that errors in statistics are regularly detected by staff or reported by users and corrected by the Statistical Office.

Indicator 4.2 Processes are in place to monitor the quality of the collection, processing and dissemination of statistics.

Assessment: Fully met

Comments: Despite the fact that quality control relies to a large extent on the initiative of the statistician in charge, the measures systematically established for the production of all statistical publications (the four-eye principle combined with the end-of-process-reports and their follow-up in bi-weekly meetings) appear to be fully adequate for the specific conditions of Statistics Liechtenstein.

The dissemination via the Internet is analysed once a year in detail.

In addition, a Total Quality Management project is in operation concentrating on personnel and organisational aspects.

Indicator 4.3 Processes are in place to deal with quality considerations, including trade-offs within quality, and to guide planning for existing and emerging surveys.

Assessment: Largely met

Comments: There is evidence that quality considerations are fully taken into account in the planning and design of statistical domains, e.g. employment and energy statistics, and mentioned in the publication of statistical results. This is particularly evident when concessions on statistical quality through the limitation to purely administrative sources imposed by the available personnel resources are accepted for new statistics.

The quality aspects are discussed in the preparation phase of statistical work, however, they are not systematically documented.

Indicator 4.4 Quality guidelines are documented and staff are well trained. These guidelines are spelled out in writing and made known to the public.

Assessment: Largely met

Comments: Quality guidelines exist in the context of process documentation for important statistical domains, such as National Accounts and business registers and employment statistics. These guidelines are generally written by the officials in charge assisted by their hierarchy. In the case of the National Accounts, a doctoral thesis was the basis for the methods applied. However, not all statistical domains are equally well documented.

Primarily in the bi-weekly meetings with staff, the attention of the personnel is drawn towards quality issues.

Neither the guidelines nor the quality criteria contained in them are made public.

Indicator 4.5 There is a regular and thorough review of the key statistical outputs using external experts where appropriate.

Assessment: Partly met

Comments: Statistics Liechtenstein has experienced external reviews. A major event was a review by a specifically established committee in 2005 on National Accounts, which was caused by quality issues concerning the National Accounts for 2002.

However, such reviews are not organised in a regular way.

It is recommended that quality reviews to be organised in the future should have as a major element the international comparability of figures of Liechtenstein with at least the neighbouring countries and ideally the neighbouring regions.

Principle 5: Statistical confidentiality

The privacy of data providers (households, enterprises, administrations and other respondents), the confidentiality of the information they provide and its use only for statistical purposes must be absolutely guaranteed.

Overall assessment: Statistical confidentiality is guaranteed by law. Breaches of statistical confidentiality are punishable. The statistical office did not observe any breaches to date.

The national data protection law has transposed the EU data protection directive 95/46/EG (1995) into national law. Liechtenstein has a national data protection Ombudsman appointed by the government. Critical issues are handled through the data protection commission.

The responsibility for IT is out-sourced to the Office for Employees and Organisation of the State Administration (Amt für Personal und Organisation). The employees of the IT-unit provide the technical equipment and software development services.

Microdata can be accessed by researchers after signing a contract that handles all relevant aspects concerning data protection and confidentiality.

Indicator 5.1 Statistical confidentiality is guaranteed in law.

Assessment: Fully met

Comments: Statistical confidentiality is guaranteed by law (StatG 1976, Art. 9). Besides this, data could be disclosed if the data provider agrees or the data has only historical value. Based on the Statistical Law, all these exceptions must be approved by the government. The statistical office could not report on any case were this possibility was used.

Article 10 of the Statistical Law describes the procedures that must be in place to guarantee confidentiality. Due to the release date of the law (1976), modern IT technology aspects are not taken into account. Only procedures relevant for questionnaires are described. The new law handles the usage of microdata in an adequate way.

There are no known breaches of confidentiality. The respondents have full confidence that confidentiality is guaranteed.

The data protection law (Datenschutzgesetz, DSG, 2002) has transposed the EU data protection directive 95/46/EG (1995) into national law. Article 17 stipulates that data collected for statistical purposes may not be published in a way that the individual providing the data could be (re-) identified. Article 43 guarantees confidentially of the data collected for statistical purposes also in the case of crime and terrorism prevention.

Article 28 states that the government appoints a national data protection Ombudsman. The Ombudsman fulfils his/her duty in an independent manner. He/she is responsible for the supervision of the administration. Critical issues are handled through the data protection commission. The commission consists of three persons appointed by the parliament for four years. The statistical office has direct contact to the Ombudsman. There is no specially attributed person in the statistical office responsible for data protection. This topic is integrated in the working procedures of all employees.

Indicator 5.2 Statistical authority staff sign legal confidentiality commitments on appointment.

Assessment: Fully met

Comments: On appointment, the employees are informed about the relevant laws and they have to swear an oath that includes a confidentially commitment. In the case of the statisticians these are e.g. the legal confidentiality commitment (Amtsgeheimnis) and the Statistical Law. This procedure is sufficient to handle possible breaches.

Indicator 5.3 Substantial penalties are prescribed for any wilful breaches of statistical confidentiality.

Assessment: Fully met

Comments: Penalties for breaching confidentiality are defined in the Statistical Law (article 11, 1). The Data Protection Law (Datenschutzgesetz, DSG 2002) determines possible substantial fines for breaches in Chapter V, Article 41. Additionally, there is a Data Protection Directive (Datenschutzverordnung, DSV 2002) that regulates all rights and responsibilities concerning data collections.

Indicator 5.4 Instructions and guidelines are provided on the protection of statistical confidentiality in the production and dissemination processes. These guidelines are spelled out in writing and made known to the public.

Assessment: Partly met

Comments: There are no guidelines written down that handle the protection of statistical confidentiality. Critical issues are discussed in an employee meeting that takes place when necessary otherwise the subject is handled in the regular bi-weekly meeting.

Indicator 5.5 Physical and technological provisions are in place to protect the security and integrity of statistical databases

Assessment: Largely met

Comments: The information technology of the statistical office is completely out-sourced to the Office for Employees and Organisation of the State Administration (Amt für Personal und Organisation). Therefore, the Office of Statistics is not responsible for security of IT-infrastructure. The employees working in this office have to comply with the data protection and statistical laws.

The IT-infrastructure is set up on the basis of ISO 27001 and periodically reviewed by external auditors. The State Administrative network is equipped with a firewall. Citrix-technology is used. Access to confidential statistical data is managed by user accounts that define the user profiles. All local PCs are equipped with a virus protection. Some PCs have a CD or DVD used for importing data on the local level. The USB port works with memory sticks. No employee of the statistical office has remote access to the IT system.

Indicator 5.6 Strict protocols apply to external users accessing statistical microdata for research purposes.

Assessment: Fully met

Comments: The Statistical Law does not state anything on the use of microdata and the possibility of delivering it to researchers. Therefore, the statistic office bases the procedure of delivering data on the EU-directive 322/97 and its adoption in national law. The Data Protection Law (2002) states in article 26 that personal data can be delivered if it is anonymized.

The statistical office mentioned only two cases where microdata was delivered to scientists. Both cases concerned census data collected in 2000. To get access to the data, the scientists had to sign a contract were all relevant aspects concerning data protection, confidentiality and fines in the case of breaches were regulated. The microdata were 'pseudomized' before delivery. The data was delivered personally.

The new law states in article 16 that there is a possibility for delivering microdata concerning individuals to other international statistical offices and research offices. The research offices have to commit themselves to statistical confidentially and to the data protection law.

Principle 6: Impartiality and objectivity.

Statistical authorities must produce and disseminate European Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

Overall assessment: There is no evidence that Statistics Liechtenstein would not collect, produce and disseminate statistics purely on statistically objective and professional grounds. The predominance of administrative data in the collection of statistics is determined by resource limitations but also by the particular specific issues for survey techniques due to the smallness of the country.

The dissemination function is organised in an effective way with release calendar, adherence to the impartiality principle and with mechanisms for error correcting and adequate information channels for users.

A point to be addressed concerns the availability of methodological metadata. The range of existing handbooks needs to be completed and published.

Indicator 6.1: Statistics are compiled on an objective basis determined by statistical considerations.

Assessment: Fully met

Comments: There is no evidence that statistics are not compiled on an objective basis in any of the interviews conducted during the peer review. Full trust in the objectivity and the professional capacity of Statistics Liechtenstein was generally expressed.

Each statistical project is started with a written project plan in order to obtain a governmental decision. Larger projects are additionally covered by a legal basis. In this context, financial aspects are discussed with the government and, as mainly access to administrative data are concerned, agreements are achieved between administrations about procedural aspects.

The criterion of an objective basis for the statistics compilation is not yet guaranteed by the legal basis but foreseen in the new Statistical Law.

Indicator 6.2: Choices of sources and statistical techniques are informed by statistical considerations.

Assessment: Largely met

Comments: The staffing of Statistics Liechtenstein requires a concentration on administrative sources and provides very little scope for survey based statistics or additional surveys supplementing administrative data based statistics. However, the very small scale of Liechtenstein makes the design of sample based surveys difficult. Well designed samples may result in a full coverage of all statistical entities by a potential survey.

Statistics Liechtenstein is fully aware of the limitations of administrative sources where applicable and documents them in publications, however, users expressed the desire for a more intensive treatment of this subject in the publications.

Indicator 6.3: Errors discovered in published statistics are corrected at the earliest possible date and publicised.

Assessment: Fully met

Comments: Statistics are generally disseminated through publications in paper or via PDF on the Internet. As a conclusion, errors need to be corrected through corrigendum publications. There is evidence that this happens in a systematic way. Users are informed about the occurrence of the error through newsletters and mailing lists in addition to the Internet.

Indicator 6.4: Information on the methods and procedures used by the statistical authority are publicly available.

Assessment: Partly met

Comments: Increasingly, Statistics Liechtenstein adds methodological information to publications through a methodological section and a glossary of terms. This information is more comprehensive for more recent publications than for types of publications that exist for a longer time.

For the statistical domains considered to be particularly important or more complex, such as National Accounts or Business Registers, comprehensive methodological information exists in the form of handbooks and guidelines for processing. However, they are currently kept as internal documents.

Users interviewed in the framework of the peer review expressed a strong interest in more metadata. It is thus recommended to intensify the current process of supplying metadata in publications and to make internal manuals and guidelines publicly available, perhaps after a review of the content.

Indicator 6.5: Statistical release dates and times are pre -announced.

Assessment: Fully met

Comments: A release calendar and a list of available publications exist on the Internet under the following links.

(<u>http://www.llv.li/amtsstellen/llv-avw-statistik/llv-avw-statistik-publikationen.htm;</u> http://www.llv.li/pdfllv-avw-statistik-publikationsverzeichnis_2007).

The level of detail is considered sufficient.

In addition, users can choose to be informed by electronic mail about publications the moment they are available on the Internet. The press is specifically alerted half a day before the publication about the event but is not provided with an advance copy and thus subject to the same conditions as the public in general.

Indicator 6.6: All users have equal access to statistical releases at the same time and any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements should be revised so as to ensure impartiality.

Assessment: Fully met

Comments: Statistics Liechtenstein generally publishes statistics by means of publications that are made available to all users at the same time on the Internet. The users are informed by a release

calendar. In addition, an electronic newsletter that can be requested by all users informs them of publications.

Statistics Liechtenstein does not itself organise press conferences. Two press conferences on the occasions of the bi-annual state of the economy report (Konjunkturbericht Lichtenstein) are organised by the government. The head of Statistics Liechtenstein is present at these events. Only the press release and not the respective publication is subject to prior governmental approval. This is the general procedure in Liechtenstein and therefore known to the public.

Indicator 6.7: Statistical releases and statements made in Press Conferences are objective and non-partisan.

Assessment: Partly met

Comments: The criterion is classified as partly met' because Statistics Liechtenstein does not organise itself press conferences.

Two press conferences on the occasions of the bi-annual state of the economy report (Konjunkturbericht Liechtenstein) are organised by the government but not by Statistics Liechtenstein. Nevertheless, the respective press releases are drafted by the head of Statistics Liechtenstein and adopted by the government for their conference. The head of Statistics Liechtenstein is present at the press conferences.

The evidence collected during the peer review indicated that observations in these press releases and statements made at press conferences have been statistically objective.

It is recommended that the statistical office of Liechtenstein hold its own press conferences once the new statistical law will be in force.

Principle 15: Accessibility and clarity

European Statistics should be presented in a clear and understandable form, disseminated in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

Overall assessment: The intensive usage of the Internet and in the form of publications in order to make statistical data available satisfies the essential requirements for accessibility and clarity.

Weaknesses exist with respect to the systematic preparation and publication of methodological background data. By publishing existing material on key statistics, the current information situation could already be improved.

Nevertheless, more extensive investments with respect to methodological data will be desirable not least for the purpose of an international comparability of the statistics.

Indicator 15.1: Statistics are presented in a form that facilitates proper interpretation and meaningful comparisons.

Assessment: Fully met

Comments: The practice of Statistics Liechtenstein to present all its statistics in the form of publications that are available both in electronic versions and in printed copies is fully adequate for clarity.

Nevertheless, users have expressed the desire to have the data also available in processable form, ideally as Excel tables, in order to avoid retyping of figures and to have the possibility of further analysis.

Statistics Liechtenstein has in recent years made strong efforts to achieve the compatibility of its statistics to the ESS definitions of statistical variables, for example in the unemployment statistics. Nevertheless, more indications on the degree of compliance and potential deviations from these definitions in publications and metadata would be desirable.

Indicator 15.2: Dissemination services use modern information and communication technology and, if appropriate, traditional hard copy.

Assessment: Largely met

Comments: The Internet has become the primary means of Statistics Liechtenstein for disseminating data although paper copies are also systematically produced.

The website of Statistics Liechtenstein is well structured and allows easy navigation to the relevant data.

Nevertheless, the limitation to PDF electronic publications is seen by some users as having a certain limitation. Electronically processable data formats to accompany the PDF formats were mentioned as desirable as a short-term measure for improvement. In a longer-term perspective, a publicly accessible database which allows users to choose their own combination of variables may be useful.

Indicator 15.3: Custom-designed analyses are provided when feasible and are made public.

Assessment: Largely met

Comments: To a limited extent, as far as resources allow, custom designed analyses are prepared. These user requests are considered as candidates for improving the next version of a publication. In the large majority of cases the analyses are requests for a different presentation of the statistics.

However, neither the existence of the custom-designed analyses nor the results of the analyses are currently made public.

Indicator 15.4: Access to microdata can be allowed for research purposes. This access is subject to strict protocols.

Assessment: Fully met

Comments: Only two examples of microdata access by researches have occurred. Both concerned data from the 2000 census data. The specific conditions of Liechtenstein which poses restrictions for the anonymisation possibilities required particular contractual precautions with the researchers. These two examples were apparently well handled to serve as potential examples for future access to microdata by researchers.

The good cooperation between Statistics Liechtenstein and researchers was emphasised by both sides during the interviews.

Indicator 15.5: Metadata are documented according to standardised metadata systems.

Assessment: Partly met

Comments: Statistics Liechtenstein has started in recent publications to add a section on methodology and a glossary of terms to its publications. A more intensive publication of methods involving the publication of existing handbooks and guidelines as well as efforts in completing the range of such documents has been expressed by Statistics Liechtenstein as improvement action. This initiative has been welcomed in the peer review.

However, existing methodological information is not structured according to a certain standard. Statistics Liechtenstein is advised to analyse the possibility to adopt a common metadata structure. Current work in the ESS for creating structural recommendations for metadata may provide a good opportunity for adopting a widely accepted metadata structure.

Indicator 15.6: Users are kept informed on the methodology of statistical processes and the guality of statistical outputs with respect to the ESS guality criteria.

Assessment: Partly met

Comments: The current efforts of Statistics Liechtenstein to systematically supplement its publications with methodological information and a glossary of terms is a welcome initiative but is not yet sufficient to satisfy the requirements of this indicator. This information does not yet exist for older, longer established publications.

The existing methodological manuals and guidelines, which have been written for key statistics such as National Accounts, are currently not made public but could be valuable information for intensive and expert users of the statistics. Moreover, not all statistical domains are yet sufficiently documented.

Quality assessments, for example in the context of the end-of-process-reports are not made public but may contain important user information.

A particular concern of users is the compliance with ESS definitions of statistical variables. In interviews conducted in the context of the peer reviews, Statistics Liechtenstein was encouraged to systematically comment on the degree of this compliance and potential deviations.

4. CO-ORDINATION ROLE OF THE NATIONAL STATISTICAL INSTITUTE

Liechtenstein is a very small country. Overall, the administration has only about 1.000 employees. Statistics Liechtenstein has only one office located in Vaduz. There are no regional offices. No official statistics are produced by other administrations. By now, there is no need for an intra-statistical co-ordination role.

Nevertheless, Statistics Liechtenstein co-ordinates the recommendations of the users by collecting them in their everyday work. These recommendations are discussed in the Commission for Statistics.

5. GOOD PRACTICES TO BE HIGHLIGHTED

- Principles of the Code of Practice are an element of the new Statistical Law
- Users' recommendations are integrated in publications whenever possible

6. RECOMMENDATIONS OF THE PEER REVIEW TEAM

- All statistical publications should have an methodological part, consisting of information about data sources and especially information about the comparability of the data of Liechtenstein with Community Statistics
- The range of existing methodological manuals and/or guidelines should be completed to cover all statistics production in the medium term future. Existing manuals and guidelines should be made known to the public at least partly.
- Efforts on the ESS level to develop a metadata structure proposal should be analysed and, if possible, the structure adopted as standard.
- Existing and comparable data should be integrated in the European statistical databases. Metadata should explicitly comment on the degree of compliance to ESS definitions.
- In the long run, a concept for making historical data and texts available to the public should be developed.
- The scientific community should be represented in the Commission for Statistics.
- Statistics Liechtenstein should hold its own press conferences.
- The Internet presentation should evolve:
 - The presentation of the statistical office should be clearly separated from the presentation of the government. This should take effect not later than the moment the new Statistical Law comes into force.
 - o Tables with data should be available not only in pdf-format but also as excel-format.
 - If available, data of other countries should be made available through the Internet if relevant for comparing (by direct download or e.g. link to Eurostat).
 - In the long-run, an interactive tool should be integrated that offers the possibility to the users to generate tables on their own.

7. LIST OF IMPROVEMENT ACTIONS BY PRINCIPLE OF THE CODE

Principle 1: Professional Independence	
Improvement actions	Timetable
 The independence of the statistical authority from political and other external interference should be specified in the statistical law. The head of the statistical authority should have responsibility for ensuring that the statistical publications are produced and disseminated in an independent manner. Status: A new statistical law has been drafted and is now open to public discussion. Discussion in parliament is planned for 2008. 	2009

Principle 2: Mandate for Data Collection		
Improvement actions	Timetable	
• A revision of the statistical law should take place to allow by national legislation to use administrative records for statistical purposes. <i>Status:</i> A new statistical law has been drafted and is now open to public discussion. Discussion in parliament is planned for 2008.	2009	

Principle 3: <u>Adequacy of Resources</u>	
Improvement actions	Timetable
• Procedures to assess the continuing need for all statistical publications should be introduced.	2008
Status: The need for different statistical publications has been discussed	
with users, but this assessment is not yet part of a regular process.	

Principle 4: Quality commitment

Trinciple 4. <u>Quanty communent</u>	
Improvement actions	Timetable
 Quality guidelines should be spelled out in writing and existing monitoring procedures should be further specified. Internal handbooks for the production process of the main statistical 	2008
publications should be drafted where they are still missing.	2010
<i>Status:</i> The principles and indicators of the Code of Practice serve as quality guidelines. For each publication is specified who is responsible for the quality controls.	
Internal handbooks exist for several statistical publications, e.g. Beschäf- tigungs- und Arbeitsplätzestatistik (LUR), Bevölkerungsstatistik (Ein-	
wohnerabgleich), Gütertransportstatistik, Konjunkturtest, Konjunkturbe- richt, Steuerstatistik, Volkswirtschaftliche Gesamtrechnung.	

Principle 5: Statistical Confidentiality		
Improvement actions	Timetable	
• A revision of the statistical law should take place to adapt the requirements on statistical confidentiality. <i>Status:</i> A new statistical law has been drafted and is now open to public discussion. Discussion in parliament is planned for 2008.	2009	

Principle 6: Impartiality and Objectivity	
Improvement actions	Timetable
• A revision of the statistical law should take place to strengthen the requirements on impartiality and objectivity.	2009
 Information on the methods and data sources used by the Statistics Division of Liechtenstein should be made public for all statistical publications. Status: A new statistical law has been drafted and is now open to public discussion. Discussion in parliament is planned for 2008. Many, but not all statistical publications provide information on methods and data sources. The information on methods and data sources is not yet standardised. 	2010

Principle 7: Sound Methodology		
Improvement actions	Timetable	
Cooperation with the scientific community, with experts from Euros- tat and with statisticians' from other NSI's to improve methodology should be strengthened. <i>Status:</i> There are cooperations with the scientific community, experts from Eurostat and statististicians' from other NSI's when specific issues have to be addressed.		

Principle 8: Appropriate statistical procedures	
Improvement actions	Timetable
• Quality indicators for statistical procedures should be introduced and procedures for revisions should be established. <i>Status:</i> Quality reporting for surveys in the form of End-of-Process-Reports has been introduced.	2009

Principle 9: Non-excessive Burden on Respondents	
Improvement actions	Timetable
 Registers should be used for the next population and housing census to reduce response burden. Questionnaires should be reduced to the questions which are necessary for statistical purposes. 	2011 2009
<i>Status:</i> Until 2000 population and housing censuses were based on surveys. Some of the questionnaires contain questions which are not used for statistical publications.	

Principle 10: Cost effectiveness		
Improvement actions	Timetable	
 New software for statistical analysis should be introduced. 	2008	
 Cost accounting should be introduced. 		
Status: The new statistical software is now available for half of the staff.	2008	
Training has still to be done.		
Up to now, there is no cost accounting for the Statistics Division. It is		
planned to introduce cost accounting in 2008.		

Principle 11: Relevance		
Improvement actions	Timetable	
An analysis of the hits on the Internet site of the Statistics Division should be carried out regularly. Status: Analysis of the hits was carried out in September 2007.	yearly	

Principle 12: Accuracy and Reliability		
Improvement actions	Timetable	
 Additional quality indicators for accuracy and reliability should be introduced. Status: Additional quality indicators have been introduced, e.g. in Natio- nal Accounts. Further work needs to be done. 	2010	

Principle 13: Timeliness and Punctuality		
Improvement actions	Timetable	
 Causes of delay in publications should be analysed on the basis of End-of-Process-Reports. Status: Causes of delay are analysed as far as End-of-Process-Reports 	2008	
are compiled.		

Principle 14: Coherence and Comparability		
Improvement actions	Timetable	
Documentation of breaks in time series should be improved.	2008	
<i>Status:</i> There were no breaks in time series in the years 2006 and 2007. The next break will be the introduction of NACE Rev. 2.		

Principle 15: Accessibility and Clarity			
Improvement actions	Timetable		
• The internet-address of the Statistics Division should be more	2008		
concise to improve access to the internet-site.			
The layout of the statistical publications should be improved and uni-			
fied.			
Status: The complete internet-address of the Statistics Division is			
http://www.llv.li/amtsstellen/llv-avw-statistik.htm, which is too long.			
The process of unifying the layout of the statistical publications has just			
started.			

8. ANNEX A: PROGRAMME OF THE VISIT

3 Dec 07	Discussion with internal stakeholders	Participants
14.00- 14.30	Welcome and introduction of	Wilfried Oehry (Leiter Abteilung Statistik),
	programme, organisational matters	Christian Brunhart (Fachbereichsleiter
		Register und Internationales), Mario
		Schädler (Fachbereichsleiter VGR)
14.30 – 16.00	Meeting with Management, Principles 1-3	Wilfried Oehry, Christian Brunhart, Mario
		Schädler
16.00 – 16.15	Coffee break	1
16.15 – 17.15	Meeting with Management, Principles 4, 5	Wilfried Oehry, Christian Brunhart, Mario
		Schädler
19.00	Dinner	Peter Beck (Leiter Amt für
		Volkswirtschaft), Wilfried Oehry, Christian
		Brunhart, Mario Schädler
4 Dec 07	Discussion with internal and external	Participants
	stakeholders	
09.00 - 09.45	Meeting with Management, Principle 6 & 15	Wilfried Oehry, Christian Brunhart, Mario
		Schädler
09.45 – 10.00	Coffee break	
10.00 – 11.00	Meeting with representatives from Statistical	Jürgen Nigg, Simon Tribelhorn,
	Council and of respondents	
11.00 – 12.00	Meeting with main users (Ministries)	Horst Schädler, Edgar Nipp, Thomas
		Lorenz, Veronika Marxer, Markus
		Biedermann
12.00 – 13.30	Lunch break	Wilfried Oehry, Christian Brunhart, Mario
		Schädler
13.30 – 14.30	Meeting with representatives from the scientific	Wilfried Marxer, Silvia Simon, Fabian
	community	Frommelt
14.30 – 15.30	Meeting with representatives from the media	Tino Quaderer, Günther Fritz
15.30 – 16.00	Coffee break	
16.00 – 17.00	Meeting with junior staff, Principles 1-6, 15	Thomas Erhart, Brigitte Schwarz, Harry
		Winkler
5 Dec 07	Conclusions	Participants
09.00 – 10.45	Meeting with Management to sum-up and	Wilfried Oehry, Christian Brunhart, Mario
	detailed review of list of improvement actions for	Schädler
	all principles. Conclusions, recommendations	
	and follow-up (improvement actions).	
1	Walk to Covernment Duilding	
10.45 – 11.00	Walk to Government Building	
10.45 - 11.00 11.00 - 11.45	Meeting with Deputy Prime Minister: Main	Regierungschef-Stellvertreter Klaus

9. ANNEX B: LIST OF PARTICIPANTS

9.1. Statistics Liechtenstein

Director General, Economic and Education Statistics		
Director, Registers and International Affairs		
Director, National Accounts		
Economic and Education Statistics		
Registers and International Affairs		
Economic and Education Statistics		

9.2. External

Statistical Commission	
Jürgen Nigg	Delegate of the Economic Chamber liechtenstein
Simon Tribelhorn	Delegate of the Banking Association
User representatives	
Thomas Lorenz	Stabsstelle Finanzen (Ministry of Finance)
Edgar Nipp	Ministry of Finance
Veronika Marxer-Gsell	Stabsstelle für Chancengleichheit (Ministry of Family and Equal Rights)
Horst Schädler	Ministry of Economics
Markus Biedermann	Ministry of Trafic and Communication
Researchers	
Fabian Frommelt	Historical Encyclopaedia
Wilfried Marxer	Liechtenstein Institute, Bendern
Silvia Simon	Hochschule for Technology and Economics, Chur
Media	
Günther Fritz	Liechtensteiner Vaterland
Tino Quaderer	Liechtensteiner Volksblatt