

## **The use of Administrative Data in the production of Structural Business Statistics in Portugal - The creation of the IES**

**Keywords:** Structural business statistics; administrative information; administrative data in economic statistics; economic statistics; burden on respondents; administrative burden for NSI; statistics; business; web form; enterprises

### **Abstract**

Statistical production in Portugal faces a new paradigm with the use of administrative data for producing structural business statistics. This new reality differs from other statistical systems once all economic data related to structural business statistics come from one single administrative source and are collected by electronic means, *web form*, at one single moment. With this model Statistics Portugal can access to all basic data for all enterprises with no need to estimate any data even partly.

The new model of collecting data results into the coverage of the enterprise population as a whole, instead of relying on a sample.

On the other hand, for the enterprises, this model represents a significant reduction of administrative costs associated to the fulfilment of four legal obligations, once at one single moment and based on the same system they are able to send data for taxes purposes, for settlement and publishing of accounts on the Public Register of Annual Reports, statistical data to Statistics Portugal (only although for those that were sampled previously) and accounting data to the Portuguese Central Bank.

For the Portuguese National Statistical System and mostly to Statistics Portugal, the new modality of obtaining these data has led to a new stage of production of statistics on enterprises, based on administrative data, with a large coverage in terms of statistical units (enterprises) and in terms of variables, making it possible (by freeing resources) to re-direct the statistical activity towards increasing consistency and updating of annual data.

Thus, this model translates indeed in a real reduction of both administrative burden in general and statistical burden in particular.

## **The conception of the IES**

This new model has been possible to get this outcome only after long and persistent work. Statistics Portugal began contacts with key public entities that are also users of enterprise data more than a decade ago. During those years Statistics Portugal promoted the dialogue and searched for a solution that could allow one single information collection. Since the beginning of the process it became clear that good results could only be achieved if based on a good conjunction of efforts not only from public entities but also the different actors in this process. Indeed the aim of Statistics Portugal was twofold: i) to contribute to the reduction of the costs associated to data collection; and ii) to reduce the burden on enterprises, since until then enterprises were sending the same data to different public entities, using different transmission format (mostly in paper form).

In addition, improvements in simplification and consistency were achieved as a result of harmonization and alignment of definitions and concepts taking as basis those that are being used by Statistics Portugal, which are aligned with the European Union requirements.

Earlier in 2006, with the launching of the Simplex Program (National Governmental Program for Administrative and Legislative Simplification), it became finally possible to jump considerably the process with the preparation of a concrete legal measure. Such a measure would concentrate the efforts of different public entities to create a system aiming at one single and timely collection of all compulsory annual information on enterprises (accounting data). The first step was defining the set of data that shall be collected. For this purpose the needs of all entities were analysed and some options were taken in order to avoid the overlapping of variables. The experience of Statistics Portugal with its Structural Business Survey for the last 15 years was very important as was possible to identify the basic difficulties that enterprises have to answer to all the requirements.

On the other hand, it was agreed that the system would have to rely on a fully “dematerialized” implementation. Therefore the possibility of delivery data in paper support was simply abolished. For that purpose it was accepted the platform already used for taxes purposes as the most suitable format for the project – in Portugal since 2002 enterprises can only submit their taxes declarations (VAT declaration, annual tax declaration, etc.) using electronic means and no paper forms are accepted.

The definition of the quality checks were a key in this system as since the beginning was identify as a crucial issue. As delivering of data is based on electronic means a heavy set of

checks can not be adopted, but at the same time as data are obtained from the accounting system the accounting checks shall be respected. Therefore a good balance between these two aspects was made, and as result more than 2.000 checks have been implemented.

After joint work among all the entities involved, it was possible in about one year (from the beginning of this new phase of work and the effective implementation of the system) to put in place and to implement the new system of Simplified Business Information (IES). For this, the commitment of the Chamber of Chartered Accountants (the national association of accountants) and the software houses that provide accounting software were a key for the success of the IES, as they were in conditions of preparing themselves for the new system. Also their acknowledge on the reality of enterprises was a very important input for the ad-hoc working group that has prepared the IES.

In sum, the IES was built in order to be a form of delivery, by electronic means, of obligations on annual data of accounting, fiscal and statistical nature. As a result of the IES, all data that enterprises have to submit on its annual accounts is exclusively transmitted at a single moment and to a single entity, through an electronic form.

### **The Legislation**

In order to implement the IES several pieces of legislation have been prepared and approved, namely:

- Decree-Law No. 8/2007, of 17 of January, establishing the IES;
- Executive Order No. 208/2007, of 16 of February, defining the variables that shall be transmitted, revised by the Executive Order No. 8/2008 (for year 2007);
- Executive Order No. 499/2007, of 30 of April, establishing the data transmission process from enterprises to Tax administration and from Tax administration to Statistics Portugal, revised by the Executive Order No. 245/2008.

### **The IES**

From March 2007 onwards, and with 2006 as reference year, the Portuguese enterprises have started to transmit at a single moment and by electronic format, a set of annual data on their accounts, that has been used for statistical and fiscal purposes and for compliance with obligation regarding settlement of accounts.

For the enterprises, the new model represents a significant reduction of administrative costs associated to the fulfilment of those legal obligations.

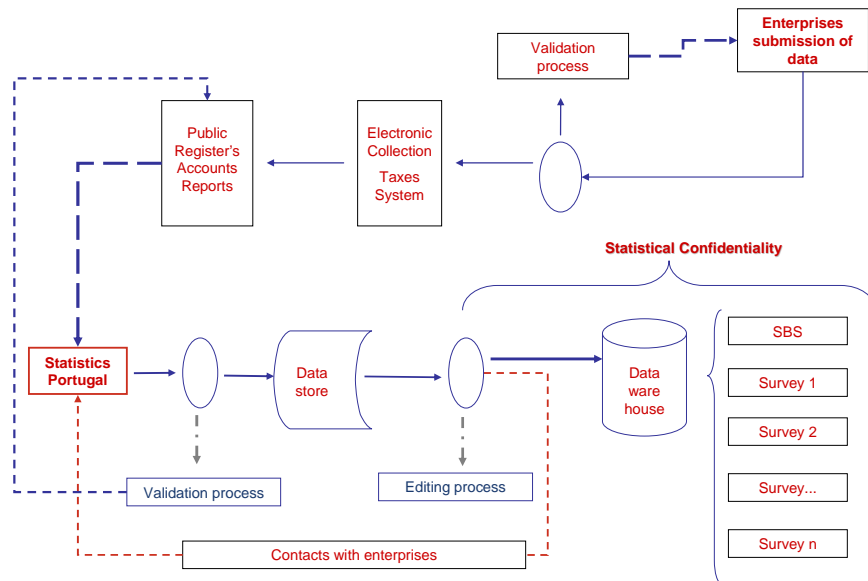
For the Portuguese National Statistical System and to Statistics Portugal, the new modality of obtaining this data has led to a new stage of production of statistics on enterprises, based on administrative data, with a large coverage in terms of statistical units and in terms of variables, creating all the conditions to re-direct the statistical activity in towards increasing consistency and updating of annual data. It is important to point out that this system allows getting all the data needed for the production of Structural Business Statistics, being this characteristic the one that becomes this singular system all. In fact, thanks to the IES the sample survey of Structural Business Statistics has been eliminated as such (the last year for this survey was 2005), and replaced by data obtain from the IES.

For the first year it was expected that enterprises could face some difficulties as this was a huge change in the way they relate with public entities. All the partner involved were prepared for this, and a longer delay (exceptionally) has been accepted for delivering data – instead of 30 June as states in the Law, enterprises were allowed to transmit their data until 16 September. At the same time more than 48 Workshops took place all over the country preparing accountants to this new reality. Besides, and thanks to the positive impact of this initiative, several national associations ask for specific workshops for their representatives.

Therefore, this new system was become possible given to the strong involvement and commitment of different public entities as well as the Chamber of Chartered Accountants and the Software houses that produce software and systems to support the elaboration of the accounting was fundamental for the success of this innovative model. It is important to point out the strong political support gotten from the Justice Secretary of State that, without interfere in technical aspects, it was crucial in order to achieve the main purpose of this project. Statistics Portugal is thus in conditions to produce with lower cost for itself and for the enterprises, more and better business statistical information in one shorter delays.

### **Dataflow**

For the implementation of the IES it was established a dataflow for the transmission of data from enterprises to the different entities involved. The flow was defined in order to allow the reduction of costs, delivery of data in a very short delay, to each one to treat the data received according to their needs and, for Statistics Portugal the respect for confidentiality of statistical data.



Picture 1 – IES Dataflow

The dataflow (picture 1), in this new system, consists of the delivery of an electronic declaration from enterprises, or from chartered accountants duly authorized for this, through a https protocol (secure connection) – although deliveries are made online, a web service can also be used. The supporting system includes a set of coherence rules (checks) in order to guarantee the consistency of all the submitted data.

Once data is received, a first validation process takes place in order to guarantee that the declaration (data) respect a set of requirements – in case that they do not fulfil, the declaration is rejected and the enterprise shall submit a new and correct one. After submitted and accepted, the declaration (data) is transmitted to the Ministry of Justice and within 48 hours to the Statistics Portugal, without any type of transformation.

From this moment data is submitted to statistical confidentiality. When received by Statistics Portugal, each declaration (data) is submitted to a second stage process of control that beyond guaranteeing the internal coherence of the information proceeds to its comparison with the data from the same enterprise to the previous year and from enterprises with similar characteristics (size class and activity). If outliers are detected, Statistics Portugal carried out a direct contact with the enterprises, however the result of this contact, with or without changes of the data initially submitted, is not transmitted to none of the other involved entities – thus the principle of statistical confidentiality is safeguard. Independently from the contacts carried out by Statistics Portugal, in case that an enterprise decides to submit a new IES declaration , through the system, the data are received by Statistics Portugal within 48 hours after its submission.

In the end of the editing and quality check, the data is included in Statistics Portugal Data warehouse and use primary as data in the frame of Structural Business Statistics and National Accounts and the common variables are used by all the other specific surveys.

### **The Present work**

Presently (May 2008) enterprises are delivering data for 2007 (the second year of the IES).

For 2006, as first year, Statistic Portugal carried out several studies on quality control of data. Several enterprises have been contacted in other to ask for clarification of their data based on the checks. For those that have answer to 2005 SBS survey comparisons have been made and the results were quite positive – very few errors were detected and it was concluded that some improvements were needed to clarify some of the definitions, namely in the area of Employment variables. Based on the contacts with accountants and enterprises, is clear for Statistics Portugal that the reason for this is simply because data came directly from enterprises accounting system– as the software houses were involved in this system, data is transferred directly from the enterprise system to the IES system.

On the other hand, as some specific surveys on enterprises are still carried out, namely on commodities production (in industry and construction) or in services provided to enterprises (in services), the common variables are not collected and the consistency of results are being put in place – data for specific surveys is being estimated based on the IES information.

For the future, the use of XBRL can be seen as a possibility, but for the moment this is not envisage, as enterprises request no changes in the system in the near future.

### **Questions and answers**

**What is the Simplified Business Information?** The Simplified Business Information (IES – stands for “**Informação Empresarial Simplificada**”) is a new system where enterprises fulfil simultaneously 4 (four) legal obligations delivering in a single moment, using electronic means, the accounting data for fiscal, statistical and annual accounting register purposes.

**What are the advantages for the Statistical System?** The statistical system is able to obtain all structural business statistical data from a single source. All the data needed by statistics in the frame of Structural Business Statistics is available and obtained by electronic means. Besides, editing process is included in the system. This represents a huge benefit for

enterprises as it is possible to fulfil 4 obligations at the same time. On the other hand, it reduces substantially the costs for Statistics Portugal once the collection of Structural Business Survey (SBS - one of Statistics Portugal most expensive annual surveys) was eliminated with positive consequences in the resources.

**Why this system could be considered as innovative?** With the IES, Statistics Portugal can access to all statistical data on Business by electronic means from a single source, thus data is more consistent. This data is already editing and is being obtained in a shorter delay – all data is submitted until the end of June of year n+1. Once the IES is also the base for enterprises to present their taxes declaration, Statistics Portugal can access to data for all enterprises.

**How could be possible the creation of the new system?** The political support was the key of this new system. In fact, without the political support from the Justice Secretary of State it would not be possible to achieve these results once some Legislation was needed. In this process were involved, besides the Justice Secretary of State, the Ministry of Finances and the Ministry of Presidency. On the other hand, as enterprises are, since 2002, obliged to use electronic means in their relation with the tax administration this was also an important contribution for the IES and its success as well as the commitment of the Chamber of Chartered Accountants.

**How enterprises react to the IES?** Enterprises react very positively to this new system. In fact, this system answer to their main complain on administrative burden: Why public entities does not share and make use of the data that is being delivery to one of them and why public entities ask for the same data, using different supports, formats, timetable and, in some cases, different definitions.

**Does Statistics Portugal still carry out Business Surveys?** Yes. Indeed, the IES only apply to annual data, thus all short term indicators are still carry out monthly or quarterly. On the other hand, some specific surveys are still in place, as their inclusion in the IES could lead to an unnecessary burden to enterprises. This is the case of PRODCOM (survey collecting data on industrial commodities), services provided to enterprises, material consumed by construction enterprises, sales in retail trade by CPA (product), etc.