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CITRUS: A NEW TOOL FOR ENTERPRISE STATISTICS

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Abstract

CITRUS is the French acronym for "Coordination of Information and Processing Operations on Statistical-Unit Restructurings," a tool now being implemented at INSEE. As shown in this article, CITRUS evolved out of the preliminary studies for the fourth-generation Annual Enterprise Surveys (EAE4G). Its prime purpose is to harmonize the treatment of corporate restructuring in different statistical applications. The server's main data sources are the official publications of record (gazettes) of business notices. By end 1996, the server allowed a pre-printing of the annual surveys. In 1997, the first EAE4G change indicators will thus be able to incorporate consistently processed data on the main restructurings. The server will be available to all partners in the System of Enterprise Statistics by the end of 1997.

I. INTRODUCTION

1. The project to set up a **new coordination tool** arose from the recommendations of a working group of the System of Enterprise Statistics Committee. In December 1992, the Committee wound up its proceedings with a proposal to establish "a centralized tool, readily accessible as a SIRENE satellite (as was done with OCEAN or, if feasible, via OCEAN itself)." Five years later, we can say that the programme outlined above has been fleshed out with more detailed specifications, but that its spirit remains broadly faithful to the initial project, which aimed to centralize information and harmonize processing operations.

II. KEEPING TRACK OF RESTRUCTURINGS

2. For enterprise statisticians, the definition of "restructuring" is ultimately a matter of contingency: restructurings are "the events that cause disturbances in the statistics." As specifically regards enterprises, and to define these "disturbances" more accurately, we can speak of them as "activity transfers."²

3. When the French conglomerate Thomson CSF, for example, spins off some its operations to subsidiaries, the statistician will observe a break in the series on activity levels of legal units, and therefore a break in the "enterprise statistics," at least at the industry level, if the transferred activities belong to different headings of the NAF classification. Such events would not be of great consequence if full information were immediately available, if all the units involved and the transferred activities were well

²This article does not directly address the issue of how to define "restructuring." In keeping with the proposals of the SES working group, the term as used here actually denotes transactions that (1) influence the continuing production activity of economic units (the production account and generation-of-income account in the Intermediate System of Enterprise Accounts) and (2) are materialized by simultaneous transfers of productive fixed assets and of employees. This definition encompasses the following categories: (1) "restructurings" in the narrow sense (full mergers, splits, partial mergers) to which special legal and tax arrangements apply (French law of 1996 on "business companies" and later amendments); (2) equivalent transactions, known as "cash transactions," that are not eligible for tax relief; (3) franchising agreements.

documented, if the impact on the variables tracked in the statistics were easily measurable, and so on.

4. It is not hard to see that these difficulties, in practice, create many inconsistencies (between sources, and between annual and within-year statistics), raise many issues, generate partial responses from firms, and complicate the updating of statistical tools such as SIRENE and OCEAN.

5. To address these difficulties, **four goals** were assigned to CITRUS:

- To **collect the key information** on significant restructurings and **make it available** in a timely manner to all partners in the System of Enterprise Statistics.

- To supply on a simultaneous basis the data and methods—change indicators, within-year and annual indicators, data summaries—that will make it possible to **harmonize the treatment of restructuring** in different statistical applications.

- To eliminate **redundant querying**.

- To manage the information **in a single place**, so as to avoid divergences and allow statisticians to prepare an authoritative summary.

III. SYSTEMATIC COLLECTION AND HARMONIZED TREATMENT

6. To gather vital information in the shortest possible time, the first step is a **systematic processing of data from legal notices**. CITRUS will use two sources for this: (a) the BALO,³ which announces planned restructuring operations one month before shareholders' meetings; (b) the BODACC,⁴ which publishes announcements of sales, divestments, and other changes in corporate structure.

7. In 1996, CITRUS began by processing BALO notices. The information obtained and entered into the data base concerned some 150 restructurings and 400 enterprises. In 1997, the server input is being widened to: (a) regular electronic "feeds" from BODACC on "demographic events" recorded in the SIRENE register under the DOCMODIF program and (b) information sent by SES partners, such as the Inventories, Revenues, and Expenditures Survey, industry surveys, VAT-form data, business confidence surveys, etc.

8. Once the server starts receiving regular inputs from the sources listed above, its first function will be to conduct a thorough examination of this set of events in order to ensure that the transactions are fully described and to isolate the most important transactions for a more exhaustive treatment.

9. All the statistical uses of enterprise data for compiling change indicators involve the calculation of variable-field results and constant-field results. The constant-field results adjust or complement the variable-field statistics by measuring (a) the impact of

³*Bulletin d'Annonces Légales Obligatoires*, a publication of record (gazette) in which listed companies and their subsidiaries are required to advertise their intended full mergers, splits, or partial mergers.

⁴*Bulletin Officiel d'Annonces Civiles et Commerciales*, a companion publication to the BALO.

movements into and out of the field; (b) unit births and deaths unrelated to restructuring; and (c) restructurings themselves.

10. The operation that has come to be known as the "inclusion of restructurings" thus consists in determining the "restructurings" component of constant-field statistics. This involves identifying the units to exclude them from other stages of the change-indicator calculation; and assigning different weights to each of these units or to the set of units included in a single restructuring: this is to make sure they will appear in the change calculation only to the extent of a comparable activity for a given transaction.

11. **The basic method we propose** for solving this problem comprises two steps:

- All the units involved in a restructuring are classified in a single economic-activity category for the purposes of the change calculation (on a constant-field basis);
- Any non-additive variable in the set of units included in the restructuring will be benchmarked on the known or estimated value added of all the units;⁵

To implement this proposal, CITRUS will provide the following items for each identified and processed transaction:

- list of units concerned (legal units identified by a SIREN number);
- activity classification relevant to the calculation of the constant-field change indicator;
- the "aggregation" coefficient that should be applied to these units in order to determine a "comparable-activity" change.

IV. COMPLEMENTARY SURVEY OF BUSINESSES

12. Some restructurings involve substantial activity transfers and have a powerful impact on industry statistics. In these cases, it is best to obtain as soon as possible:

- a detailed, accurate description of the activities concerned;
- the most accurate possible assessment of the impact on the main activity variables: sales, number of employees, value added.

These cases will be dealt with by gathering data from enterprises by means of written forms or—when the impact on the industry is thought to be greater—by interviews. The questionnaire will likely concern some fifty restructurings a year and will be sent to the "leading enterprise" in the transaction.

⁵This is the basic proposal for harmonizing the change-indicator calculations. The proposal will be applied for the first time to the treatment of restructurings in the initial results of the EAE4G. This principle needs to be elaborated in greater detail, notably in the case of within-year statistics (specifying procedures for registering dates of implementation and decision; taking into account whether the restructured units belong to the samples or not).

This "supplementary" inquiry, even if it applies to a small number of firms, should actually reduce the paperwork burden for enterprises. This requires closer coordination among partners.⁶

V. A COORDINATED SYSTEM

13. The proposed system comprises a central tool managed by a small team, and a communications module to provide consistency with other SES tools (SIRENE, OCEAN, SUSE) and links with partners who will also be the system users. The **central team** not only manages CITRUS but also serves as expert, primarily for analysing the most complex or most significant restructurings. The managers also perform the following tasks with the support of the central-tool functions:

- selecting the most significant cases;
- ensuring the time-consistency of information;
- settling or identifying any difficulties that may occur, such as inconsistencies in industry classifications.

14. **SES partners** supply the server with events or information on restructurings. In exchange, they use the server in two ways: to access the entire set of information collected, and to exploit its value added—such as information-checking, industry classification, and data needed for statistical applications.

15. Two-way communication procedures have been set up between CITRUS and the other system tools: SIRENE, OCEAN, and SUSE, to which one should add the 4G Annual Enterprise Surveys as "common-core tool."

16. Within the project framework established by the end of 1994 by INSEE and non-INSEE partners, the first steps completed were the definition and validation of user needs and the drafting and approval of the project feasibility study. The main purpose of the **feasibility study** was to define the data-base "objects" and the methodological principles to be applied. In addition, the study lay the groundwork for the choice of architecture. This was a crucial decision, since the future system involves not only a central team but many applications and management departments, both in and outside INSEE.

17. The **future system** will therefore rely on:

- the PARADOX data base, available to central-team managers through an interface that already exists in prototype form;
- the ADABAS data base on the central site (a PARADOX replica), available to all partners or users via 3270 terminals or PCs with 3270 emulation; the central site will thus serve as a bridge for two-way information flows between central-team managers and users or partners.

⁶As is already the case with SIRENE and the Inventories, Revenues, and Expenditures Survey.

VI. GOALS FOR 1997

18. The implementation stages were planned to meet the constraints of the EAE4G project schedule: the CITRUS server was ready at year-end 1996 for the launch of the Annual Enterprise Surveys, which involved an OCEAN update and the preparation of data for pre-printing the survey forms. The server must also be capable of receiving survey data, and then supplying data for the change-indicator calculations of the new-generation survey in Q2 1997.

19. As a first step in compiling the information needed for these applications of the first 4G surveys, data from the BALO gazette have been fed into the CITRUS data base.

20. The detailed study and the construction were completed in time to open the server input facility to all sources in early 1997. The project will be finished in the second half of 1997.