

IAS 14/SFAS 131 – Basis for a Dynamic Segment-Supported Corporate Management

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Segment reporting in accordance with IAS 14/SFAS 131 is considered an essential component of a Group's financial statement. But it would be a mistake to see only the regulations for external accounting in the IAS Standard. After all, effective group management in a diversified multinational business takes place best through the use of simple, rapidly-transmitted information and the use of good control instruments.

In ASRAP, we meet this goal by using an Input-Output model which is constructed from company segments; in other words, from the bottom up. In this new type of business model, the user can look across periods, using data that is continuously updated. The ASRAP model shows the actual and planned status of all operating subunits of the corporate group. These are combined and consolidated automatically into full-value actual and planned financial statements of the business. The infrastructure of the model also allows the user to plan for expansion of the operating business and for these plans to be presented as consolidated financial statements.

1. Consolidated group financial statement and segment reporting

The definition of 'group' in the "Lexikon des Rechnungswesens [German Lexicon of Accounting]"¹ is "A group is the merger of legally independent businesses under economically unified management." In a group, the management has numerous legally independent businesses to keep an eye on, to provide with defined goals and objectives and to monitor as they try to meet the defined goals and objectives. Management generally constructs a profit and loss statement, annual financial statement and flow of funds analysis of the group as a whole. The success of the group is then reflected in this consolidated financial statement which summarizes the results of the individual businesses. The comprehensive corporate calculation³ of the

group financial statement, however, has serious failings. It contains “little meaningful data”⁴ and describes only the past. The consolidated group financial statement is, on its own, not suitable for making a forward-looking judgment within the framework of a multilayer group structure.

“In every good organization the entirety of all management tasks must be broken down into and distributed in small packets”. Such a statement has been made by the president of the European Manager School and his view is supported by German industry.⁵ For those responsible at the head of the group, the CEO, CFO and CIO, this demand might be a truism. But how are the required packets to be defined? In what way is the consolidated group financial statement, achieved with a great deal of difficulty, to be broken up again and divided into manageable packets? Must these packets still follow legal settlement structures or should they be designed abstractly as “reasonable”? How are such packets to be planned and managed, also without legal structure, in the relationships of a harmonious accounting system? How are the planned financial statements of the abstractly engineered packets finally to be combined again into a planned group financial statement and be harmoniously consolidated?

This is a significant question for the financial managers of a diversified and internationally active industrial heavyweight. Which approaches will best direct the group through the exercise of proper planning, monitoring and information gathering⁶? Can group control perhaps support itself on definitions and regulations of the internationally laid down accounting system (IFRS/IAS) which visualizes and permits the use of more advanced rules and regulations than the consolidated group financial statement? To ask the question means to affirm it. It is our belief that, up until now, the right tools have not been available for the control function; and this is affirmed by the group accounting system specialist from Saarland University, Professor Küting. He has said “it is to be assumed that the control function will be continuously modified. Increasingly, businesses are employing, within the scope of their control calculation, the system of the International Accounting Standards.”⁷ After discussions with departments which have the control function responsibility, we can certainly confirm that there is a shortage of good, strategic control methods based on international accounting standards, as described. This applies not least to the

segment reporting specified in accordance with IAS 14, which is the foundation for a software-supported corporate management system.

2. Preliminary notes on segment reporting according to IAS

Segment reporting is considered an important part of the external rendering of accounts within the Group financial statement. It is therefore a fixed part of the financial statement according to the International Accounting Standards (IAS 14, SFAS 131). “The objective of this Standard is to establish principles for reporting financial information by segment —information about the different types of products and services an enterprise produces and the different geographical areas in which it operates —to help users of financial statements:

- (a) better understand the enterprise’s past performance;
- (b) better assess the enterprise’s risks and returns; and
- (c) make more informed judgments about the enterprise as a whole.”⁸

However, it would not be correct to see in an IAS Standard only regulations for external accounting. IAS 14 will also provide support for the internal control of the business: “An enterprise’s business and geographical segments for external reporting purposes should be those organizational units for which information is reported to the board of directors and to the chief executive officer for the purpose of evaluating the unit’s past performance and for making decisions about future allocations of resources.”⁹

The principles and methods according to which a consolidated group financial statement is to be broken down into segments are detailed and precisely described in IAS 14/SFAS 131. Predominant in international terms is the disaggregation approach: “The concept of segment reporting concerns a revision and reversal of the consolidation theory”¹⁰. With this, the segments are formed by a computational breakdown (disaggregation) of the consolidated (aggregated) variables of the group financial statement. The breakdown is to be carried out in accordance with the principle of the management approach. In other words: the internal organization structure and the internal reporting system determine the composition of the segments which, by the way, are to be clearly delineated from each other. Even if we

do not go any further here into the comprehensive regulations of IAS 14, the linking of the two complementary breakdown principles – the disaggregation approach and the management approach - ensures a solid basis for the design of meaningful segments and forward-looking planning. “For internal purposes an individual case-related solution, oriented to the peculiarities of the business”¹¹, is appropriate. In contrast to this “to improve the inter-company comparability, a reduction of the individual segment accounting to generally recognized segment principles”¹² is required externally. This can also vary from one group to another.

3. A software-supported approach to strategic control

In the approach used by ASRAP, the segments are defined abstractly (without reference to the rendering of accounts of legal entities), logically, or “reasonably”¹³. They are described using only a few numerical values. The aspects that are firmly laid down are as follows:

segment external sales, segment transfer turnover, segment profit/loss, segment assets and segment investments (fixed assets and intangible assets), segment depreciation, profit from shares in a company accounted for under the equity method, segment liabilities.¹⁴

Already the few externally required segment parameters, which can cut right across the individual companies and countries of the group, suffice entirely for this approach which was developed years ago by ASRAP with its “input-output simulation of business processes”¹⁵ (also “simulative dynamic rendering of accounts”¹⁶). ASRAP’s software approach generates clear-cut actual segment financial statements from unconnected actual segment details. Complete planning segments can be simulated over one or more years from the actual segment financial statements. In other words: a few segment parameters enable balanced actual and planned segment business statements of account with statement of profit and loss, balance sheet and flow of funds analysis and any derived key ratios desired.

The actual and planned transactions of the individual segments can be combined into actual or planned consolidated financial statements using the same input-output approach. As the definitions for segment reporting have already been met in the

segment reporting of the consolidated financial statement, they are automatically integrated into a “corporate management, by segments and from the bottom up”.

In summary, ASRAP’s input-output simulation is the core for group segment planning and is a significant advance on all traditional software approaches. The unique characteristics of the software enable the interplay of required actual segment reporting with segment-simulations as well as their consolidation for planning the operating business of the group.

4. Corporate management by segments and from the bottom up

The idea of shareholder value has spread and as a result value-oriented approaches to planning have increasingly moved into the foreground, along with the need for close strategic control. “With this, one is concerned with concepts and methods which aim at a valuation of companies, strategic business units etc. on a cash-flow basis across all periods.”¹⁷ The valuation can apply for the earnings before interest, taxes, depreciation and amortization (EBITDA). In addition, it can also take into account the appropriate amount of capital invested. This leads to the Economic Value Added (EVA). Annual financial statement parameters must be made available for each business unit in this case.

Along with the concept of the value-based management of a group, there are not only the actual but also the planning parameters and these should extend, as far as possible, for several planning years. This requires another understanding of “planning”. It is not the controller who “plans”, rather that the appropriate operating person “thinks”. “Strategic planning often spoils strategic thinking in that the manager causes actual vision to become mixed with the manipulation of numbers.”¹⁸ The thinking by the operating manager has to be matched continuously to the economic environmental changes (such as competition, level of economic activity, supply market, job market etc.) in the countries in which the segment (or sub-segment) is present. Then the parameters in which the thinking is realized must also be capable of modification. In the process of controlling a group, this means providing the controller with the approaches and software instruments which allow strategic “thinking”. Moreover this has to be done over continuously changing periodic financial

statements each of which has its revenues, costs, operative earnings, investments, assets and flow of funds analysis.

A complex but clear (perhaps an “optical”) overview of all actual and planned data also incorporates the concept of a value based management. This first applies for the operating segments which report (also “Strategic Divisions”²⁰) and which are formed according to the management approach. Value-oriented control which goes “deeper”, however, assumes that the combined group is “dissected”²¹ into many parts supporting the segments subject to reporting. “The components can be legal units but also includes virtual components which are defined in accordance with the control concept for which respectively the EVA is determined. Through this the responsible operating persons have the ability to control their business, oriented to equity return.”²²

The projected financial statements of the segments (also sub-segments etc.) are to be continuously transmitted from the bottom up, to be presented comparatively and to be summarized into an overall rendering of accounts of the operating business of the group. The planned operating business of the group can be expanded through simulating input of non-operative planning parameters such as subscribed capital, operating reserves, planned interest rates, assets and total liabilities, financial expenditure and distribution of dividends. This can all be financially couched in a “designed” financial statement.

5. A target group for this type of corporate management

The aim is to present a valuable planning tool that is supported by software and works on segments designed from the bottom up. It gives corporate management a completely new control instrument. This tool is typically addressed to the top management of multi-sided, global manufacturing companies but it can also be applied to medium-sized businesses which, in organization and international diversification, are close to being group-like structures. It can also organize the documenting, the assessment, the bottom-up transfer and consolidation of the individual planning of the segments (or further sub-units) formed according to the management approach.

In a diversified and multinational business activity, effective group management needs simple control instruments and rapidly transmitted information. ASRAP's segment, bottom-up group method, using the approach of input-output simulation, meets these requirements. It is not just software with a fantastic new technology. It is much more a new type of implied business model²³. It spans periods and has extremely flexible infrastructure, housing the actual and planned positioning of all parameters of an internationally required rendering of accounts. It provides an unhindered view of the actual and planned status of all operating sub-units of the group, which are formed for control purposes. It automatically consolidates the actual and planned rendering of accounts into actual and planned operating businesses. It is extremely simple to handle, compared with conventional software approaches, and it is an efficient, cost-effective control instrument that enables the management of any complex organized group.

FOOTNOTES

(Translator's note: a courtesy translation, in square brackets, of quotations from German source material and/or its title is added where necessary for clarification. This does not imply that the documents referred to exist in English).

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- 1 Busse von Colbe/Pellens (Hrsg.), Lexikon des Rechnungswesen [Lexicon of Accounting], 4. Auflage, S. 419
 - 3 Busse von Colbe/Pellens (Anm. 1), S. 635
 - 4 Busse von Colbe/Pellens (Anm. 1), S. 635
 - 5 Derek Abell, FAZ v. 4.4.2005
 - 6 Busse von Colbe/Pellens (Anm. 1), S. 169
 - 7 Küting, „Einladung zu Praktiker-Seminaren zur Konzernrechnungslegung [Invitation to practical seminars on the rendering of group accounts]“ 2005
 - 8 Official Journal of the European Union dated 13.10.2003, IAS 14 (Revised 1997), L 261/90
 - 9 IAS 14 (Anm. 7), L 261/96, § 31
 - 10 Busse von Colbe/Pellens (Anm. 1), S. 636
 - 11 Busse von Colbe/Pellens (Anm. 1), S. 635
 - 12 Busse von Colbe/Pellens (Anm. 1), S. 635
 - 13 IAS 14 (Anm. 7), L 261/88, 93, 94, 95, § 16, 17, 19
 - 14 IAS 14 (Anm. 7), L 261/93, 94, 95, § 16, 17, 19
 - 15 grundlegend Dauner/Dauner-Lieb, Betriebswirtschaftliche Forschung und Praxis, BFuP 2/1996, S. 233-251
„Das Konzept der Input-Output-Simulation beruht auf der These, dass die mathematische Grundstruktur eines linearen Gleichungssystems Grundlage der Doppelten Buchhaltung ist und diese ersetzen kann. Sie wurde mit Hilfe eines Computer-Algorithmusses gewonnen und verifiziert, der von vornherein die (Kapital-) Finanzflussrechnung mit Anfangs- und Schlussbilanz und der Gewinn- und Verlustrechnung linear-algebraisch verknüpft. Der planenden Unternehmensführung eröffnen sich damit völlig neue Perspektiven: Die Entwicklung eines jeden Unternehmens – ob Einzelunternehmen oder globaler Konzern – kann in einem künstlichen „Business-Kosmos“ in Varianten vorgedacht und in ihrer jeweiligen Auswirkung auf Gewinn und Verlust, Cashflow, Produktivitäts-, Rentabilitäts- und Finanzentwicklung über beliebig viele Perioden bilanzwahr dargestellt werden. [The concept of input-output simulation is based on the thesis that the mathematical basic structure of a linear equation system is the basis of double-entry bookkeeping and can replace this. It has been obtained and verified by means of a computer algorithm which, from the very beginning, has coupled, linear algebraically, the (capital-) cash flow statement with opening and closing balance and statement of loss and gain Thus there opens for the planned business management completely new perspectives: the development of each business – whether one-man business or global group – can be thought through in advance in variants in an artificial “business cosmos and their respective effect on profit and loss, cash flow, productivity-, profitability- and finance development represented, in the form of a financial statement, over as many periods as desired.]“

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- ¹⁶ Dauner/Dauner-Lieb, in Knowledge Management and Business Intelligence, Hrsg. Uwe Hannig, 2002, S. 319-334 „Simulationen spielen für komplexe zukunftsorientierte Entscheidungen eine immer zentralere Rolle. Eine wirklich effektive, wertorientierte Unternehmenssteuerung erscheint ohne die Simulation künftiger Unternehmensprozesse nicht möglich. Benötigt wird ein in die Zukunft gerichtetes Rechenwerk. Die Simulative dynamische Rechnungslegung erfüllt diese Anforderung [Simulations are playing an evermore central role for complex, future-oriented decisions. A really effective value-oriented management control appears not to be possible without the simulation of future business processes. What is needed is a set of figures aimed at the future. The simulative dynamic rendering of accounts meets this requirement]“; siehe auch schon Dauner/Dauner-Lieb „Vorausschauende Kapitalflussrechnung als Ansatzpunkt einer Top-down-Planung“, Bilanzbuchhalter [see also Dauner/Dauner-Lieb “Forward looking flow of funds analysis as starting point of a top-down planning”] BiBu 9/1994, S. 193ff; Dauner/Dauner-Lieb, „Die Input-Output-Simulation - Anwendungsmöglichkeiten im Rahmen einer <Top-down>-Planung am Beispiel der ABH AG und des ABH Konzerns [“Application possibilities for input-output simulation within the framework of top-down planning using the example of the ABH AG and the ABH Group”], Bilanzbuchhalter BiBu 7/1995, S. 152ff. und Dauner/Dauner-Lieb, „Prospektive Kapitalflussrechnung – ein Schlüssel zu Bilanzanalyse und Simulativer Unternehmensführung [Prospective flow of funds analysis – a key to financial statement analysis and simulative business management]“, Deutsches Steuerrecht, DStR 39/96, S. 1541ff. und DStR 40/96 S. 1578ff.
- ¹⁷ Busse von Colbe/Pellens (Anm. 1), S. 434
- ¹⁸ Henry Mintzberg, The Fall and Rise of Strategic Planning, Harvard Business Review, January-February 1994, S. 107. "Indeed strategic planning often spoils strategic thinking, causing managers to confuse real vision with the manipulation of numbers."
- ²⁰ Geschäftsbericht [Management report] der Deutschen Telekom 2003, S. 168
- ²¹ Karl-Gerhard Eick, Eva setzt den Maßstab für Wertsteigerung [Eva sets a standard for appreciation], Handelsblatt v. 20./21./22.5.2005, S. 14
- ²² Karl-Gerhard Eick (Anm. 20)
- ²³ "Anwender vermissen Geschäftsmodelle. Kein Unternehmen kauft neue Software um ihrer selbst willen oder weil die neue Technik so toll ist. Der wirtschaftliche Nutzen muss eben so klar werden [Users lack business models. No business buys software of its own accord or because the technology is so fantastic. " („SAP ist zu technologielaastig [SAP is too technology-heavy]", Bericht vom Anwenderkongress [Report of the User Conference], FAZ v. 28.9.2004)

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