John Schmittroth jr. et al., eds., 1985–86 Encyclopedia of Information Systems and Services. Detroit: Gale Research Company, 1984–1985. In two volumes. 1,899 p. US\$340. Hard cover. ISBN 0-8103-1537-8, ISSN 0734-9068. ("International volume" [vol. 1]: 669 p., US\$175, ISBN 0-8103-1538-6; "United States volume" [vol. 2]: 1,230 p., US\$200, ISBN 0-8103-1541-6).

The Encyclopedia of Information Systems and Services (EISS) has been around for some time, and become a familiar quick-reference tool for those involved in the business and professions of information provision. Most of us have probably used it from time to time—and for some it very likely constitutes the first recourse when they want to find details on trade and professional associations in the information field, documentation and data collection centers, library cooperatives/networks, data-base producers, online service providers, information intermediaries and consultancy firms etc. Likewise, there will be few of us who are not aware how the data for this publication are collected, who do not have a fairly good general idea how the entries are organized and indexed, and who haven't formed their own opinions regarding EISS's merits and weak points. The present review need not therefore deal extensively with these aspects, and can be kept relatively short. What follows is first a brief account of the particular features of this latest edition (the sixth); then a few random impressions of my own concerning the entries themselves, and the indexing; and finally some statistics and concluding remarks on the publication as a whole.

One of the more significant departures from the editorial approach taken to all previous editions is that we find here, for the first time, some listings for organizations which have not themselves provided any information to Gale. These 'editorial' insertions are usually quite succinct, and do not always contain even contact information (e.g. entry no. 1036: "Martin Marietta Data Systems – Special Note: Martin Marietta Data Systems of Orlando, Florida, is reported to offer interactive time-sharing and remote batch services. No further information was obtained for this edition."); furthermore, inexplicably, there are no such listings for organizations located outside of the USA. When we look at the index sections of this edition, we notice two other minor but significant changes from its immediate predecessor: one is that indexes 4 and 6 through 20 are now incorporated into a single classified "function/service" index which in addition contains several new categories (e.g. "electronic mail applications", "personal computer oriented services", "software producers"), and the other is that references in the subject index now include organizational and system/service designated

nations from the indexed listings (but, incidentally, not the names of data bases). So far as the descriptive listings themselves are concerned, we note that the editors have attempted to provide more details in general, and in particular have expanded the amount of information in the "publications" field; they have also in some instances supplied electronic mail addresses (in the "contact" field). While the entries have tended to become more lengthy, they have likewise become more numerous—totaling 3,328 in this sixth edition; that is an increase of about 32%. The most immediately apparent new feature of this edition, however, is that the entries are no longer all in a single alphabetical sequence: the publisher has disjoined them on geographical grounds and apportioned them into two separate (and separately purchasable) volumes—one for non-US-based organizations (the "international" volume, published in late 1984) and one for US-based organizations (originally announced for December 1984 but published in the latter half of 1985 after several delays). In the Introduction to the "international" volume he explains his rationale for doing so; this explanation does not appear in the US volume. As such, I can see nothing really objectionable in the approach—which was probably the most reasonable means for avoiding the production of a rather unwieldly single volume.

With regard to the content, presentation and arrangement of EISS's descriptive listings there is not much that need be added here. Of course, the user is well advised always to keep two aspects clearly in mind. First, that this is essentially a directory not of organizations but rather of systems, services, products and activities which various organizations offer or in which they are engaged. Secondly, that when you are looking for information on a given offering, project or organization, it is normally most efficient to begin with the master index instead of the main section of full listings—especially, I might add, if you are using the "international" volume (where, for example, the online host DIMDI is lurking as no. 428 alphabetized on the heading "Germany - Ministry of Youth, Family and Health - German Institute for Medical Documentation and Information"). Having made these two points, I might restrict myself to just a few more very brief remarks concerning the descriptive sections. In general, the entries are well structured, easy to scan, and sufficiently extensive for purposes of general orientation on a given system or service. The only serious criticisms which I would wish to voice are: first, that often little or no information is supplied concerning the status and activities of sponsoring or parent bodies; second, that publications of an organization are frequently implied to be available from the organization itself, whereas in reality they are exclusively distributed by third parties (such as commercial publishers); and finally, that the non-contributed entries are sometimes absurdly short (see, for example, the listing for Reference Technology—on which it would have been easy for the editors to put together a reasonably comprehensive description). One particular inconsistency which struck my eye is that in the US volume data-base descriptions do not accompany the names of the available files as given in online host services entries, whereas we do find such descriptions in comparable "international" volume entries. Another is that defunct systems and services were dropped out for all countries except the

USA; the US volume continues to list them, in the form of brief entries. In terms of EISS's scope of coverage, it is probably worth pointing out that it does in fact comprehend certain types of service which one may not expect to see described here (and whose inclusion the publisher does not emphasize). Among these are subscription agents, library automation purveyors (marketers of "library management systems", in this directory's terminology), and public data communication networks. If there is any category in which coverage might clearly be said to be deficient, it is that of professional associations. Missing are such organizations as the Special Libraries Association, the Japan Documentation Society (Nipdok), the Library Administration and Management Association, the Deutsche Gesellschaft für Dokumentation, and the International Group of Scientific, Technical and Medical Publishers. This does not seem to fit very well with the directory's stated objective of including "professional and trade associations and other membership groups with interests and programs in the information, electronic publishing, library automation, and related fields". Finally, we might note that the editors have, "in selected instances", included in the US volume entries for the US offices of foreign systems and services—and the other way around in the other volume. On the whole, such entries have been very well formulated, though occasionally one can detect an apparently insufficient familiarity with the organizational structure of certain multinational entities.

Pages 427-669 of the "international" volume, and pages 773-1230 of the US volume, contain the indexes. These indexes—all of which appear, in the same order, in each volume—are: master index, data bases index, publications index, software index, classified function/service index (comprising twenty categories), personal name index, geographic index, and subject index. Let me say at the outset that in my opinion the indexing of the descriptive listings in this directory is for most practical purposes nothing short of superb; I would be hard put to come up with any real suggestions for improving it—with the one exception noted below. I would however like to make a few more specific remarks concerning certain of the indexes, and then in general about the indexing of data bases. The master indexes, in addition to listing all organizational and system/service names which appear in the (bold-face) headings to the descriptive entries (including acronyms as well as full versions, translations as well as original and alternate forms), also index selectively such names which appear within the texts of the entries—including data bases, publications, software products (all of which have their own distinct indexes), and conferences (i.e., distinctively named conferences—such as Infodial, the Office Automation Conference); they do not incorporate personal names, for which there is also a separate index. In the US volume, the master index includes references to defunct organizations, which are not otherwise indexed (defunct data bases are, however, indexed elsewhere). There are two noticeable differences between the master indexes in the two volumes. One of these is not really substantive, but nonetheless quite obvious: namely that in the "international" volume every reference to a given organization constitutes a separate listing (resulting in a good deal of wasted space), whereas in the US volume the reference numbers have been collated in consolidated entries;

it is difficult to guess why this should be so. Secondly, the master index in the US volume (called the "combined" master index) indexes the descriptive sections of both volumes, as well as some entries from another Gale directory (Telecommunications Systems and Services). In both volumes, the publications index refers to normally distributed publications (both print-on-paper and microform, and including the hard-copy versions of computer-readable data bases) and to specialcirculation items—such as system newsletters, user guides and other documentation. We might note, furthermore, that one will in the computerized searching category of the function/service index find few references to library-based online search operations, since these were as a matter of policy excluded from EISS's coverage (Gale publishes a separate directory covering such operations—but only for the USA and Canada). In the same index, the magnetic tape providers category also refers to floppy-disk-based information (but not software) distribution, though not to optical disk services (at least one of these, however-"Infotrak"—is mentioned in the directory's main section). The online host services category also indexes telecommunications networks. In using the geographic index one must keep in mind that within country and (US) state segments, the alphabetization is by city of location, though the city names are not used as entry headings. Sofar as the subject index is concerned, the inclusion in this edition of organizational and system/service names with each reference constitutes a great improvement over the previous procedure of supplying merely the entry numbers from the main section.

In only one respect does the indexing quality of this sixth edition of EISS leave a good deal to be desired—that is, in terms of access to data-base information, and particularly from the subject approach. The most serious problem is that, if you have only the "international" volume in hand, the indexes will give you no access whatever to any information on US-produced data bases -even though these files may be available for searching on one or more European host systems, and are therefore listed (with brief descriptions) under the descriptive entries for those systems in the main section of this volume. If you are working only with the US volume, you will have no subject access to information on non-US-produced data bases—even though these files may be available for searching on one or more US host systems (and note that host entries in the US volume do not contain data-base descriptions, except for host-produced files). This means that the utility of the directory as a data-base guide is significantly limited; if you happen to have both volumes at your disposal simultaneously, then you will ultimately find the details you need—but only through a process more cumbersome than you might like. Here, I would suggest, there is clearly room for improvement in EISS's indexing. The online data-base business is, after all, very much a genuinely international (note: no quotation marks) affair, and has to be treated as such.

In the foregoing, I have indicated certain quantitative characteristics of this publication. Here are some further figures. The sixth edition incorporates information on approximately 3,900 publicly accessible and internal computerized data bases (approximately 2,300 of these being listed in the US volume); this

represents a 56% increase over the previous edition (1983). It lists approximately 515 online host services (approximately 320 of these in the US volume)—a 72% increase over the previous edition; approximately 430 document delivery services (approximately 240 in the US volume)—a 48% increase; 128 library and information networks (92 in the US volume)—a 44% decrease compared with the previous edition; approximately 325 software producers (approximately 240 in the US volume); approximately 710 software products (approximately 545 in the US volume)—an 82% increase; approximately 110 associations (approximately 65 in the US volume); approximately 1,200 computerized searching services (approximately 765 in the US volume)—not comparable with the 5th edition, since that edition did include library-based search operations; approximately 5,400 publications (almost 3,400 of these in the US volume)—a 54% increase over the previous edition; and approximately 4,400 personal names (approximately 3,000 in the US volume).

What can we in summary then offer as our assessment of this publication as a whole? It is probably not going too far to claim that EISS is now—as it indeed has for some time been-still the best and most comprehensive available directory of the modern-technology-based information sector, broadly defined. At a glance, it is obvious that the emphasis remains strongly on the United States, with 66% of the total number of entries; the publisher has expressed his eagerness to increase the foreign coverage, and this is of course a worthy objective (I would personally suggest that he make a special effort to add more listings for non-US data-base producers: particularly the more specialized non-US producers are at the moment insufficiently represented). Whether you are prepared to shell out \$340—+10% if you live outside the USA and Canada—for the product is of course for you to decide. I might digress for a moment in order to point out that since EISS's 3rd edition (the first one published by Gale, in 1978) the price has increased 209%, while the number of entries increased by 59% and the number of pages by 82%; the 6th edition is however only 36% more costly than the 5th, though the number of entries is up by 32% and the number of pages by 53%. (Gale has of course been broadly criticized for its pricing policy, and perhaps is now taking such reactions more seriously.) If your pockets are deep, and it is important for you to stay more up to date in this field, you might consider subscribing—for another \$250—to what is called New Information Systems & Services. This comprises two supplements which will be issued prior to the appearance of the 7th edition. That 7th edition should be available in 1987—and it will be interesting to see to what extent it improves upon this already very useful reference work.

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