

News, Trends and Comments

News

New international STI network

Already last spring, some word had reached us of plans that were afoot to use online information retrieval software being developed by the American Chemical Society's Chemical Abstracts Service (CAS) in a cooperative scheme to make the files of certain data-base producers available directly to users, without the intermediation of the major established vendors.

Now, an obviously related arrangement has very recently become public knowledge (though meanwhile some hints as to what was coming had leaked out). On 19 September at the fall meeting of the Association of Information and Dissemination Centers (ASIDIC) in Philadelphia, CAS' Harry Boyle (manager, online services) briefly alluded to a transparent gateway system under development by his organization, INKA (the online service of the Fachinformationszentrum (FIZ) Energie, Physik, Mathematik in Karlsruhe, FRG), and an unnamed Japanese partner organization. While stating that he was not at liberty to give full details, he did indicate that the system would make it possible for an online user to be switched automatically through from one host computer to another in a process which the user would perceive as only a file change. Then INKA, in the 6 October issue of its newsletter, made the announcement of what is called an "International Information Network for Science and Technology". A CAS news release dated one day later carried very nearly the same text. In a panel discussion on 10 October at the Online conference in Chicago, CAS marketing director Ronald G. Dunn also briefly described the newly announced arrangement. The network was originally dubbed "INSTI", but the official name will be "STN International".

According to the text mentioned above, the link will be realized through a "dedicated telecommunications facility", and the same (i.e., CAS') software will be employed in Columbus and Karlsruhe. The CAS Online substance search service is supposed to be available through the Karlsruhe node by the end of this year or early in 1984, and FIZ Karlsruhe's Physikalische Berichte data base (INKA-PHYS) should be searchable via Columbus by the middle of next year. 1985 is to see implementation of a "full networking arrangement, with automatic switching between computers". By that time, other current INKA files - including INIS, Compendex, INSPEC, Zentralblatt für Mathematik (INKA-MATH), DECHEMA (chemical engineering) and NTIS - will presumably have been incorporated into the system. The text of the announcement contains the cryptic remark that CAS "expects to load at least one additional data base in Columbus during 1984" (in addition to its new subject-searching

facility), and continues with the general observation that "under the network arrangement, a particular data base will be loaded at only one site.... A searcher will access the nearest host computer and be switched automatically to whichever computer in the network stores the data base to be searched. The searcher will perceive the network as a single comprehensive system and will be able to search any number of files in one session without being aware that some of the files may be physically located on another continent." According to the present intention, the INKA system will cease to exist as an independently operative host service in the course of 1986. CAS director Dale Baker has stated that the American Chemical Society "believes such networking can solve many of the current problems of delivering scientific and technical information across national boundaries and reduce duplication of effort and costs in providing online access to scientific and technical information".

It should meanwhile not go without notice that the Fachinformationszentrum (FIZ) Technik, which presently cooperates with FIZ Karlsruhe to the extent that the former's data bases are mounted for online access on the latter's computer, has more or less openly objected to the proposed arrangement with CAS. In a letter of 11 October to its customers, signed by P. Genth, FIZ Technik management stated: "Aus unserer Sicht besteht nicht die Notwendigkeit für die Einführung eines neuen Systems." ("We can see no need to introduce a new system."), and indicated that it would continue to make its files available under the GRIPS/DIRS3 information-retrieval software (using the Common Command Language) even after FIZ Karlsruhe's abandonment of this software in 1986 (without specifying just how it plans to do so) - and would even continue to develop the software. The same letter points out that FIZ Technik's files currently account altogether for 43.5% of invoiced connect time on FIZ Karlsruhe's system, and that two of these (DOMA, with 24.3%; ZDE, with 14.4%) are in fact in first and second connect-time positions among the twelve most important files supplied by the two organizations.

Neither FIZ Karlsruhe nor CAS has publicized the identity of an actual or potential cooperating party in Japan, and in fact it seems that no definite plans yet exist for loading any data base on a Japanese computer for access via STN International, though a telecommunication link with Tokyo and Osaka is supposed to be in place early next year. It is also not clear just with what other data-base producers or suppliers discussions may be underway, with one exception. (Producers would presumably benefit by participating on the network - as they would for example enjoy full control over pricing of access to their files, and have more access to customer information than is often provided them now by other vendors.) It would be a rather safe bet - indeed almost a sure bet, according to very recent information from a CAS spokesman - that Derwent, with its patent files, will be the first to jump on the bandwagon. An announcement that these files will be mounted on the Columbus computer could well be forthcoming very shortly.

It is not apparent what effect if any this development will have on INKA's fairly new marketing and service support deal (with Kinokuniya) for Japan (CAS Online's Japanese agent is JAICI), or on the arrangement between CAS and the Internationale Dokumentationsgesellschaft für Chemie mbH whereby the latter would in a sense 'broker' access to CAS Online for its supporting organizations, based on an annual flat-fee

agrément. Certainly, it has ramifications for the European market prospects of Télésystèmes-Questel's DARC chemical information system (and note that this vendor will soon be putting up ISI's new organic compound data base Index Chemicus Online - see our October issue, p. 279). (France, of course, has its own plans for integrated network services, such as the "BDST" - banques de données scientifiques et techniques - project, sponsored by MIDIST.)

Many questions about the nature and possible ramifications of the above described international venture remain unanswered - and some perhaps as yet unasked - but it seems beyond doubt that this development will prove to have been one of the year's most significant events in the world of computerized STI services. Doubtless, too, we shall note more than a few reverberations in 1984, and possibly beyond. One may be certain that the major vendors of online services, and especially the large commercial operations in the USA, are going to sit up and take very careful notice - and it could be that their reactions will be a good deal less docile than that. It seems, incidentally, that data-base producers may even be encouraged to hook into the network their own computers, on which their own files would be mounted (for access using the CAS software).

For further information, contact: Dr. B. Jenschke or Dr. C.D. Siems, INKA Online Service, 7514 Eggenstein-Leopoldshafen 2, FRG, tel. (7247) 82-4566, telex 7 826 487 fize d; or, Mr. Edward P. Donnell, Chemical Abstracts Service, Public Information Office, P.O. Box 3012, Columbus, OH 43210, USA, tel. (614) 421-3624, telex 684-2086.

ICSTI

In volume 3 number 4 (p. 212), we mentioned the current examination, by the International Council of Scientific Unions Abstracting Board (ICSU/AB), of its options for the future (a process code-named "Pegasus"), and the fact that it was contemplating a change of name. We may now inform you that ICSU/AB has come close to a decision that it will become the International Council for Scientific and Technical Information. It is really no secret that ICSU has for some time now been less than enthusiastic about its official relationship with the Abstracting Board, though a total severing of the ties may not be forthcoming. ICSU/AB is presently constituted as an independently registered "permanent service" of ICSU, and was formally established in 1953. The ICSU/AB national member for the USA, the National Academy of Sciences, has given notice of its intention to pull out, and similar action has been taken in the case of the Royal Society, representing the United Kingdom. The present membership structure is currently under review. There are only five 'national' members at the moment (representing Belgium, France and South Africa, in addition to the UK and USA); abstracting/indexing services themselves make up the largest membership category; other members are the various scientific unions and the so-called "associate members". ICSTI will presumably be drastically adjusting its mandate and scope of operation. More on this in the future.

Advanced training for information management

In the first place, it is significant that the Institut européen pour la gestion de l'information (European Institute for Information Management) has actually gotten off the ground and is now operational. It was originally scheduled to open its doors in October of last year, when it was being called the "Institut supérieur pour les sciences et techniques de l'information" (see our notice in ISU vol. 1 no. 6, p. 376), but was able to begin instruction only a full year later. Located in Luxemburg, the Institute is officially under the direct supervision of the Grand-Duchy's minister of education, and has as its official aim to provide training, at a post-graduate level, for the future specialists in the field of information management which the European economy will require in order to face the impact that information technologies will have on Europe's economic and social activities. The Institute was in fact formally established on 29 December 1982. Opening ceremonies were held on 19 September last, and instruction began on 17 October.

The program of instruction comprises four principal themes: I) information environment in the world, II) information systems, III) the marketing and economics of information systems and IV) information within organizations. In addition, students will participate in "specialization modules", independent study, and internships. The administrative structure includes an advisory pedagogical council (composed of five members - currently from Belgium, France, the FRG, and the United Kingdom), a board of experts, a board of directors (also from various European nations), the director of the European Commission's Directorate General XIIIIB in the capacity of an observer, a State Commissioner, a director of studies, and an administrative attaché. Lecturers come from various parts of Europe, many being highly placed individuals in the 'information industry' rather than academics; instruction is in French and English. For each of the four themes there is a coordinator, and the year's instructional program covers two semesters. (Note that the original intention to offer an optional two-year program has been abandoned out of practical considerations.) The designated specialization modules (of which each student must choose two) are: 1) the new media, 2) techniques of diffusion, 3) design and management of data banks, 4) the microcomputer, and 5) sources of information. A student may register for a subset of instructional modules across themes, for an individual theme, or for the entire program. The last option amounts to 615 hours, including specialization modules, and costs 100,000 Luxemburg francs (roughly US\$1,850). Applicants to study at the Institute are expected normally to have completed a full university education, or the equivalent, and preferably to have behind them "several years of professional experience". There is a small number of students currently enrolled - representing Asia and North America, as well as Europe itself. Enrollment is expected to reach thirty or more by this coming winter. A student association has already been formed. The Institute presently has four microcomputers available for instructional use, and plans to acquire further appropriate hardware in the near future. A library has also been established. It is the intention to employ "novel teaching methods", and also to implement a procedure whereby students will evaluate the lecturers. The potential problem of lack of continuity among the series of lectures presented in

turn by various speakers will be ameliorated in the case of at least one of the themes, it is hoped, by the production of an introductory video film containing orientation presentations by the lecturers involved.

For further information, contact: Mme. Alice Stern, Director of Studies, European Institute for Information Management, 13 rue de Bragançe, 1255 Luxemburg; tel. 445811.

DIALOG II

It had been billed as a very major pronouncement concerning the future look of the USA's largest vendor of online information, and, though it turned out to be a rather low-key presentation, there was a standing-room-only audience (with a good number of standees) on hand in the capacious Red Lacquer Room of Chicago's venerable Palmer House Hotel. The occasion was Roger Summit's scheduled revelation of DIALOG Information Services' "next generation system", on 10 October at the Online conference. This system goes under the designation "DIALOG II", and is the new - though, note, "backward compatible" - data-base management system presently in the final stages of development. Dr. Summit, president of DIS, called it "a major rewrite of DIALOG" which has taken into account the previous comments and criticisms of the system's users, and he indicated that implementation would begin in early 1984. While not giving extensive details, he made a number of interesting remarks about DIALOG's short-term plans. For one, the vendor will in 1984 be adding fewer files than in recent years (when growth rates were, according to Dr. Summit, in the range of 20-30% per annum). It will be more selective, and emphasize the areas which it now is not covering. More non-bibliographic data bases are in the offing; some sorts which Dr. Summit mentioned were encyclopedias, handbooks, and statistical files. By mid-1984, DIALOG is set to have in operation a new electronic mail service, which will also permit delivery of search and SDI output - even between users. Furthermore, a personal computer development group has been established in order to develop appropriate software. This will however not be done independently, but rather in cooperation with other software businesses. Finally, we might point out an observation which Dr. Summit made near the beginning of his presentation: profit, he said, is for DIALOG Information Services a constraint, not an objective.

Ariane

On the evening of 18 October, a rocket lifted off from the ground on the northern coast of South America to put into orbit a 1,870-kilogram geostationary Intelsat-V communications satellite which is scheduled to go into commercial service in December of this year. To be noted is that the rocket was a European-produced and -operated Ariane-4; the Ariane will in the future be launching further satellites for Intelsat (whose previous payloads had been put into orbit exclusively by US Atlas-Centaur rockets), as well as for General Telephone & Electronics. The launch took place at Kourou, French Guiana, under management of the European Space Agency. It was Ariane's third successful satel-

lite launching - the most recent having taken place last June 16th, when the first in a series of European communications satellites was put up - and was the rocket's seventh successful firing. The satellite itself had been a joint US-European production undertaking. The Ariane development project goes back to 1973, and the first (test) firing was made in December of 1979. Shortly after this, the company Arianespace was formed for purposes of commercial exploitation, and it now hopes, according to Le Monde, to capture 30% of the world market for satellite launching services. At the moment, Ariane has capacity advantages over the US space shuttle, and - at US\$27 million per satellite - a considerable price advantage over the Atlas-Centaur. Ariane is scheduled to send up two more Intelsat-V satellites already this coming winter.

Still one more

Approximately two years before the planned phasing out of Euronet, the most recent member of the European Community was scheduled to be linked up to the international data network - on 15 November. Greece's official connection was preceded by an introductory period of approximately two months, during which the service was free of charge - by agreement of the other national telecommunications authorities involved.

Downloading

In the wake of its recent announcement concerning contractual permission for downloading data-base records from its computers (see our October issue, page 275), ESA-IRS is now publicizing its new "format X" specifically designed for purposes of downloading to a microcomputer. The vendor indicates that this user-defined format will be available "in the near future", and that it will cut down on transmission time (and therefore telecommunications bills), in addition to providing the transmitted information in an optimal form for local receipt. More details should be forthcoming shortly.

Downloading

In reporting (in our first issue of this year, p. 78) Chemical Abstracts Service's new downloading allowance policy, we neglected to mention that CAS has imposed a 50,000-record per (calendar) year limit on this activity. This provision will apply to both chemical substance and document records.

Information management policy

The United States Office of Management and Budget (OMB), through its Office of Information and Regulatory Affairs, has this September made known its intention to develop a new unified "policy circular on federal information management". The Information Industry Association (IIA) has identified this move as one of great potential interest to its members, and formed a task force in order to coordinate a set of formal

IIA comments, in response to an official government Solicitation of Public Comment. It should perhaps be interesting to follow the developments in this affair.

Data bases

Pergamon-InfoLine has announced the availability of Dun & Bradstreet's Key British Enterprises (KBE) Online (annual data-collection cycle, with monthly updates), under an exclusive arrangement.

Effective in October, the data base Trademarkscan (file 226, bi-weekly updates) has become exclusively accessible on DIALOG. Produced by Thomson & Thomson of Boston, it contains information on more than 600,000 registered and pending trademarks on file in the US Patent and Trademark Office. DIALOG has also announced that it will in the near future (late 1983 / early 1984) be making available the Computer Database (file 275), from Management Contents of Northbrook, Illinois, a file which also covers electronics and telecommunications in general; and Drug Information Fulltext, from the American Society of Hospital Pharmacists (file 229). This vendor now also has ready for searching the latest updated version (corresponding to the printed 9th edition) of the Foundation Directory (file 26). See also below the item on NTIS.

A further file recently loaded on ESA-IRS is Standards & Specifications, from the National Standards Association of Bethesda, Maryland (file 44, coverage from 1950, monthly updates). This host will also soon reload Compendex (file 4) with certain improvements - for instance, the capability of searching on abstracts. A new file coming up for access in the near future is COSMIC (an acronymous designation based on the name of the producer: the Computer Software Management and Information Center of the University of Georgia). This reference data base (file 69) contains details (including programming language, machine requirement, program size, distribution medium or media, controlled terms, corporate source, "abstract", and price) on more than 1,000 generally available computer programs in various high-technology areas - some of which were developed in connection with various US government bodies, including NASA.

BRS has mounted the Robotics Database (file-label: RBOT; coverage from 1980, with some references dating from the period 1970-1980; updated monthly), which is bibliographic in nature, and is produced by Cincinnati Milacron Industries; the Mental Measurements Yearbook (file-label: MMYD; full text; monthly updates); and the Online Microcomputer Software Directory (file-label: SOFT; monthly updates). BRS has furthermore recently reloaded Harfax Industry Data Sources (file-label: HARF), thereby adding more than 30,000 records (largely pertaining to Western European and Asian publications and to the energy and high-technology industries) which had "because of technical difficulties" not previously been included (note that the producer now promises regular monthly updates of 2,400 new citations). This vendor has also recently effected an increase (to \$8) in hourly rates for access via Telenet or Uninet; the Tymnet rate (\$11) remains unchanged.

FIZ Technik, in Frankfurt, has made available, effective 1 November, what it calls the "first German periodical and full-text-databank" -

i.e., an online version of the weekly publication entitled VDI-Nachrichten. Connect-time pricing is by the minute (DM3.50). VDI contains articles on technical, research, economic and current-affairs subjects, and about sixty-five articles per week will be added to the file. This "host" has also promised to offer further new files in the future, "for instance, databanks on products, information on external trade, patents, guidelines [?: "Richtlinien"], industrial management etc.". Just how these files will in the long run be made accessible to users is not clear, since FIZ Technik's arrangement with INKA (FIZ Karlsruhe) seems destined to lapse sometime before the end of 1986 (see the opening item in this news section).

DIMDI is mounting IRCS Medical Science for online access from the beginning of 1984. See the first item below under "Comments".

Predicasts is introducing a new indexing/abstracting product called Defense Markets & Technology (DM&T) - which will take the form of a monthly printed publication covering recently published defense industry literature (journal articles, reports, press releases etc.) on an international scale. A Predicasts representative has indicated that there are plans to make an online version of DM&T available in early 1984 - through Data-Star, BRS and DIALOG. In addition, the producer will lease the file on magnetic tapes, and will provide its own specialized retrieval software for use with micro- and minicomputer-based systems. More information: Predicasts, 11001 Cedar Avenue, Cleveland, OH 44106, USA, tel. (216) 795-3000 or (800) 321-6388, telex 985 604; for the United Kingdom and Europe: 199 High Street, Orpington, Kent BR6 0PF, UK, tel. (0689) 38493, telex 898 239.

The British Library's online information retrieval operation BLAISE-Line will be mounting a file called DPB (post-1970 catalogue records of the British Library, Reference Division, Department of Printed Books, along with records from the same institution's Department of Oriental Manuscripts and Printed Books (from 1980 onwards), and from the India Office Library and Records (from 1983 onwards)), and SIGLE (System for Information on Grey Literature in Europe). A test file of the former has already been demonstrated, and conversion work for the latter was apparently undertaken late last summer. We might incidentally note that preparing the SIGLE data base for online access has proven problematical - also for example for the German host INKA, which long ago developed plans to mount it, and has now made it publicly available. The SIGLE project, which aims to enhance the accessibility of unpublished European scientific and technical texts, and later will expand to cover also the social and economic disciplines, goes back to 1981, and has been helped along by the Commission of the European Communities.

Mead Data Central has put up Harfax Industry Data Sources on its Nexis service.

A Directory of Information Resources Online (DIRLINE), produced by the Library of Congress' National Referral Center, has begun a period of experimental availability on the National Library of Medicine service.

According to an item in the Nikkon Industrial Daily of 7 September, the Japan External Trade Organization will by now have created an international basic economic, trade and policy information data bank -

which it apparently intends to make available for online access, though the eventual circumstances of such access are not yet clear.

DEVELOP is a non-bibliographic file covering developmental technologies, research, courses, consultancy opportunities etc. available to third world nations, produced by Control Data Corporation. It is also intended to function as a "networking tool" for users. Contact: Beth Holmgren, manager, International Development Services, CDC, P.O. Box 0, Minneapolis, MN 55440, USA; tel. (612) 853-4977.

Samsom Data Systemen in The Netherlands has announced its intention to mount two further files: Fluidex and Solar & Alternative Energy. Dates of availability were not indicated.

UTLAS has mounted a data base, containing more than 150,000 items, of indefinitely out-of-print and out-of-stock book titles (produced by the R.R. Bowker Company of New York; retrospective to 1979; to be updated monthly). Also recently, UTLAS has contracted with Tandem Computers Canada Ltd. for the supply of "an extensive range of computer equipment"; the major conversion project will carry through 1984. This Toronto-based utility, which provides online services and products - either directly or indirectly - to over 1,850 individual libraries in Canada, the USA and Japan, has just celebrated its tenth anniversary. Its data base is said to contain at present more than twenty million records. (See also a related item in our previous issue, volume 3 number 5, p. 284.)

The National Technical Information Service (NTIS) in the United States has announced, in the fall 1983 issue of its newsletter News-Line, that as of 1 January 1984 it will no longer be distributing data bases produced by the US Patent and Trademark Office; and that it is in the final stages of completing work on the Federal Research in Progress (FEDRIP) file (the successor to the Smithsonian Science Information Exchange data base) - which is due, after final testing, to be offered online by DIALOG Information Services.

The French national online retrieval vendor Télésystèmes-Questel is said to have plans for mounting Medlars in the near future.

New service for educational professionals joins that for the medical sector

"The third in a series of user-friendly information retrieval services targeted at the end user market" is the phrase employed by BRS to describe its "BRS/COLLEAGUE Educator" feature.

The COLLEAGUE Educator user-interface package involves more than seventy of BRS' publicly available files - as diverse as Books in Print, Mental Measurements Yearbook, the Academic American Encyclopedia, and the School Practices Information File (all of these, and others, belonging to what is called a "core of major educational and reference databases"), and is intended for use by teachers and school administrators, curriculum developers, guidance personnel, media center coordinators and others. BRS points out that the menu-driven interface "eliminates the need for extensive system training, yet provides all the powerful searching capabilities of the BRS/SEARCH System". Use of the vendor's electronic mail service will also be available.

Another of the vendor's services aimed at the end-user, BRS/COLLEAGUE Medical, is, in the words of the vendor, "a new information service designed specifically for physicians and biomedical researchers". We give here a fairly extended account of it, based on recent information which has been distributed by the vendor itself. Advance promotion of the service began already late last year. The Medical COLLEAGUE system offers immediate access to many of the world's most authoritative medical publications through a simple but powerful menu-driven interface. Now users can directly access bibliographic and full-text data bases without extensive system training. BRS/COLLEAGUE Medical will be very useful for practitioners who need immediate answers to clinical questions. Access to key medical books and journals is available through the nearest terminal - at the office, in a hospital station or at home. BRS/COLLEAGUE is a response to the much talked-about inability of practicing physicians to keep up on new medical developments directly related to their delivery of medical care. Users will enjoy full search capabilities including paragraph qualification and unlimited truncation. Varying print formats suited to both bibliographic and full-text data bases are also available on COLLEAGUE, in addition to printoff options. The complete BRS/COLLEAGUE Medical Libraries System focuses on a three-tier model of medical knowledge: 1) a broad base of bibliographic information (Biomedical Bibliographic Library); 2) a select tier of full-text specialty information (textbooks such as Conn's Current Therapy and Sabiston's Textbook of Surgery, plus other structured data bases such as POISONDEX); 3) a select crown of full-text specialty information from premier medical journals, such as the New England Journal of Medicine, Annals of Internal Medicine and Lancet. The first offering of BRS/COLLEAGUE Medical is the Biomedical Bibliographic Library (BBL), which includes: a) Medline (1966 to present), b) Pre-Med (current contents listing to supplement Medline), c) Health Planning and Administration (1974 to present). This library should be particularly useful to research and academic physicians who have used such services via intermediary medical librarians in the past, and who now wish to do preliminary 'self-service' searching on their own. The second level of release slated for Fall 1983 availability is the Acute (Critical) Care Medicine Library, which will include the full text of up to twenty-three medical textbooks from such prominent publishers as W.B. Saunders and Churchill-Livingstone. Other "libraries", such as an Internal Medicine Library and a Clinical Pharmacology Library, are also envisioned for 1984. Another future enhancement will allow users of the Acute Care and Internal Medicine Libraries to display the illustrations of some titles. Photographs, anatomical drawings, x-rays, graphics and charts will be available in full-color, high-resolution form on a videodisk player and standard TV set connected to the user's terminal. The BRS/COLLEAGUE Medical information system represents a significant development for the medical professional who must keep current with an ever-growing body of literature and who demands accurate and immediate answers to complex medical questions encountered daily. Further information may be requested from BRS, 1200 Route 7, Latham, NY 12110, USA; tel. (518) 783-1161, or (800) 833-4707.

Tools of the trade

You may now order (from the American Geological Institute, Customer Service Department, 5205 Leesburg Pike, Falls Church, VA 22041, USA; tel. (703) 379-2480) the 1984 edition of the GeoRef Serials List and KWOC Index, at a price of US\$95 (or \$20 in microfiche). The key-word-out-of-context index gives access to the titles and publishers' names appearing in the list itself.

Gale Research Company has published a Telecommunications Systems and Services Directory, which aims to offer international coverage, and includes a glossary of terms. Price: US\$150, for three serial issues.

I.P. Sharp (2, First Canadian Place, Suite 1900, Toronto, Ontario M5X 1E3, Canada) is providing, for US\$3, its 93-page Energy Data Bases Reference Guide.

Available from Communications Trends Inc. (710 Webster Avenue, New Rochelle, NY 10801, USA) for US\$85 is Computer Publishers and Publications, which is a directory product.

Libraries Unlimited has published a 288-page volume entitled Online Searching: a Dictionary and Bibliographic Guide, at US\$27.50. The author is Greg Byerly, and the "dictionary" portion contains over 1,200 terms.

A new edition of Who's Who in Information Management (the membership directory of the Associated Information Managers (AIM) in the USA) has appeared. It costs US\$35 prepaid including postage and handling, and is available from AIM headquarters (see below, under "People").

Available for US\$55 from Transborder Press (4846 Chevy Chase Boulevard, Chevy Chase, MD 20815, USA) is Issues in International Telecommunications Policy: a Sourcebook. The item may also be ordered from the George Washington University Center for Telecommunications Studies in Washington, DC.

Major readjustments at CNRS

The French Centre national de la recherche scientifique has some time ago entered upon a process of structural change, which will, not least, have an effect on its Centre de documentation scientifique et technique (CDST). Mr. Goéry Delacote, who was late last year appointed as CNRS director for distribution of scientific and technical information, has made clear his desire to move more completely toward electronic products, to reorganize operations within CDST, and to improve relationships with users. (CNRS seems to have realized that CDST is in considerable need of a more effective marketing approach.) It appears also that CNRS may enter into an arrangement with a commercial publisher for purposes of achieving a more rationalized exploitation of its information products, and may, as well, set up some system for 'on-demand' publishing. CDST currently processes nearly 20,000 documents, feeds approximately 450,000 references each year into the Pascal data bases, translates annually about 3,000 articles, and photocopies around 1,000 articles per day. One consequence of the new order is that publication of the Bulletin signalétique will cease, while new products will be in-

roduced. CNRS has recently revamped its administrative council - which now includes, out of twenty members altogether, four members elected by the personnel.

VINITI director addresses Arlington conference, advocates right to information; a first for ASIS

Well, he wasn't actually there (very likely for political reasons growing out of previous action by the US government), but his paper was, and Samuel Wolpert (former president of Predicasts) read it out, on Wednesday afternoon the fifth of October, to a session entitled "The effects of using information on industrial productivity". Quite a bit had been made, in a number of the earlier sessions, of the fact that never before had a paper by a Soviet author been presented at an American Society for Information Science annual meeting. It was appropriate, of course, that this distinction should go to Aleksander I. Mikhailov, director of the All-Union Institute for Scientific-Technical Information (USSR Academy of Sciences) in Moscow. Perhaps more important than Dr. Mikhailov's appearance on the ASIS program, however, is what he actually had to say in his paper, which was entitled "Information science and informedness of society". He asserted, to quote his words, that society needs an "information environment which can guarantee the actual realization of the right to be informed". It was clear, in fact, that he was referring to the man on the street. He had just emphasized his recognition of the "difficult problem" of an optimal compromise among "the interests of society as a whole", the desirability of giving priority services to "a comparatively small user community responsible for a sizable share of the national income", and "the interests of an individual with his indispensable right to be informed". Perhaps surprisingly, there were no audible gasps of disbelief, guffaws, or even chuckles from the (admittedly small) audience as it listened to these words coming from the most highly placed individual in the Soviet STI establishment. Dr. Mikhailov had just been speaking (through Mr. Wolpert) of an "optimal strategy of information environment development", and had uttered the perhaps contradictory, but apparently more Soviet-orthodox recommendation that one attempt to extend "the community of adequately informed users", "with due account to their rankings according to their roles in social production". It was clear that he took the view that information science (and provision) should operate in a social context, but perhaps he had put the audience to sleep with his foregoing rather theoretical observations on the nature of information (information as "signal" - a subject for study by the 'cybernetical' disciplines - as opposed to information as "knowledge", or what VINITI calls "semantic information" - the domain of information science and 'semiotics'). The speech also offered some insight into the Soviet use of 'buzz-phrases'. One of these is "a socially required level of informedness" (used over and over again by Mikhailov), and another is "a comfortable information environment". His elaboration of these notions was quite interesting, as was his description of the conclusion to which VINITI has come concerning "the specific nature of the economic effect of information", namely that "it must be measured from the standpoint of prevented losses, rather than that of gains"; this criterion is, in his view, important for judging the efficiency of informa-

tion services. If a high level of efficiency is achieved, then "society will agree to pay an insurance duty in the form of assignments for information environment development". All of this is rather thought-provoking when one tries to put it into the context of the actual economic, social and political situation currently prevailing in the Soviet Union. Dr. Mikhailov also, we might note, offered a definition of information: it is "a certain form of knowledge, existing in society, when this knowledge is alienated from its carrier, and it is materialized in the form of a document". In his theoretical exposé, he often cited the work of western (as well as Soviet) scholars - especially that of B.C. Brookes.

For more on VINITI's plans regarding STI provision in the Soviet Union, we refer readers to an item in the "Trends" section of our December 1982 issue, p. 340-341. We might note in conclusion that, though scheduled to deliver a paper at the September 1982 FID Congress, Dr. Mikhailov (who likewise is a member of FID Council, and editor of FID's International Forum on Information and Documentation) was refused a visa by the authorities in Hong Kong (his paper was read by another delegate, and appears in the proceedings, The Challenge of Information Technology, published in May 1983 by North-Holland); and that the ASIS session for which his contribution was scheduled was dropped from the final program without explanation or notification - by accident, according to ASIS - and only restored at the last minute, in direct conflict with another SIG/III session.

Holding the executive's hand

Wiley and BRS have announced the "Executive Information (Exec Info) Service", a flat-fee (US\$100 per month - the so-called 'all-you-can-eat' pricing approach) subscription-based offering of files such as ABI/Inform, Management Contents, Harvard Business Review, and the Academic American Encyclopedia. It is based on a 'user-friendly interface' (involving menus), and features "intelligent online hand-holding". Promotional material emphasizes obviation of the need for "special training", and even states that "the techniques for using Executive Information Service can be learned in under ten minutes". BRS obviously is going after a big and as yet largely untapped daytime non-STI end-user market - in a move that may be seen as complementary to its After Dark service (launched a little more than a year ago), which however has many more of the vendor's files on offer. BRS is probably also figuring that not many intermediaries will use the service - in view of the limited number of data bases, and the unsophisticated interface which they neither need nor want. (It is, however, true that quite a few information professionals are using After Dark, attracted by its relatively low connect-time rate - and no recurring subscription fee for access.) For further information: Exec Info Service, 1 Wiley Drive, Somerset, NJ 08873, USA; tel. (212) 850-6360.

Special vendor pricing for educational users

Chemical Abstracts Service has announced its new "CAS Online academic

program". The point is this: If your academic institution is willing to lay down a flat fee of US\$500 (¥135,000; £300) per month, then it can enjoy unlimited use - by its students, faculty and staff - of the CAS Online chemical information retrieval service between the hours of 2:00 p.m. and 8:00 a.m., US eastern standard/daylight-savings time (4:00 a.m. - 10:00 p.m. in Japan; 7:00 p.m. - 1:00 p.m. in the UK; 8:00 p.m. - 2:00 p.m. in western Europe) - with the following exceptions: 6:00 p.m. to 8:00 p.m. e.s.t. on Tuesday and Thursday (8:00 a.m. - 10:00 a.m. on Wednesday and Friday in Japan; midnight - 2:00 a.m. on Wednesday and Friday in western Europe), and the whole period from 8:00 p.m. Friday to 6:00 p.m. Sunday e.s.t. (10:00 a.m. Saturday - 8:00 a.m. Monday in Japan; 2:00 a.m. Saturday - midnight Sunday in western Europe); during all of these hours the computer in Columbus, Ohio is not operative for purposes of online access, in accordance with a schedule which took effect on 30 October last. The flat fee mentioned above does not include offline prints, which will be charged separately at the normal rate. It is not clear whether the "academic program" will involve also the 'transparent gateway' system described in the first item of this news section (see pages 343-345 above), but the new subject-searching facility will be available for the flat fee, along with the earlier-implemented structure-based searching capability. For further information, contact: Chemical Abstracts Service, Customer Service Department, P.O.Box 3012, Columbus, OH 43210, USA; tel. (614) 421-3600.

Another grant for CRL

October 1st of this year was the scheduled starting date for a project to convert to machine-readable form the catalogue records for more than 26,000 no longer received serial publications held by the Center for Research Libraries in Chicago. This represents roughly one half of CRL's serial titles, and the project - set for completion by the end of 1984 - was made possible by a Higher Education Act Title II-C grant in the amount of \$299,488. A similar grant was received last year for retrospective conversion of records for currently received serials and their predecessors (as mentioned in ISU vol. 2 no. 6, p. 333). The records will be made available through various bibliographic utilities, and on tapes which may be purchased at cost by individual libraries.

BPIA

Management Contents of Northbrook, Illinois, and Gale Research Company of Detroit, Michigan, have implemented a cooperative agreement whereby Gale will produce a new product called Business Publications Index and Abstracts - a print version of the Management Contents data base, which is already available online via BRS, Data-Star, DIALOG, The Source and SDC. This print version will be a monthly product containing subject and author indexes, as well as abstracts, based on the coverage of more than 700 periodicals in the management and related areas. There will be quarterly and annual cumulations of the indexes (but not of the abstracts, which are arranged numerically by citation number). Management Contents claims that articles will be covered in BPIA within eight weeks after their original publication. Library of Congress Subject

Headings are used, enhanced by additional Management Contents headings. Additional information may be requested from Gale Research Company, Book Tower, Detroit, Michigan 48226, USA; tel. (800) 521-0707 or (313) 961-2242.

New network offering

"Sopho-Net" is the name of a synergetic open packet-switching wide-area network system recently put on the market by the Dutch electronics/telecommunications firm Philips. This will be a counterpart to Philips' local-area network "Sopho-LAN".

People

The new director of the Lister Hill National Center for Biomedical Communications, National Library of Medicine, is Richard B. Friedman, previously of the University of Wisconsin medical school.

Mary C. Berger has become manager of the planning and product development division at Engineering Information Inc. in New York. She was previously employed at Cuadra Associates in Santa Monica, California.

The US organization which goes under the name Associated Information Managers (AIM) has a new executive director in the person of Sheila Brayman, who replaces Rita Lombardo. This fairly recent offshoot of the Information Industry Association has now moved out of the IIA's Washington, DC headquarters and is situated at 1776 East Jefferson Street, Suite 470S, Rockville, Maryland 20852 (tel. (301) 231-7447).

Bert Helfinstein is now president and chief executive officer of Source Telecomputing Corporation.

Michael McGill has left the National Science Foundation, where he was information science program director, to become director for technical planning, in the office of planning and research, at OCLC in Dublin, Ohio.

R.R. Bowker Company's new manager of online database services is Debra K. Brown.

Heather Taylor has become European lecturer for the Institute for Scientific Information, and is to be based in the United Kingdom. She was formerly employed by ASLIB in London, where she for several years served as editor of ASLIB Information and ASLIB Proceedings.

P. Blake Ragsdell has become systems development manager at Data Courier Inc.

The new president and chief executive officer of United Telecommunications Inc. (which has just sold off its United Information Services - including Uninet - to Control Data Corporation) is Paul E. Huber.

Keith Lawrey, JP, LLB, Barrister, ACP, FCIS, has announced that he will in the fairly near future be stepping down as secretary general of the Library Association in the United Kingdom.

New data-base directory service

With amazing rapidity, and apparently by circumvention of procedures that would normally be followed in such a case, the leadership of the American Society for Information Science (ASIS) has agreed with Knowledge Industry Publications Inc. (KIPI) to lend ASIS' sponsorship (and an advisory board) to a new package to be marketed by KIPI under the title "Data Base User Service". For this purpose, KIPI late last spring bought up the Directory of Online Information Resources (after publication of this directory's 11th biannual edition in March) from Capital Systems Group of Kensington, Maryland, combined it with its already-launched "Data Base Alert" (as an updating service), enlisted ICI (Information Consultants Inc., of Washington, DC) to create and offer as a private-file service an online version of the directory, threw in a hotline facility, announced the package at the ASIS Annual Meeting in early October, and started selling it there, at a prepublication price of US\$185, or \$166.50 to ASIS members, for a one-year subscription (but inclusive of only one hour of online access - additional usage to be billed separately at an apparent rate of US\$75 per hour). The printed directory and updates are to be separately available (US\$168 combined), but Terry Mollo, editor for the service, has indicated that the online file may not be. (She did, however, say that the data base would perhaps eventually go up on DIALOG.) KIPI's intention is that the service should be available by the end of February, and they claim that the initial edition of the directory will contain 1,700 or 1,800 entries. At the ASIS conference itself, on more than one occasion, reservations in principle about the arrangement with KIPI were openly expressed by ASIS members, even at the highest levels within the Society. We might note that ASIS has recently seen withdrawn (because of circumstances presently beyond its control) its option to sponsor the publication of Computer-readable Databases: a Directory and Data Sourcebook, edited by Martha F. Williams. KIPI will no longer act as publisher of this major reference work.

Business communications

Intelsat, the International Telecommunications Satellite Organization, has begun operation of its "Business Service", after approval by its board of governors. Implementation of the service will require some modification to the Intelsat-V satellites which remain to be launched.

New periodicals

Some weeks ago we received from their publishers the premier issues of two new serial publications. Since we have no space here for actual reviews, we shall suffice with a few descriptive remarks.

Issue no. 1 (October 1983) of Language Monthly: the International Journal for the Language Professions contains thirty-two pages of mostly brief (one page or less) current awareness and news items, as well as sections on technology, patents, schools, lexicography, broadcasting etc., notices and reviews of publications, reports on conferences, a "Professional Services Directory", a conference preview, and an exten-

sive calendar of upcoming events. The contents are entirely in English, except for two items in French. The editor is Veronica Lawson (a translator and language consultant well known for her work on automated translation), the managing editor Geoffrey Kingscott. Language Monthly (ISSN 0265-2137) is published by Praetorius Ltd., 30 Clarendon Street, Nottingham NG1 5HQ, United Kingdom, at £12 for twelve issues including postage. The initial issue contains some very interesting material, and we hope that this new periodical can keep up the good work.

Volume 1 number 1 (1 September 1983) of The Lawyer's PC (subtitled "A Newsletter for Lawyers Using the IBM PC and Compatibles") runs to sixteen pages, and includes an article under the title "Is DIALOG a best-kept secret?". This newsletter, written by lawyers for lawyers, is to be published twice monthly, at an annual subscription rate of US\$58 (\$70 in Canada and Mexico; \$94 elsewhere), by R.P.W. Publishing Corporation, P.O.Box 1046, Lexington, SC 29072, USA. This firm began publication last year of a similar periodical called The Lawyer's Microcomputer (now subtitled "A Newsletter for Lawyers Using the TRS-80").

Electronic message service

Teletex service within the USA, and between the USA and the FRG, has been put into operation by Western Union.

New host newsletter

The first issue has appeared of Samsom Datanet Newsletter, distributed by Samsom Data Systemen B.V., P.O. Box 180, 2400 AD Alphen a/d Rijn, The Netherlands.

Net importers

For those of you on this side of the ocean who are concerned with the considerable dependence on US information products and services, as well as those of you worried about what has more than once been dubbed US cultural imperialism, may we cite some figures from an industry that is not normally a major concern of this journal - simply for possible purposes of comparison. Of all films shown in British cinemas, 92% are of American origin; for some other countries, the percentages are as follows: in The Netherlands 80%, in France 45%, in Italy 30%. In the European Community nations altogether, American products enjoy a 47% market share (whereas French have 16%, Italian 24%, British 8%, and German 3%). Also in this area, the European Community authorities are concerned, and have undertaken to do something about the situation - through increased support for the movie industries in Europe, and encouragement of national authorities also to lend more of a helping hand.

Name change

The California Library Authority for Systems and Services has become the Cooperative Library Agency for Systems and Services - for reasons which will be more or less obvious to those who have followed the organization's development in recent years.

Trends

Trend toward vertical integration claimed to have reached 1/3 level for new files

"Of the new databases listed, almost 34% are available either from producers that offer their databases through their own online service or from online service organizations that produce and make available their own databases." This statement comes from a news release dated September 1983, issued by Cuadra Associates Inc., and refers to that company's summer 1983 update supplement to its Directory of Online Databases.

Focus

The news release mentioned in the immediately preceding item also makes the point that one can, by scrutinizing the new data-base offerings, perhaps detect "a movement toward greater targeting of specific markets and market needs", together with greater depth of coverage in some fields. "This targeting of specific markets appears to go hand in hand with the trend toward integration."

Sex roles?

An observant attendant could perhaps not help noticing a rather peculiar incidental fact about two of the sessions that took place on Monday 3 October at the annual meeting of the American Society for Information Science (ASIS) in Arlington, Virginia. In the afternoon, the moderator and five panelists taking part in the "symposium on end-user training" were all women (representing one special library and five different US data-base producers), while the six panelists in the morning session "three-sector interaction for increased productivity: data evaluators, vendors, and users", sponsored by the Special Interest Group on Numeric Data Bases, were all men. This may be pure coincidence, but it does seem to have some correspondence with rather longstanding perceptions of preferred spheres of activity (some would perhaps rather say with 'stereotypes'). We might just point out, however, that the morning session was very ably, efficiently and eloquently moderated by Ms. Bonnie C. Carroll of the US Department of Energy's Technical Information Center, and president-elect of ASIS.

Comments

Electronic journals

Again in this issue we are pleased to offer the first part of the present section to what we may call a "guest comment". We reproduce below, by special arrangement with the publisher, the text of an editorial which appears in the November 1983 number - vol. 11, page 949 - of IRCS Medical Science. It is signed by M.C.S. Buckingham (managing director of IRCS Medical Science in Lancaster, UK), H.D. Paul (Deutsches Institut für medizinische Dokumentation und Information, Köln, FRG) and S. Johnson (also of IRCS). IRCS (International Research Communication System) Medical Science is an integrated family of journals offering rapid publication and effective dissemination of original research data. There are thirty-two IRCS Medical Science specialist journals covering the whole field of medical and biomedical science. When a paper is submitted to IRCS Medical Science it is reviewed according to accepted criteria by outside referees. If accepted, the paper is published in one or more of the IRCS Medical Science specialist journals depending on the interdisciplinary nature of its contents. On acceptance, papers are also immediately considered for possible inclusion in an IRCS Medical Science Key Journal and the IRCS Journal of Medical Science - these contain papers considered by the editors to be of the greatest merit and general interest. All papers are published in the IRCS Medical Science Library Compendium and listed in the IRCS Medical Science Classified List. Publication in an IRCS Medical Science journal takes place 15-45 days after receipt of an acceptable manuscript - an average of 30 days. The editorial is entitled "European host for IRCS Medical Science on-line will offer new forum for scientific debate", and it reads as follows:

"IRCS on-line offers the full text of all articles published in IRCS Medical Science, including tables, in a fully searchable and retrievable form. Publication on-line is simultaneous with the printed version and can make all IRCS papers directly available to anyone with a terminal or desktop computer. We are pleased to announce that from the beginning of 1984 IRCS Medical Science will be available as an on-line computer database mounted by DIMDI (Deutsches Institut für Medizinische Dokumentation und Information), Köln, West Germany. IRCS has been available on-line since July of this year on the BRS system in Latham, USA. We hope that European users in particular will find access to a European host an added convenience.

This combination of a printed journal and an information retrieval service has aroused considerable interest in the scientific community. Now DIMDI and IRCS will be cooperating in the development of a new facility unique to on-line publication.

This facility will make it possible to add further information and comment to published papers in such a way that all comments can be directly linked to the original article and obtained automatically in the course of on-line access. With this service we hope to be able to combine the best features of both the printed journal and the conference as media for scientific communication.

Entering a printed journal is, in many ways, like entering a well-

kept cemetery. The papers stand in ordered rows, carefully presented but timeless and unchanging. Journal publication cannot easily reflect the changing emphasis which comment and additional information from authors can produce in the interpretation of any set of results.

Conferences, on the other hand, offer a free forum for debate and the provision of supplementary information by the author. But even conferences are fixed in time and place. Only a limited number of people can participate. Furthermore, material published in conference proceedings is notoriously difficult to retrieve bibliographically.

For a printed journal Letters to the Editor and responses from authors can help to some extent but the process has to overcome severe difficulties. Postal delays and delays in publication mean that effective correspondence columns are substantially limited to the pages of a few weekly publications. Even if these problems can be overcome, the scientist is still faced with the labour of tracking down all the correspondence in subsequent issues of the journal. Some journals are now reacting to this challenge by publishing the comments of an Editorial Board member as a form of postscript to the published paper. But these comments also are frozen once the journal appears in print.

In the on-line Forum to be provided by IRCS and DIMDI, scientists will have the opportunity to submit additional information or comment relevant to any paper published in IRCS Medical Science. It will be possible to submit such material to the Editor by normal postal means or by use of an electronic mail box. Comments will not, of course, go immediately into the on-line database; we would naturally wish to exercise the same Editorial control applied to the selection of correspondence for normal printed publication and original authors must have ample opportunity to provide additional information and comment.

The linking of such correspondence to the original article will permit the user to immediately gather any comments from other scientists or additional material submitted by the author. The material will, of course, be published in our regular printed issues, but we expect its full value will be realised through on-line access which can bring together material submitted over a long period of time.

The principles of this service are clear enough but we shall naturally be feeling our way to a certain extent in putting these principles into practice. It may, for example be appropriate to encourage authors to submit comments on their own papers some time after publication when new results give a new perspective on the data. It will be a matter for Editorial judgement, however, on the extent to which such material can be submitted without presenting a fresh paper and a refereeing process for the correspondence as well as the original paper may well be appropriate. It will also be essential to retain the principle that the original paper remains unchanged.

Modern science has emerged as one of the greatest areas for international debate and cooperation in the world today. In the earliest stages of its development, public debate was a major force in scientific communication. With this new development we hope that modern technology can restore some of the excitement of the debate.

The final details of the service remain to be established and clearly readers' comments will be welcome. We shall be glad to receive any such comments and readers are invited to write to us to request full details of how the scheme will operate."

For further information, contact: Michael C.S. Buckingham, IRCS Medical Science, St. Leonard's House, St. Leonardgate, Lancaster LA1 1PF, UK, tel. (0524) 68116; or, H.D. Paul, DIMDI, Postfach 420580, 5000 Köln 41 (Sulz), Weisshausstrasse 27, FRG, tel. (0221) 4724-252.

Third world opportunities

After clearly proclaiming that he was an incurable optimist regarding the future of mankind on this planet, Rashmi Mayur (vice president of the Global Futures Network in New York, and a native of India) went on, in his speech before an October 5th session of the 46th Annual Meeting of the American Society for Information Science (ASIS), to paint a quite dismal picture of the widespread dearth of basic information resources outside of the developed areas of the world. Out of a total population on the planet of 4.6 billion persons: 60% is illiterate, 3 billion persons have never read a newspaper, 2 billion have never listened to the radio, 3.2 billion have never watched television. He cited these figures after pointing out how much talk there is these days about the 'information explosion', and went on to assert that productivity in the third world is actually declining, because of the problem of information transfer: information which is available is outdated, or not available at the right time. (The theme of this ASIS conference was "Productivity in the Information Age".) Mayur did suggest that the third world would open up as a very sizable market for information providers, if the product can be offered at an affordable cost, but it was difficult to detect the basis for the kind of optimism which he had at the outset of his address claimed to espouse. He even stated that the world in which we live has become "more complex, more interdependent, and more distorted and degraded, in many ways". It should be pointed out that quite a bit was said during this conference - also at other sessions - about the information needs of developing countries. The upshot seems to have been that information providers and service suppliers in the developed nations are indeed conscious of the great potential of the third world (though perhaps mostly in terms of exploiting new markets), but just don't understand the real requirements of the societies in these areas - as was in fact pointed out by certain representatives of developing nations who were in attendance at the conference. At the reactor panel - "agenda for change" held on the final day, Barry Mahon of the European Commission, Euronet-DIANE, in addition to gently chiding his audience for a certain chauvinism (while avoiding this word itself) in the US information industry's attitude toward the rest of the world, explicitly pointed out this failure to understand the real requirements of developing countries - but said that this was a shortcoming among Europeans as well as Americans.

Certainly ASIS is to be congratulated for providing (largely through the efforts of its new Special Interest Group on International Information Issues) a forum for the open discussion of such important subjects as those of third-world information-related activities, needs and attitudes. A readiness for meaningful cooperation may indeed result in very interesting opportunities for information organizations in the more advanced parts of the world to expand the scope of their activities. But this cooperation will have to be more of a two-way street - not just a matter of increasing third-world import of information products and

services conceived, designed and produced in Europe and North America. Cor van de Weteringh wrote in his editorial to the November 1982 special issue of this journal that "information, knowledge are now synonymous with power, health and wealth", and about the gap between information-rich and information-poor: "It is one of my strongest convictions that the gap has to be bridged, not only for the survival of the poor, but also for the survival of the rich." It won't be easy to achieve success in this task (some of the difficulties encountered in one aspect of it are nicely pointed out in the paper by M.L. Dosa in this same issue), but there fortunately seem to be enough individuals in the information world - on both sides of the divide - who are not willing to grant that it is impossible.

CORRIGENDA

As a consequence of technical errors, there occurred, in the "Comments" section of "News, Trends and Comments" for August (vol. 3, no. 4), one slightly garbled sentence, one typographical error, and one minor omission. These should be corrected as follows (underlined words represent corrections).

Page 215. In lines 28 through 30 (fourth full paragraph), read: "People responding to the IFBs have manufacturing capabilities. Contractors responding to RFPs have innovation and engineering capabilities."

Page 217. In the second line of the last paragraph, read: "and will also".