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The Technology of Insight: Computers and Informed Citizens - The Charles Green Lectureship Series

Peter Seipel
THE TECHNOLOGY OF INSIGHT: COMPUTERS AND INFORMED CITIZENS

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I. INTRODUCTION: SOME MERITS OF THE SUBJECT

A. Shared Values and Problems

The topic chosen for this lecture has a number of advantages to which I would like to devote some introductory comments. First of all, the lecture treats a field of law where the United States and Sweden share both a number of basic values and a number of basic problems. Both countries try to live with principles of open government which, from an international perspective, are unusually far-reaching and generous to the general public. Both countries have not hesitated to extend existing principles of openness to information stored in the computer systems of government agencies.

In the United States, on the level of state legislation, "public records" laws and "open meetings" laws have existed since the early part of this century. I have noted, for example, that the State of Louisiana appears to have been the first to enact a public records law in 1912.1 In 1946, Congress passed the Administrative Procedure Act.2 It introduced a limited right of access to federal government records provided that the documents requested were relevant to a right asserted in an administrative proceeding. This requirement—that a person seeking information must provide a reason for his inquiry—was removed with the Freedom of Information Act in 1966. It extended the right of access to the public generally. As this audience is well aware of, the Freedom of Information Act (FOIA) has later been amended on a number of occasions, most substantially in 1974. It is not my intention to deal with the hundreds of reported cases under the act, nor with the rich literature discussing it. I wish to emphasize, however, that in the international discussion the United States FOIA is often referred to as a model solution and a goal to work towards for

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nations where administrative secrecy is considered to be too strong. Often in such contexts mention is also made of Canada and its Access to Information Act of 1983 and, perhaps not so often, of my own little country where a general right of access has been in existence since the second half of the eighteenth century. Thus, it seems natural and fruitful to focus this lecture on a regulation where our countries have ambitions in common and where information technology has brought with it both new possibilities and new complications.

B. European Community (EC) Law and Openness

A second motive for choosing this topic and a particular perspective on it has to do with recent legal developments on the European stage. Lately, the agreement on a European Economic Area between the twelve EC-countries and the European Free Trade Association (EFTA) countries (apart from Switzerland) has been concluded although not yet ratified by all the participating countries. This means, among other things, that Sweden and the other EFTA countries will have to incorporate a large volume of EC law, the so-called Community Acts, into their national legal systems. As for Sweden we are talking about some 1,500 Community Acts comprising around 10,000 pages of legal texts. More is to come, not least if Sweden’s present application for full membership in the EC leads to the intended result.

It is easy to realize that such a massive reception of new law involves many kinds of problems on different levels. On a high level there are issues concerning legal traditions, general legal principles, involving among other things fundamental human rights, and issues of legal theory having to do with interpretation of legal texts, etc. On lower levels one finds an almost endless number of detailed issues in different areas of the law. As for the field of computer law, let me just mention the protection of rights in computer software, the protection of personal data, criminal sanctions aimed at protecting computer systems, and the legal framework of computer usage in trade, administration, and transport (so-called Electronic Data Interchange [EDI] applications).

Among the many complications, and maybe to the surprise of some observers, the issue of administrative openness has turned out to be one of particular sensitivity. In his opening speech in connection with the commencement of the negotiations on full EC membership, the Swedish minister responsible for EC matters, Mr. Dinkenspiel, declared that the Swedish general right of access to government docu-
ments represents a fundamental value which Sweden intends to protect. It has even been stated by members of the Swedish Government that the right of access will not be subject to negotiations. Swedish journals have given the issue much attention and expressed worries that the tradition of openness is being threatened. A typical headline reads: “Secret EC collides with Swedish law.”

In the following we will look into the reasons for this feared clash of interests. It should be mentioned that it has more than limited, national interest since it has to do with the kind of legal regime that will take shape in relation to international computer networks and to data flows over national borders. Briefly, access laws are becoming a matter of international concern.

C. The Significance of Openness and Access Laws

A third reason for the choice of topic for the lecture is rather evident, namely, the importance in general of openness and access laws.

These issues may be approached from different angles. There is, for example, a long philosophical discussion of the rationale of openness. Jeremy Bentham considered secrecy to be an evil in itself, a state of affairs which ought never to be a part of a system of government. Others have emphasized the positive value of openness for a democratic society: decision-makers should be aware that they are acting in the public view. There are also sociological aspects: Max Weber chose to focus on the inclination of a bureaucracy to use secrecy as a means to increase the superiority of the professionally informed. Generally speaking, the whole discussion of “information as power,” beginning its modern history with Frances Bacon in the 17th century, is in many ways connected with the development of general rights of access. Evidently, information kept by public authorities constitutes a power resource and can be analyzed as one of the components of the networks of power relations in society.

4. Already in the early 1980s attention was paid to these issues within the EC. See, e.g., Data Security and Confidentiality. Freedom of Information and Data Protection. A joint research programme between ADI, GMD and NCC sponsored by the Commission for the European Communities and national governments. Bonn: GMD 1983.
6. A general presentation of Weber’s “sociology of domination” may be found in DIRK KÄSLER, MAX WEBER: AN INTRODUCTION TO HIS LIFE AND WORK 161-68 (1988).
Later in this lecture, I will return to the issue of the significance of openness and access laws. I will, however, limit myself to discuss it in one particular perspective which is neither political nor philosophical. Instead, I will try to use a framework inspired by information science and cybernetics. In this way it may be possible to add something new to the traditional discussion of openness.

D. The Nature of Computing Law

The fourth and final motive behind the choice of topics for this lecture concerns the field of law and information technology as such. More precisely, the discussion of freedom of information issues may also be used to express a view on the nature of the field as an academic subject. In my opinion, it is essential to develop the paradigms of the field and to discuss them on a meta-level. The pragmatic view that problems in the field (computer contracts, computer-assisted decision-making, etc.) are of practical concern and therefore should be devoted attention, can only serve as a starting point. For a deeper understanding of "computing law" and for the development of the paradigms of the field it is essential to understand, among other things, the relationships between "the law of computers"—lex computationis—and "the use of computers in the law"—computatio legis. Often there is a tendency to overlook the overlap between the two. Stated perhaps too concisely, it has to do with technical implementation of regulatory solutions and regulatory constraints on technical solutions. "Technical" here refers, of course, to information technology—machines, computer programs, databases, methods and systems. Some topics, among them the safeguarding of openness in government computer systems, are particularly well-suited to shed light on the overlapping area between the law of computers and the use of computers in the law.

II. The Principle of Publicity in Sweden: A General Background

A. Historical Roots

Publicity or openness is a well-established doctrine in the Swedish legal system. Basically, it includes three different kinds of publicity: (a) one is associated with proceedings of different kinds to which the public is guaranteed access; court proceedings and the meetings of

various bodies where public matters are discussed and decided, for example; (b) one is an integrated part of the administrative procedure and involves obligations of public authorities to communicate writings to parties to a case and to allow them access to all materials associated with the case; and (c) the principle of the public character of official documents. The following discussion will be limited to the third category, the general right of access to official documents.

For many centuries administrative secrecy, restrictions on the printing of documents, and censorship were the rule in Sweden. For example, in 1688 ordinances issued by the King and certain other state documents appear to have been regarded as the property of the Crown. To print them was explicitly prohibited. According to the Instrument of Government of 1720 protocols of the Parliament and its committees were to be kept secret.

Later on in the eighteenth century, political struggles between two groups named the "hats" and the "caps" led to a general discontent with regard to the lack of information about the foreign policy and the finances of the State and also with regard to the abuse of power by an irresponsible bureaucracy. The outcome of this struggle for increased openness was the Freedom of the Press Act of 1766. Among other things, the Act regulated the publicity of official documents and enumerated a number of such documents which could be printed freely by anyone, for example the documents of the Parliament, the courts, and the civil service. Anyone who so claimed could obtain access to such documents and had a right to copy the documents on the premises of the keeper or to receive certified copies of them. In practice the new act met with difficulties and limited understanding. Its validity was contested already in 1772 when the political situation changed and yet another period of royal autocracy began with King Gustaf III. But the ideas formulated in the Act remained alive and significantly influenced the Instrument of Government of 1809 and the Freedom of the Press Act of 1810 and of 1812. The last mentioned legislation was in force until it was replaced by the presently valid statute. Thus, it may be said that Sweden has a rather long and unbroken tradition of a right of access to official documents.

B. The 1949 Freedom of the Press Act

The right of access (the so-called principle of publicity) is now set out in Chapter 2 of the Freedom of the Press Act of 1949 (the FPA). The basic provision in Article 2:1 reads:

To further free interchange of opinions and enlightenment of the public, every Swedish national shall have free access to official documents.

In Article 2:2 certain permitted exemptions are spelled out. They are referred to seven categories, among them the security of the Realm or its relations with other nations or international organizations, the activities for inspection, control or other supervision carried out by public authorities, the prevention and prosecution of crime, and the protection of private and economic information about individuals. All cases in which official documents, in accordance with these principles, are to be kept secret, must be clearly defined in a specific act of law or in a law referred to by this specific law.

C. The 1980 Secrecy Act

The "specific act of law" is at present the Secrecy Act of 1980, an extensive and detailed piece of regulation. In eleven chapters it enumerates and defines the different types of data and activities which are subject to secrecy. The Secrecy Act also contains general provisions regarding, among other things, the exchange of information between public authorities, registration and docketing of official documents, and certain requirements with regard to computer systems. There is also a Secrecy Ordinance of 1980 which supplements the Secrecy Act in certain respects, for example with regard to the application of specific secrecy norms to particular public authorities.

D. Related Legislation

I will not attempt a complete description of the total regulatory structure which in different ways is of consequence for the basic, general access right. As in any country, the situation in Sweden is complex and difficult to survey. Generally speaking, it is possible to distinguish between four categories of related rules, namely rules which:

- create possibilities to make use of a right of access,
- regulate access in particular situations and, thus, further contribute to openness,
- regulate rights in information and the use of information which has been obtained,
- regulate the activities of public and private parties on the information market.

Some examples of regulations in each of the four categories are:

rules on the collection of data from private sector firms and rules on deposit in archives,
rules on the rights of registered persons to gain access to their own data,
rules on copyright in government materials,
rules on information services performed by public authorities and fees and prices for such services.

E. Statute Law and Case Law

Sweden together with the other Scandinavian countries belongs to the family of "Romano-Germanic" law according to the terminology used by Professor René David. Historically and systematically Scandinavian law is closely akin to Continental law. Statute law prevails although Sweden does not have any comprehensive, systematic codification along the lines of, for example, the French Code civil. Documents associated with the preparation of laws, the legislative history, have traditionally played a predominant role when statutory texts are constructed. In particular, this goes for the explanatory memorandum prepared by the responsible minister. It has not been uncommon that the text of a statute is vague and short and that comments in the explanatory memorandum contain far-reaching suggestions for construction which have no evident support in the main text itself.

Case law certainly also plays a role. In particular this is so in areas of the law where the development is rapid and where there is a lack of detailed legislation. The right of access to official documents can be said to constitute such an area, in particular when it comes to defining the detailed criteria for the accessibility of documents.

Decisions by the public authorities to deny access to official documents may be appealed by the information-seeker to the so-called Courts of the Chamber—general administrative courts of second instance—and, ultimately, to the Supreme Administrative Court. It should be noted that a public authority seeking to prevent a disclosure has no right to appeal, neither has a third party to whom the document at issue concerns.

Finally, the Ombudsman, a successful Swedish export article, has supervisory functions also in the area of freedom of information. The Ombudsman watches over the activities of public authorities. He acts as a kind of public prosecutor and can bring criminal actions against

public servants for conduct which he finds punishable under the law. The yearly reports of the Ombudsman usually contain interesting statements concerning the right of access to official documents. These Ombudsman statements do not constitute case law in the proper sense of the word but in practice they carry weight and contribute to shape valid law.

F. Practical Experiences

Case law provides indications as to the state of health of the openness legislation. To obtain a more complete picture it is, however, necessary to carry out empirical studies of the application of the law and the activities of public authorities and information-seekers. The Swedish Institute of Law and Informatics has done so on a number of occasions, most recently in 1987-88.14

In summary, such studies have shown that there are varying "openness climates" at different public authorities. Some of them devote considerable efforts to making the legislation work, others seem inclined to obstruct or neglect even their basic statutory obligations. Secondly, the technical preparedness to fulfil the duties associated with the openness principle vary greatly. Thirdly, the knowledge about the regulatory requirements is often disturbingly thin. This may be an effect of the fact that many public authorities only rarely have to handle requests for official documents under the FPA. It seems to be more common that access is required to one's own data according the 1973 Data Act15 which, among other things, stipulates a right of registered subjects to be informed about registered personal data concerning them. There is more to be said about practical experiences but these brief comments will suffice for the moment. We will turn our attention instead to certain characteristics of information technology which are of interest in relation to access legislation.

III. Key Issues in Relation to Computers

The effects of information technology on openness laws are of many kinds. An attempt is therefore required to try and group them into certain key issues.

15. The Data Act (1973:289), § 10.
A. Strategic Choices

Information technology opens a range of possibilities when it comes to defining the scope and nature of access rights. It is not so that computers are either open to inspection or they are closed. Rather it is a question of degrees of openness and layers of transparency. Simply put, it is a matter for political decision-makers to decide to what extent modern information technology should be used to amplify and expand the previously existing, traditional openness. Swedish experience indicates that these strategic choices are poorly understood by politicians. Or maybe one should say that experts in the field have not always been successful in explaining the alternatives.

B. Paper Documents and Computer Media

One of the first questions to attract attention when it comes to applying openness rules to computers has to do with traditional legal terminology referring in one way or another to carriers of information. Some examples are "document," "form," "letter," "writing," and "paper." There are also many associated and interrelated terms, for example, "original," "signature," and "copy."

In principle, it may seem to be a simple operation to introduce a definition which states that a term such as "document" or "record" should be taken to include any kind of medium. For instance, a modern law dictionary offers the following definition of the term "document":

Any writing, recording, computer tape, blueprint, x-ray, photograph, or other physical object upon which information is set forth by means of letters, numbers or other symbols.16

There are, however, several complications. The reason is that the terms at issue appear in many different legal contexts where the problems associated with information carriers are different. In consequence, the definitions have to satisfy varying legal and practical requirements.

Thus, the legal order has a need for information handling procedures and information media which can perform certain functions. Since paper has been around for a long time, these functions have come to be closely associated with the particular way of performing them with the aid of traditional paper documents. However, the new electronic media necessitate an unbiased analysis of the functions as

such. The following list of short key-words outlines certain main functions that may be identified:

- communication
- identification
- signalling
- authentication
- evidence
- timing
- liability
- protection
- symbol
- practicability\(^{17}\)

In the present context it is not necessary to elaborate on each of these functions. To make the point which is of interest, it is sufficient to explain the meaning of four of them, namely, "communication," "evidence," "protection," and "practicability."

The communication function has to do both with communication of special messages (such as a message to a party to an administrative case) and the spreading of knowledge in general (for example, information about the activities of a public authority).

Matters of evidence concern a number of aspects: the sender of a message, the point of time when an action has taken place, the occurrence of certain actions or events, the existence of certain rights, etc. The evidence function also involves concerns for the creation and keeping of archives by public and private organs.

Protection refers to the need to create trust in certain kinds of information and information handling procedures. The legal system must be able to define these protected objects and procedures—letters, private communication, identifiers, etc.—and offer them adequate protection against unauthorized access and use, distortion, manipulation, etc.

Finally, practicability refers to needs which are quasi-legal in nature. Carriers of information must be easy to use in sundry legal contexts and must be well-suited to practical needs. This may mean that the medium must suit a particular kind of transaction and its agents. The requirements may also be more general and concern the habits of the market or a specific industry. It may be discussed whether or not practicability should be viewed as an independent functional criterion in relation to the other ones on the list.

To summarize, the choice and definition of computer-related concepts become an issue in many legal contexts where the mixes of functional requirements differ. The context of freedom of information is different from the context of pretrial discovery, for example. Questions arise concerning the need for different concepts and the coherence and consistency of the set of concepts as a whole. In other words, one standard concept ("document," "record," etc.) cannot serve the needs of all kinds of regulations and since different terms and different meanings are required there are questions of coordination. For instance, should there be some kind of hierarchy with general and flexible document concepts on the top and more specialized and narrow concepts on lower levels?

C. Finding, Accessing, Delivering

Information technology changes the *dimensions* of data processing. It is useful to compare with the technology of transportation. When railroads were constructed in the nineteenth century, landscapes changed, industries changed, human perception of time, distance and speed changed. For example, the experience of travelling at 30 miles per hour was overwhelming. In his treatise of the development of railway travelling, Wolfgang Schivelbusch notes that the increased speed destroyed the "intimate relationship" between the traveller and the landscape.\(^\text{18}\) The experience of travelling became "mechanized" and the traveller was transformed into a "package." Among other things, the new vehicle required a kind of seeing that had little in common with the watching of individual trees and flowers from an ox cart. In a letter written in 1840 we can read the following passage: "The closest objects, trees, cottages and such things, you cannot see in detail and when you make an effort to watch them they have long since disappeared." Medical complications were feared. In 1862 the medical journal *The Lancet* had the following to say about railroad travelling:

The speed and the mass of impressions necessarily wear out the eye and the brain. The ever varying distances to all objects constantly activate the apparatus of adaptation by which these objects are focused on the retina and no physiological fact has been more clearly demonstrated than the destruction of material and the dilapidation of organic substances through an excess of activity.\(^\text{19}\)

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19. *Id.* The texts from the letter and *The Lancet* are cited by Schivelbusch.
So what about information travelling and information navigation in the late twentieth century? The changes of dimension have been discussed in many contexts. We have here a subject which could keep us quite busy for the better part of a day or month or year so I will restrict myself to a few brief comments. What is of interest here is how the conditions have changed for finding, accessing, and delivery of information. My comments will be practical rather than philosophical.

As for finding, modern information technology supports even very precise searches of the “needle-in-the-haystack” type. At the same time it involves constant dangers of information overload or, as it is sometimes called, overrecall. To give an example, it may be easy to search for all administrative matters of a certain category where the handling of the case has lasted over one month, where the person concerned was a woman over fifty and where the decision was against the appellant. On the other hand, it could well be that such a search results in several thousands of retrieved documents.

Another aspect has to do with the often short-lived nature of electronic information: a particular message may be created once on a computer screen and never repeated. A computer program may be run in a particular version at only one particular instant, and so on. It becomes a problem not only to find information but to find out what has taken place in a rapidly changing, transient electronic world.

As for access, the global nature of computer networks and the speed of data transmission mean that ever larger volumes of information become “local” in the sense that they are available wherever there is a work place connected to a data network. One consequence is that at each point of time, the same information may be local in many places. From another point of view, one may say that the location of information becomes of subordinate significance: electronic accessibility is what counts.

Finally, delivery of small pieces of data as well as whole archives is technically feasible. Visible, readable formats is one possibility, machine-readable another. Delivery can be on stable media where data are fixed or via dynamic channels where data are transferred online. Delivery may be from one piece of equipment to another with no human involvement at all. Demands for delivery can be put forward on a single occasion or they may be formulated as standing requests—automated reporting of all occurring cases of a certain kind is one example.

For the citizen and for the public authority, limits have dissolved, distances have disappeared, volumes are measured differently. We
have at our disposal an information handling technology of insight far beyond anything previously known. The question is: what kind of seeing is it that we are discussing?

D. Issues of Infrastructure

One characteristic of information technology law is a shift of emphasis from the application of the law in individual cases to the design of information systems so as to bring them in accordance with the law. Herbert Fiedler, a German law professor and leading specialist in "Rechtsinformatik," has described information technology law as future-oriented. Some important reasons behind this shift of emphasis are connected with the difficulties of improvising legal solutions in EDP systems, the needs for standardization, and the automation of the application of legal norms.

Generally speaking, interest is often focused on the total infrastructure of information processing, i.e., elements such as computing machinery, structure of databases, computer programs, security measures, documentation, organization of different manual tasks, and so forth.

Last but not least, the international nature of computer networks means that many matters of infrastructure are of international concern. For example, different national security norms and different degrees of openness may be difficult to accept in an international network with data flows over national borders.

E. Issues of Use

Information technology facilitates or makes possible a rich variety of uses of information: transfer, copying, selection, transformation, merging, checking, etc. Digitization provides a platform for initiatives and activities which were not possible in the traditional world of index cards and ledgers. In consequence, issues of use are gradually becoming an increasingly important aspect of access laws. These issues are of many kinds: intra-agency sharing of data, commercial exploitation of data, purposes associated with different uses, public sector uses versus private sector uses, and so forth. One could even go so far as to say that issues of use are today an inseparable part of access laws.

IV. THE DEVELOPMENT OF COMPUTER ADAPTED RULES UNDER SWEDISH LAW

A. Early Adjustments

Until the early 1970s it was not clear how the term "document" should be construed with regard to machine-readable media such as punched cards and magnetic tapes for automatic computers. In 1971 the Supreme Administrative Court took a stand in favour of a broad construction.

The case involved population files kept on magnetic tapes by one of the county administrations. A computer service bureau involved in marketing activities had asked for copies of the tapes which it needed to update its files. The County Government Board refused to hand out the tapes and maintained that the tapes did not constitute "documents" as meant by the Freedom of the Press Act; instead they should be regarded as a technical tool for producing documents such as register cards and various kinds of printouts.

This reasoning was not accepted by the Supreme Administrative Court which concluded that the term "document" must be construed broadly so as to cover new types of media for the registration of information and that it could not be accepted that developments in the technological field erratically weakened the right of access.

This step—although important—meant only a provisional and partial solution. For example, it was not clear whether public authorities were under an obligation to hand out computer-readable copies of data. Case law on this issue and other ones never got time to develop. Work was already under way to revise the relevant sections of the Freedom of the Press Act.

B. Revisions of the FPA in the 1970s and the 1980s

In 1972 the Committee on Openness and Secrecy addressed the issues in a report titled "Data and Privacy." The committee suggested that computer recordings should be regulated separately and follow special rules. The reasons were summarized in the following way:

- recordings for EDP cannot be directly read with the eye,
- the location where recordings for EDP are stored cannot decide whether they should be made available to the public,
- instead, accessibility should depend upon who is authorized to use a particular recording,
• the point of time when recordings become official documents may be difficult to decide since recordings are often continuously updated,
• a recording may consist of elements which are being stored on different technical media which must be used together to create a meaningful whole.  

The work of the committee resulted in certain provisional amendments of the FPA which entered into force in 1974. These amendments created perhaps more uncertainty than they did away with. Above all, they made accessibility dependent upon a nebulous combination of the criteria “physical location of recordings,” “technical means of reproducing recordings,” and “authority to reproduce recordings.” Since the weaknesses of the provisional legislation were quite obvious, the Committee on Openness and Secrecy immediately continued its work on a more thorough revision of the FPA. The subsequent report concluded that a computer recording should be considered official, i.e., in principle accessible, if a public authority;

(a) had at its disposal technical facilities for reproducing the recording, i.e., for making it visible (readable) or audible, and
(b) was legally permitted to do so.  

The proposal was taken up in the ensuing Government Bill. However, there was one important modification, namely, that the legal competence criterion according to (b) should only apply to recordings in computerized files containing personal data and falling under the 1973 Data Act.  

During the 1980s two other committees have continued the work on adapting the FPA to computers, namely, the Committee on Data Legislation and the Committee on Data and Openness. The first-mentioned committee did not find it necessary to further revise the basic rules in Chapter 2 of the FPA. However, it proposed some minor changes and also a new statute which would clarify and complement the rather general constitutional rules in the FPA. The proposal for a new statute did not survive the following scrutiny by the Ministry of Justice with the exception of a number of suggested new provisions which were added as amendments to the 1980 Secrecy Act. The general purpose of these new provisions is to safeguard the practical implementation of the access rules of the FPA.

23. Id. at 55.
27. SOU 1980:31, Offentlighetsprincipen och ADB [The Principle of Publicity and EDP].
The second committee, which completed its work in 1988, reported on a number of issues, among them the selling of data in personal files by public authorities, protection of the right of privacy in the Constitution, and the use of personal identification numbers. The final report of the committee dealt with the application of the principle of publicity to EDP recordings.\textsuperscript{29} Basically, the Committee on Data and Openness reached the conclusion that the present rules are not in need of any deep-going conceptual rethinking. But the committee suggested a number of clarifications and minor modifications. Not least, it was concerned with matters of implementation touching upon the information systems of the public authorities, or, in other words, matters of information infrastructure.

\textbf{C. The Present Situation}

After the recent amendments, the complete text of the basic Article 2:3 of the FPA now reads:

The term document shall refer to representations in the form of texts and pictures as well as to recordings which can be read, listened to or otherwise perceived only with the aid of technical means. A document shall be considered to be official if it is kept by a public authority and if, in accordance with Articles 6 or 7, it has been received or drawn up by such authority.

A recording such as is referred to in the first paragraph of this Article shall be considered to be kept by an authority if, with the aid of technical means used by the authority itself, it is available to the authority in such a way that it may be transformed into a version that can be read, listened to or otherwise perceived. The previous shall not apply to recordings which are contained in personal files if the authority, according to law or ordinance or according to a specific decision which is based upon law, is not permitted to perform the transformation. A personal file means a register, a listing or other notes which contain information regarding a private person and which can be referred to the individual.

Thus, the main or general category of objects of access is called "documents" and documents are further subdivided into different types according to the following scheme:

\textsuperscript{29} SOU 1988:64, Integritetsskyddet i informationssamhället 5. Offentlighetsprincipens tillämpning på upptagningar för automatisk databehandling [The Protection of Integrity in the Information Society 5: The Application of the Principle of Publicity on EDP Recordings].
Direct media are letters, index cards, maps, tables, etc., usually representations of information on paper. Machine media (which are called "recordings") are of two different types: Simple machine media are tapes for sound recorders and microfilm, for example. They are "simple" in the sense that the transformation from machine-stored format to a format suitable for direct human perception is logically straightforward although it may be more or less technically complex. As for computer media, the transformation process is or may be logically complex and, above all, it is more controversial from the legal point of view.

To shed a bit more light on the Swedish situation we shall look at three areas where the developments are of particular interest, namely, the so-called potential documents, the notion of an adequate openness structure, and the possible stratification of the openness.

1. Potential Documents

The extension of the right of access to electronic recordings involves risks and uncertainty. To what extent is it necessary to be able to control the recordings to which the public can gain access? For a number of years in particular the Swedish Data Inspection Board (the surveillance authority set up under the 1973 Data Act on protection of privacy) maintained that only units of information of a permanent kind should be regarded as recordings under the FPA. According to this view, the original "thought contents" should determine once and for all what "documents" existed in computer files and databases. Alternatively, a precise definition of the tasks of a particular public authority should be decisive. Under this doctrine of fixation it would be possible, for example, to access a letter in electronic form but not a collection of segments of texts extracted from a number of such letters, for example.

The doctrine of fixation has repeatedly been rejected by the courts and by the lawmakers. Instead the doctrine of so-called potential documents has been accepted and presently constitutes valid Swedish law.
Briefly, the doctrine of potential documents is to be interpreted in the following way:

- A recording, i.e., a (type of) document, is defined as any meaningful combination of data or facts,
- Such a recording is to be regarded as being kept if the recording can be made readable by the public authority through the use of routine measures,
- The recording has been received when someone else has made it possible for a public authority to make the recording readable using routine measures.

The figures below visualize these principles:

**The concept "recording"**

A "recording" is made up of any meaningful combination of fact atoms.

**Potential Documents**
Traditional documents must be made available upon request. But a public authority is not under any obligation to extract facts from existing paper documents and produce a new document. As for potential documents stored in computers no such limitation exists. The applicant may ask for any recording that is being kept, i.e., that is possible to make readable. "Previously existing documents" in the figure refer to traditional paper documents. According to the FPA, a public authority is not required to extract facts from existing paper documents which are in its keeping and put them together in a new document. As far as electronic media are concerned this limitation of the right of access is no longer valid: there are no "new documents" only "potential documents" which should be made available if they can be produced using routine measures (existing computer programs, etc.).

The doctrine of potential documents is certainly not without difficulties. For example, there are problems of definition when it comes to delimiting the recording/document, i.e., to decide what constitutes the smallest and the largest possible recording. In other words, a recording has to be distinguished from "facts" or "particulars" (its constituent elements) as well as from "files," "archives" and "document collections." There are also problems of secrecy and security.

According to the Swedish Secrecy Act of 1980 recordings/documents are to be kept secret in many situations. Decisions on secrecy must neither be final nor collective—they are to be made anew in each actual situation when a recording is asked for and must refer to a particular request and a particular recording/document. Obviously, large databases and flexible ways of processing data create problems in this respect. In practice, decisions regarding secrecy tend to involve whole files rather than particular "potential documents." And sometimes combinations of certain computer programs and certain data are considered to be sensitive.

There is also the issue of registration (docketing) of potential documents. In principle, all official documents—existing as well as potential—are to be registered (including information on the relevant date, docket number, sender or receiver, and contents). Evidently, to examine voluminous computer files to determine what (potential) documents can be produced using routine measures and to register all such documents is simply not possible. The necessary escape can be found in a section of Chapter 15 of the Secrecy Act which states that, with regard to documents which are not to be kept secret, registration is not required if the documents are organized in such a way that,
without difficulty, it is possible to verify whether a particular docu-
ment has been received or drawn up. EDP systems can thus be used
to solve a problem which they have given rise to: to keep track of
potential documents. Also, for certain large computer files, there are
special exceptions decided by the Government.

2. An Adequate Openness Structure

The notion of an adequate openness structure has to do with mat-
ters of infrastructure. The concept was taken up in the Swedish dis-
cussion some years ago and has become the accepted term for
describing the present regulatory strategy. Its aim is to ensure that
computerized information systems are designed and operated in strict
accordance with legal requirements. Historically, it has not always
been so. The complexity of computer systems and a number of other
factors have tended to shield them from legal discussion and control.

The interest taken in issues of practical implementation is also
associated with trends in information law in general. I am referring to
the “future-orientation” mentioned above. It means that planning
and forecasting, development of standards, and formulation of even
detailed legal system design requirements become important con-
cerns. These concerns have to do with how computerized informa-
tion systems are built and operated, with organizational matters, and
with matters of system documentation. They are based on the insight
that ad hoc approaches and attempts to solve legal issues of document
access in computer systems only when they occur are as a rule haphaz-
ard, costly, or sometimes not possible. Ad hoc approaches may also
lead to quite different levels of openness in different information
systems.

Not least, matters of standardization are in the foreground. One
example is a Swedish project aimed at establishing standards for elec-
tronic mail systems used by State authorities. The project involves
three types of design goals:

(a) There shall only exist certain predefined, standardized
databases, each of which contains a specific category of information
such as secret recordings, official recordings which do not have to be

30. For an historical overview see C. MAGNUSSON-SJÖBERG, RÄTTSAUTOMATION 412-17
32. General viewpoints may be found in Seipel, supra note 8, at 248-49, 258-59, 267-69 (on
issues concerning “legal system management”).
33. The project (“SÄND”) is headed by the Swedish Agency for Administrative Develop-
ment. A brief description of its basic ideas may be found in an appendix to the report of the
Committee on Data and Openness, SOU 1988:64.
registered and which may be erased at short intervals, each day's registered matters, and so forth. The purpose of this fixed structure is to avoid uncertainty with regard to the status of particular recordings, multiple copies or multiple versions of a particular official document, private messages of an unclear status, and so forth. It is also foreseen that the meaning of certain important operations must be defined — technically and legally, e.g., "erasure" (for example, is erasure intended and allowed to keep back-up copies of erased materials?) and "placing in an archive."

(b) The system should allow only one way of handling external data communications. Each public authority participating in the network has its own "electronic domain" and messages can only be transferred to another "domain" via an "electronic registrar." The purpose of the "electronic registrar" is to enable full control over incoming and outgoing messages and, thus, to determine the points of time when various messages may become official as "received" or "dispatched."

(c) The use of the mail system is based on predefined menus. This means, on the one hand, that only certain approved activities can be performed and, on the other hand, that the system signals measures that ought to be carried out, for example personal signing of a particular message or secrecy evaluation of certain sensitive information.

The basic requirements which define an adequate openness structure may be found in Chapter 15 of the Secrecy Act. Repeated suggestions to include them in a special act have not met with approval. The rules are quite general and leave considerable room for different implementations. Among the requirements the following may be noted:

- Official documents are to be kept apart from other kinds of documents, for example unfinished, internal working documents.
- The protection of secret data shall be organized in such a way that the public's right of access is not endangered.
- Data processing shall be organized in such a way that it supports the interest of the citizens in using terminals and other technical equipment to obtain access to official documents.
- Each public authority shall prepare descriptions of its EDP systems. These descriptions shall be made available to the citizens. The descriptions shall contain information about, among other things, the names and purposes of different files, what kind of data can be accessed, what secrecy rules apply, the names of other public authorities which have access to different files, whether the public can use terminals, etc., to search for data, and whether there exists a right for the public authority to sell personal data.
On the whole the concept of an adequate openness structure appears to have been useful. Many Swedish public authorities have made quite impressive efforts to implement open EDP systems. In particular they have created possibilities for the public to use terminals to search for information in their databases. This right is not unconditional and it is not supported by the FPA itself. However, it is considered important and has been included as one element in the openness structure.

A weakness of the regulation of the openness structure is that there are practically no sanctions if a public authority neglects its obligations. It has been discussed to allow complaints to a court, to the Ombudsman, or to some other organ with regard to the way in which a particular public authority has chosen to interpret the FPA when it designs and operates its information systems. At present such remedies are not available and there is little an individual can do to challenge bad and neglectful information systems and practices. In such situations access to official documents may be denied because no "routine measures" have been implemented to satisfy the interests of the public. In this sense the right of access is still *lex imperfecta*.

3. Levels of Openness

Official documents which are identified by an applicant are to be made available upon request regardless of the effort required to produce them. In practice the ease with which documents can be identified and access arranged may vary considerably. The FPA does not directly deal with the general issue of different levels of openness, i.e., whether there is and whether there ought to be some kind of hierarchy of access possibilities—in addition to the ones associated with secrecy and with the criteria which decide whether a document is to be considered official or not (compare with working documents, etc.).

Stratification can be accomplished according to different criteria: the type of files and data, the intended use, economic concerns and costs, and technical preconditions and difficulties are some main categories. There may also be combinations of degrees of openness and the way in which data are made available: for example, uncontrolled on-line terminal usage cannot involve unrestricted access to all kinds of databases.

So far, the Swedish discussion has paid attention mainly to the *purposes* of the openness legislation and their possible practical consequences. Briefly, one can distinguish between four possible purposes, namely to provide access to:
information on a certain matter or activity;
information on the activities in general of a public authority;
information which constitutes useful knowledge in general;
information which has commercial value.

Since the Swedish openness legislation is general in nature and does not presuppose legitimate interests or anything of that kind, there has been a marked reluctance to connect the FPA with any particular purpose. However, the growing use of computers has necessitated such a discussion. Some of the reasons may be noted.

The efforts to implement an adequate openness structure has created an awareness that even without conscious efforts openness hierarchies tend to come about. For instance, it is as a rule difficult to cater for openness in technically old systems. Public authorities tend to leave them as they are and concentrate their efforts to safeguard and improve openness in their new systems. On the whole, implementation efforts naturally lead to considerations regarding different branches of EDP where the interests in openness varies: consider as examples dockets of newly registered matters, dockets of pending matters, dockets of historical matters, tele-conferences and electronic mail systems, general administrative files (e.g., personnel administration), permanent files associated with practical activities (e.g., a file of toxic substances), and temporary files associated with daily activities (e.g., a research project).

Cost concerns are, of course, unavoidable. One type of concern has to do with the direct costs associated with the design and implementation of EDP solutions. Consider, for example, the electronic registrar function that was mentioned earlier. Another type of concern is theoretically more sophisticated and is related to what may be called relative cost concerns. It has to do with such things as margin costs, and transaction costs for different parties—the information holder, the information seeker, the information user—under varying openness conditions. Such concerns may motivate, for example, that if certain information is available from commercial sources then a public authority does not have to grant a request for identical or similar information. A solution of this kind appears to be valid law in Norway, for example.

Commercial interests require particular attention. Public authorities in Sweden have sometimes referred to their obligations under the FPA in order to legalize activities which come very close to selling their information. On the other hand, it has repeatedly been stated by the responsible ministers, by the Committee on Constitutional Law of the Parliament, etc., that neither can the right of access according to
the FPA be used to legitimate such activities, nor is the right of access intended to support commercial activities of the information seekers. Such support may be a "side effect" of the right of access—sometimes a doubtful side effect—but that is all. In practice the dividing lines are a bit blurred between the exercise of the right of access, the provision of non-obligatory information services by public authorities, and their engagement in purely commercial activities. Computerization complicates these matters. Among other things, it has motivated a distinction between "passive" and "active" information services. "Passive" services are carried out on request and are closely connected with the primary purposes of the openness legislation, i.e., administrative control etc. "Active" services are developed and promoted by the public authorities themselves. They may sometimes be seen as ambitious efforts to implement the legislation on openness. More often there is a clear commercial intent. In a new Ordinance on Fees of 199234 an attempt has been made to define more clearly what constitutes legally permitted active information services. For example, there is a general permission for Swedish public authorities to market data from computer databases provided that the activity is of a temporary nature or of small proportions.

D. The EC as a Possible Threat

The above account of the FPA and the application of the right of access to computerized information should have made it clear both that there is a strong Swedish tradition of openness and that the development of the law has reached a fairly advanced stage in theory as well as in practice. Recently, the possible Swedish membership of the European Communities has caused concerns that it may be difficult or even impossible to uphold the traditional openness. Within the EC one finds different national traditions, different views on freedom of information issues, and different principles of protection of personal data. Generally speaking, the climate has so far been one of administrative secrecy—not least with regard to the activities of the EC institutions themselves. The chairman of the Commission of the EC, Jacques Delors, has talked about an "explanation deficit." Recently, eight leading Swedish lawyers and journalists claimed that the Swedish EC negotiators are confronted with "a regulatory framework where the interests associated with openness and freedom of speech are conspicuously absent. The Treaty of Rome looks more like a busi-

ness contract than a constitution." Will Sweden be forced to reduce its traditional openness? The question is of more than limited national interest: it may be seen as a struggle about an important part of the legal framework that will govern tomorrow's international data networks.

V. THE LEGAL SITUATION IN OTHER EUROPEAN COUNTRIES

A. The Nordic Countries

Finland shares with Sweden an old tradition of open documents—the two countries were parts of one kingdom until 1809. Until recently the right of access to documents was, however, interpreted narrowly so as not to cover computer-readable data. A revision of the law in 1987 has changed the situation and the general right of access now also includes computerized information.

Both Denmark and Norway have legislation on the openness of the administration. The openness is more limited than under Swedish law and the statutes at issue limit themselves to provide for access to documents related to specified administrative matters. Both countries have accepted that the principle of openness extends to entries in computerized dockets and similar types of files. Thus, computerized tools may be relied upon to identify and locate documents which belong to a certain administrative matter. Since computerized dockets may enable quite advanced selection and retrieval operations this supplement may amplify the right of access to paper documents in quite innovative ways. There are also certain other legal possibilities of accessing data stored in computers. For instance, in Norway the right to inspect is based on what is called an "analogue document concept." At least in theory this principle expands the right of access to any kind of compilation, etc., which a particular information processing system is capable of producing. One is reminded of the Swedish doctrine of potential documents.

36. See Edward Andersson, Rättspraxis kring handlingsoffentligheten, 121 TIDSKRIFT UTAUFINGEN AV JURIDISKA FÖRENINGEN I FINLAND 123 (1985).
38. It should be noted that the total situation with regard to access possibilities is more complex and involves a number of statutes in addition to the statutes on the openness of the administration. In Denmark, for example, there is also the law on the files of public authorities of 1978 to be taken into consideration. The access object of this law is personal data.
39. See supra part IV.C. More precisely, there is a right to obtain access to: "the natural unit of text or facts which, when printed by the system, has the appearance of a document. Such a natural unit may be, for example, a text that is processed as a unit in a text processing system or a unit which may be retrieved by a text retrieval system or some other kind of information system." Government decree of Dec. 19, 1986, pt. I, No. 2.
B. Member Countries of the EC

Of the Nordic countries only Denmark is at present a member of the EC. In this company Denmark is the country which has taken perhaps the most clear stand in favour of administrative openness. In several other EC member countries, laws on openness exist but they vary considerably in character and ambition. In several cases we are talking about general principles which have yet to be implemented in lower level legislation or in administrative regulations.40

C. The Council of Europe

All the EC countries are also members of the Council of Europe which came into being in 1949. This means, among other things, that they have stood behind the adoption of the Council of Europe recommendation of 1981 on the access to information held by public authorities (R (81) (19)). In its own words the recommendation seeks to achieve the highest possible degree of access to information. According to its Article 1 everyone within the jurisdiction of a member state shall have the right to obtain, on request, information held by the public authorities other than legislative bodies and judicial authorities. According to Article 3 access to information shall not be refused on the ground that the requesting person has not a specific interest in the matter.

The recommendation is not binding. The member countries do not appear to have been in haste to turn it into national law. In fact, Italy and Luxembourg have explicitly reserved the right of their governments to comply with it or not.

One interesting question is how the right of access as outlined in the Council of Europe recommendation should be looked upon. The question is: can it be considered to belong to the category of fundamental human rights and freedoms? One may compare, with the wording of Article 10, paragraph 1 of the European Convention on Human Rights of 1950:

40. France has a law of 1978 on a right of access to administrative documents (CODE CIVIL [C. civ.] art. 753), as well as Greece (Access to Information Law, No. 1599/1986), the Netherlands (law of 31 October 1991 on Public Access to government information), and Italy (law of Aug. 7, 1990 No. 241). Portugal and Spain have openness principles written into their constitutions but no lower level legislation to implement them. As for Italy, it has been reported that the law is not yet really applied because the adoption of application rules is required from each administration, and this process will be rather slow. See COMMISSION OF THE EC LEGAL ADVISORY BOARD; PUBLAW COUNTRY REPORTS, JANUARY 1991, TO THE EC DIRECTORATE GENERAL XIII; COMMISSION OF THE EC LEGAL ADVISORY BOARD, PUBLAW 2 FINAL REPORT EUROPE, A REPORT TO THE COMMISSION ON AN EVALUATION OF THE IMPLEMENTATION OF THE COMMISSION'S GUIDELINES FOR IMPROVING THE SYNERGY BETWEEN THE PUBLIC AND PRIVATE SECTORS IN THE INFORMATION MARKET (1993).
Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. This article shall not prevent States from requiring the licensing of broadcasting, television or cinema enterprises.\textsuperscript{41}

If the right of access can be considered to constitute a kind of fundamental human right, then the recommendation may be treated by the European Court as a source of general principles of law and gain importance for the shaping of the Community concept of fundamental human rights.\textsuperscript{42} However, the prospects for such a development are at present highly uncertain.

\textbf{D. Summary}

In a Swedish perspective, the laws on openness in the EC member countries are weak, of recent origin, and of uncertain practical significance. Recent studies performed within the EC confirm these observations. Above all, there is no widespread tradition of openness and it is uncertain to what extent openness is actually regarded as an important democratic value by the EC institutions themselves. However, there are signs that the situation may be changing.

\textbf{VI. Recent Initiatives of the European Community}

\textit{A. The Interest Taken in Openness Issues}

One cannot say that so far issues of openness and freedom of information have played any foreground role in the EC. In several areas there are rules on secrecy which have to be adhered to by the member countries. We find them both in the constitutive EEC Rome Treaty of 1957\textsuperscript{43} (Art. 214) and in Community Acts which regulate information usage and confidentiality in specific areas such as control of competition and inspection of banks and financial institutions.

Only one directive exists which deals directly with access rights, namely, a directive of 1990 on the freedom of access to information on the environment.\textsuperscript{44} The directive stipulates a general right of access, including access to information in database form, regarding all kinds of environment information. As for exceptions, the list includes such


\textsuperscript{43} \textit{Treaty Establishing the European Economic Community} [hereinafter EEC \textit{Rome Treaty}].

interests as public security and commercial and industrial confidentiality but it also refers generally to situations "where the request is manifestly unreasonable or formulated in too general a manner" (Article 3.3).

A suggested Council Regulation on the security measures applicable to classified information produced or transmitted in connection with EEC or Euratom activities\(^4^5\) which was tabled in 1992 has later been withdrawn. It has been criticized for going too far and being contrary to ideas about "transparency" which are now gaining strength. A declaration annexed to the Maastricht agreement praises openness and refers to an on-going investigation on increased transparency.

Recently, the Commission has put forward a proposal that openness ought to apply to the Commission itself, the Council of the EC (the Council of Ministers), the Economic and Social Committee and the European Parliament.\(^4^6\) The information seeker does not have to show a legitimate interest in the matter. Openness shall apply to computerized information and copies of documents shall be made available at a low price. The proposal foresees several secrecy exemptions: general security concerns, trade secrets, privacy protection, financial secrets, data which have been transferred from another institution or member country in confidence, etc.

The emerging interest within the EC in openness matters can be said to have three aspects:

- The democratic aspect;
- The harmonization aspect;
- The information market aspect.

The first one involves human rights and democratic values. So far it has been in the background. The harmonization aspect has to do with the possibility that different openness regimes in the member countries can distort trade and data traffic. The third aspect is the one which has dominated so far. It focuses upon the significance of access laws for the establishment of a European internal information services market. In particular, it concerns the so-called synergy between the public and the private sector in terms of access to data, uses of data, and dissemination of data. Thus, to understand the present thinking


\(^4^6\) Public Access to the Institutions' Documents, Communication to the Council, the Parliament and the Economic and Social Committee, COM(93)191 final at 2.
on matters of openness one has to take a closer look at the information market activities.

B. The Development of a European Information Market

The development of a European information market has its own work programme under Directorate General XIII, the so-called Information Market Policy Actions or IMPACT programme, for short. The first IMPACT programme was launched in 1988 and a second one in December 1991. One important concern is to analyze the strengths and weaknesses of the European Information Services Market and to improve the accessibility of information at the European level for all interested parties.47

The programme is organized as a number of “action lines.” One of them is titled “Overcoming legal and administrative barriers.” It aims at “horizontal” studies of the various legal issues of the information market—privacy, intellectual property, liability, proof and authentication, and so forth. It also aims at harmonizing the conditions for opening up electronic information services to the public and to provide the framework for contractual arrangements between the various market actors.

The driving force is the Legal Advisory Board, the LAB, which was originally set up in 1985 and has been active within IMPACT since 1989.48 The LAB is an advisory body of the legal section of Directorate General XIII and assists the Commission in identifying legal problems and suggesting possible solutions. It is composed of independent experts from all the member countries. It has been involved in the preparation of draft EC directives on legal protection of databases and on personal data protection. Both these draft directives are of interest from the openness point of view.

C. The Draft Directives on Protection of Databases and on Protection of Personal Data

Generally speaking, the draft directive on protection of databases affirms copyright protection of databases as “collections of works or materials.” The draft also suggests a new right to prevent unfair extraction, i.e., to prevent the unauthorized extraction or reutilization


48. See Amended proposal for a Council directive on the legal protection of databases, COM (93) 464 final (4 Oct. 1993); Amended proposal for a directive on the protection of individuals with regard to the processing of personal data and on the free movement of such data, COM (92) 422 final (15 Oct. 1992).
from a database of its contents, in whole or in substantial part, for commercial purposes. This right shall apply irrespective of the eligibility of that database for protection under copyright but not where the contents of the database are works already protected by copyright or neighbouring rights.

One situation where this suggested right to prevent unfair extraction is of interest is when materials in a public database are excluded from copyright protection. Briefly, it may be possible to obtain materials under a right of access but the suggested provision on unfair extraction may still prevent that such materials can be used for commercial purposes.

There is also another way in which the draft database directive is of concern from the point of view of access laws. In Article 8, paragraph 1 it is stated that, if the works or materials contained in a database which is made publicly available cannot be independently created, collected or obtained from any other source, the right to extract and reutilize, in whole or substantial part, works or materials from that database for commercial purposes, shall be licensed on fair and non-discriminatory terms.

In paragraph 2 of the same Article it is stated that the right to extract and reutilize the contents of a database shall also be licensed on fair and nondiscriminatory terms if the database is made publicly available by a public body which is either established to assemble or disclose information pursuant to legislation, or is under a general duty to do so. It should be remembered, however, that both compulsory licenses do not apply where the contents of the database are works already protected by copyright or neighbouring rights.

As for the directive on personal data, the general impression is that it creates considerable difficulties for general access laws. Above all, it is to be noted that it does not directly address issues of general access rights and the problems of coordinating privacy protection with these rights. It does, however, bring up the issue of freedom of information in general and leave room for exemptions aimed at protecting the interests of the mass media. Article 9 states:

With a view to reconciling the right to privacy with the rules governing freedom of expression, Member States shall prescribe exemptions from this Directive in respect of the processing of personal data solely for journalistic purposes by the press, the audio-visual media and journalists.

What this may eventually come to mean for the right of access in practice is, of course, difficult to foresee. It is also difficult to appreciate the scope and possible interpretation of several exemptions which in
various ways restrict the protection of privacy. For example, the basic rule states that personal data may only be made available if the data subject has consented. But according to Article 7(e) personal data may also be made available "if processing is necessary for the performance of a task in the public interest" or according to Article 7(f) "if processing is necessary in pursuit of the general interest or of the legitimate interests of the controller or of a third party to whom the data are disclosed, except where such interests are overridden by the interests of the data subject." Another exemption which applies to the obligations to inform the data subjects about disclosures to third parties can be found in Article 14(1)(g) which, among other things, refers to "an equivalent right of another person and the rights and freedoms of others."

There are many other uncertain elements in the draft personal data directive. The main impression is that matters of coordination regarding privacy protection and general access rights ought to have been treated much more explicitly. The fact that this has not been done probably has to do with the weak interest that the EC has so far taken in openness matters.

D. The Question of Synergy

One may say that issues of rights of access have sneaked in through the back-door of the EC. The name of this back-door is "The Synergy Guidelines."49

More precisely, the Commission has issued "Guidelines for improving the synergy between the public and the private sectors in the information market." The document is advisory in nature. It was published in 1989. The purpose of the Guidelines is described in detail in Guideline 1:

Public administrations regularly and systematically collect basic data and information in the performance of their governmental functions. These collections have value beyond their use by governments, and their wider availability would be beneficial both to the public sector and to private industry. Public organizations should, as far as is practicable and when access is not restricted for the protection of legitimate public or private interests, allow these basic information materials to be used by the private sector and exploited by the information industry through electronic information services.50

50. Id. at 7.
The public sector should in principle refrain from commercial exploitation of its data resources. According to the Guidelines there have to exist special reasons for which the public sector might develop and support electronic information services. Some examples are:

(i) where the service is deemed to be essential to the public interest, but the private sector is unwilling or unable to offer it on reasonable terms;
(ii) where it is an inseparable part of public sector tasks;
(iii) where a visibly neutral service, independent of the private information industry, is required.\(^{51}\)

The LAB has investigated the implementation in the member countries of the Guidelines from different points of view. Among other things, the Board concludes that the Guidelines so far have had only modest influence. Actually, it becomes evident that government departments and agencies everywhere strive to be more self-financing as the public sector seeks to reduce debt and contain personal taxation levels. Within this context, says the Board, the public sector has recognized that information is a resource for which there is a demand and which if sold, results in additional income.\(^{52}\)

The LAB’s discussion of rights of access is closely connected with the Synergy Guidelines and with the effort to develop the European information market, i.e., with economic and commercial aspects. Civil rights aspects are not neglected but they are certainly not the main concern. The LAB emphasizes the significance of rights of access for making information sources known, documented and available for commercial uses. However, certain draft texts of the board also strongly recommend that the EC should make efforts to promote openness laws in the member countries. It is still uncertain to what extent the EC institutions will pay attention to the advice of the subject experts that:

Administrative transparency and access to government is as essential an element as data protection for the EEC citizen, bearing in mind that a large part of the data protection principles also rely on transparency. We would therefore extend the current wording of the “Synergy Guidelines” requesting that not only “any pre-existing citizens’ rights of access must be preserved” but demanding, also in view of the Council of Europe’s Recommendation [on Access Rights], that such legislation be extended within the Community.\(^{53}\)

51. *Id.* at 10.
53. Publaw Subject Reports (Drafts Jan. 1991), General Access to Information Legislation 37. The subject report has been prepared by H. Burkert, B. Brauner and T. Klapp of the German Gesellschaft für Mathematik und Datenverarbeitung, GMD-FS.INFOW.
E. A Suitable Framework for the Development of Openness?

The on-going activities within the EC pose the question of what kind of framework is best suited for the further development of access rights in the context of computerized information.

The EC approach emphasizes the significance of rights of access for the development of information services, in particular information services provided by the private sector. The growth of a European information market is the predominant concern. Private sector involvement in public sector information should not be seen as a "contradiction" but as "a supplement to the principle of public access." The strong version of this view is that the right of access should be interpreted as a right of free use. In other words, in order to be effective, access laws must mean that the requested information "be released from administrative control" and that "there should be no initial control of the motive nor any further control after the release." The general idea is that information technology will make it possible to upgrade the information and make it accessible to the citizen in more digestible formats.

This view may be contrasted with the traditional Swedish approach which emphasizes the relationships between the citizen and the State and the transparency of the administration. Openness is a goal in itself and already the awareness that central and local government activities are performed in the sunshine has beneficial effects for democracy in general and public administration in particular. The strong version of this view holds that commercial uses of official recordings are side effects of the right of access which may be tolerated but which ought to be viewed with skepticism. One reason for such skepticism may be that if commercial interests are allowed to play a significant role then it is not unlikely that economic obstacles to access may be created.

VII. A Technology of Insight

A. The Roads to a Knowledge Society

It is important to remember that information technology in itself does not bring about a knowledge society. In fact, perhaps it would be better and sobering to talk about a "sign processing technology." At its best this "sign processing technology" is a technology which en-

54. Id. at 4.
55. Id. at 16, 17.
56. Id. at 17.
hances information availability, information clarity, information quality, and other positive characteristics of a knowledge society. At its worst, it is a technology which hides information, enhances stupidity, complicates information usage, and so forth. It is not a road to a knowledge society. It is a building material for such roads.

General information access laws such as the American FOIA and the Swedish FPA can exploit information technology to reach new levels of openness. But the simple fact that such laws also apply to government computer systems is not enough. The complete structure of the regulation and its aims must be scrutinised. Let me try to illustrate with a few comments what this appears to mean:

1. Coordination of the Norm Complex as a Whole

General access laws are surrounded by regulations on different levels. In the earlier presentation of the Swedish situation mention was made of, for example, rules on the collection of data, deposit in archives, data subjects' access rights, copyright, fees for public services, rules of competition law, and so forth. When information technology is brought into the picture and there is a determination to use it to increase transparency, to facilitate access to official information, etc., then it becomes even more important than before to ensure that the totality of legal norms is coherent and produces the desired effects. In principle, this is nothing new, but information technology tends to expand the dimensions of the tasks in terms of benefits, costs, usage, security concerns, needs for coordination, and so forth. This is one reason why the EC draft directive on protection of personal data can be criticized: it is very badly coordinated with general access laws and the interests of openness in general. It is, for example, absurd that it has been possible even to conclude that public authorities would not be permitted to grant access to their dockets under the rules set out by the draft personal data directive.57

One issue to which I would like to direct special attention involves the level of general access law in the norm hierarchy. In Sweden the right of access is guaranteed in the Freedom of the Press Act at the constitutional level. Few other countries have chosen this solution. It may well be that information technology will stimulate a discussion of the strength of the access interests. The question is are we dealing with a fundamental human right, i.e., an independent aspect of the freedom of speech or of the general freedom of information? Not

least for the development of a legal regime for international data networks this issue is of practical concern.

2. Openness, Usage, and Different Information Channels

From a Swedish perspective one possible advantage of the EC approach to openness issues is that it so strongly emphasizes the significance of general access laws for the development of the information market and their role for achieving an efficient information synergy between the public and the private sector. These are issues which have been rather poorly investigated and discussed in Europe. At least, this goes for Sweden where emphasis has always been on the significance of openness as a democratic right and a constitutional control mechanism.

Since information technology opens radically new possibilities for customizing, packaging, dissemination, etc., I believe that the usage side of openness should be devoted more attention. For example, the idea of the EC Legal Advisory Board to extend the right of access so as to comprise a right of free usage is worth attention. Most likely, a general principle of this sort meets with difficulties and objections. But it points in a direction which is worth exploring. Moreover, there are principles of subsidiarity to be considered: in short, where information may be obtained from one source, other sources do not have to be kept open. For instance, if a local county administration engages a private database host to administer and make available an information service which provides data about its activities, statistics, plans, etc., then it may be argued that it is acceptable that the public can be denied access to the original data in the official files. Of course there are objections related to questions of costs and fees, quality control, possibly unsatisfied needs, etc. But, generally speaking, it appears to be fruitful to expand the traditional openness framework and pay attention to the broader issues of the creation of information resources in society. For such an attempt I find the experiences gained in the U.S. highly valuable. Among other things, the principles set out in the U.S. Office of Management and Budget Circular A-130 ought to be studied carefully by the Swedish lawmakers.

3. The Design and Implementation of EDP Systems

Finally, I wish to return once more to the importance of perceiving openness laws as system design requirements. This is one issue

where Swedish empirical data point unequivocally in one direction: openness is construction work, public authorities which do not in detail and in advance analyze the practical consequences of openness laws and regulations for their computer systems will most likely have difficulties when it comes to carrying out their obligations.

One question is: how detailed standards and design criteria should be set out in a legal form? We are talking about such things as required database modules, automated secrecy assessments, automated registrar functions, etc. The Swedish regulation of public computer systems in Chapter 15 of the Secrecy Act has so far stayed on a rather general level. Suggestions to draw up a special act containing implementation rules has so far been rejected. I consider this to be a mistake.

B. International Concerns: Transborder Data Flows

A number of comments in the foregoing have already been devoted to the special issues connected with international data networks and the rapidly increasing flows of data across national borders. I will try to summarize and elaborate some of these viewpoints.

Traditionally, each country has felt free to apply the kind of openness regime that suited its traditions and political situation. In the future, there may very well be a considerable measure of harmonized rules and common standards regarding access as well as protection and use of information.

Consider the situation, in particular in Europe. The free movement of people, capital, goods, and services is unavoidably accompanied by intensified information exchange in data networks. Information technology also accelerates a general trend which means that public sector and private sector information systems become more and more dependent upon one another and that they sometimes merge into a kind of mixed private and public system. The information systems found in the area of so-called Electronic Data Interchange, EDI, are typical. For example, the Swedish Customs Data System is a mixed system of this kind. In the CDS the functions performed in private firm computers are tailored to the needs of the customs authorities and a private data service bureau functions as an intermediary between the data systems of exporters and importers on the one hand and the data systems of the customs authorities on the other. Generally speaking, such synergies in combination with international data flows increase the interest taken in matters of administrative openness.
Consider also the consequences of differences in national access legislation in a broad sense for competition, not least competition in the field of computerized information services. The EC Legal Advisory Board discusses "distortion of the market." It says:

It is reported from the United Kingdom that government departments and agencies in the United States are incorporating European data into their information products, which they sell at lower costs (using the principle of marginal costing) than European government agencies. Information from sources such as Ordnance Survey maps has been historically obtained for legitimate government purposes, but is subsequently being used in commercial competition with Europe, often undercutting prices charged for European information products.59

Be that as it may, what the remarks show is both that international concerns are being formulated and that the international discussion of access rights may very well be influenced by trade related interests.60 Just as we have the TRIP issues—the trade-related intellectual property issues—in the GATT negotiations, we may have TRAP issues—trade-related access policy issues—in the discussions focusing on international data networks. It is no coincidence that the EC step by step has intensified the interest taken in questions of access rights and that this has come about in connection with the work on the development of a European information market.

As for the doctrines that will govern international data networks, there is still uncertainty. It is not so simple that either there will be a doctrine of openness or there will be a doctrine of administrative secrecy. We have already been into the complex nature of access laws in a broad sense and the different ways in which they may be implemented. The need for harmonization can be discussed at three levels:

- General policies and main doctrines;
- Basic regulation;
- Details of implementation.

As for general policies, the prospects for the acceptance of a basic principle of openness seem favourable. An increasing number of countries are moving in this direction, following the example of the pioneering ones. The EC institutions will probably opt in favour of openness which must be regarded as a breakthrough at the interna-

60. Another example concerns information on companies see Susanne Jones, Obtaining Information on Companies in EC Countries, 8 REFER J. INFO. SERVICES GROUP LIBR. ASS'N 1 (1992).
tional level. Maybe the 1981 Council of Europe recommendation will come to be looked upon as the general standard for all the EC and EFTA countries. It is not too early!61

Basic regulation has to do with such things as secrecy exemptions and with the application of openness rules to computer systems. At this level, the alternatives are only now beginning to be formulated. In Europe, it is probably at this level that there will be controversies and discussions during the next few years. One may compare, for example, the Danish principle of allowing access only to computerized dockets with the Swedish principle of a right of access to all kinds of recordings regardless of the type of information processing of which they are part. In this context, it is also of interest to refer again to the draft EC Database Rights Directive with its compulsory license regarding data kept by public authorities.

Finally, as for the details of implementation, many matters are of no international concern whereas others must be placed under the microscope. Take the question of the unit of information that ought to be the access object in computer systems. Can the Swedish notion of "potential documents" be regarded as the natural, general solution? I am not so certain even if the EC commission seems to have moved in this direction. There will probably be other suggestions for concepts which are less flexible and make it easier for the agencies to define what data are open to inspection. Likewise, the precise wording of various secrecy clauses and other exemptions is problematic. Think of concepts such as "working documents," "financial institutions," and "protection of private life." For the people involved in international data processing systems it will be difficult to live with different meanings and standards. It should be remembered that we are talking not only about rules and concepts to be applied ad hoc when problems arise but about specifications which guide the design and operation of computer systems and data networks.

C. A Cybernetic View of Openness

Finally, why more openness? What does the talk about a "knowledge society" really stand for? In my introductory comments I touched upon the well-known textbook arguments for general access rights: philosophical, ethical, political, sociological. I wish to add some comments on yet another perspective, namely, a perspective

61. The optimistic view, however, does not find support in recent developments within the EC. Thus, the Council has recently adopted Rules of Procedure which do very little to increase openness. See Council decision of 6 Dec. 1993, 93/662/EC.
that is inspired by information science itself, or, more precisely, by systems science and cybernetics—the science of steering and control which was given its name by one of its founding fathers, Norbert Wiener.

As is well-known, society is often discussed and analyzed as a system. James Grier Miller in his monumental treatise, Living Systems, cites a large number of studies in sociology, political science, economics, and so forth that use the system perspective. In Miller's perspective “[s]ociety is a large, living, concrete system with organizations and lower levels of living systems as subsystems and components.”

A basic hypothesis of system theory states that in all dynamic systems, i.e., systems which undergo change, the information subsystems are of critical significance for the total performance.

The simple and intuitive truth is that steering, change, and adjustment in human societies require well-functioning information systems. As for the relative importance of the information systems, some experts maintain that they have to be of a very high quality because of the complexity of modern societies and their environment. Forrester sees risks in what he calls a “drift to low performance” associated with deficient societal information systems. Etzioni notes that the generally low capacity to guide societal processes, especially societal change, can be traced analytically to two major kinds of limitations—to deficiencies in control processes and to the lack of consensus. Miller concludes: “Without accurate information about the current states of societal subsystems and components, optimal guidance and control of a society are not possible.”

One way of stating this need for well-functioning information systems is the principle of so-called “requisite variety.” Briefly, it means that any steering system must be more complex than the system which it purports to steer. All goals, situations and states, and alternative choices, etc., related to the system to be steered must be within what we may call the information range of the steering system. If the information subsystem of the steering system is hampered by a lack of information or by distorted information, then the steering system as a whole will most likely be lacking in requisite variety.

Consider the case of the East and Central European states under communist regimes. Following basic Marxist theory, they regarded themselves as masters of social steering at all levels of society. In real-

63. Id. at 785-86 with further references.
64. STAFFORD BEER, CYBERNETICS AND MANAGEMENT 55, 144 (1965).
ity, there were constant steering crises due to systematic deficiencies in the information subsystems of their steering systems. May it suffice to mention the distortions caused by the communist ideology which forced experts in all possible areas to formulate and analyze problems in awkward, one-sided, and misleading ways (the Lysenko case in genetics is but one example). The final collapse can be seen as the victory of the capitalistic system viewed as a workable information system over the communist system viewed as non-workable.

As for the quality and capacity of information subsystems, access to government data plays a significant role and can be discussed from several points of view. Above all, it is important to understand that there is a need for a high degree of freedom or variation and a need for redundancy. More precisely, these desired characteristics can be translated into measures that have to do with such things as:

- the number of open sources of information;
- the sorts of data that are available;
- the percentage of data that are available;
- the number of organs, etc., to whom the data are available;
- possible distortion of the process of obtaining, interpreting, and disseminating data;
- the possibility of alternative and competing interpretations of particular data which may cancel out distortions, etc.;
- time lags;
- the signal-to-noise ratio in dissemination and communication processes; and
- costs of processing and disseminating data, and so forth.65

The point which I wish to make is (a) that general access laws can be seen not as a democratic luxury to have or to have not but as an objective necessity to prevent societies from decline and destruction, and (b) that information technology not only can but should be used to improve the information subsystems which are associated with the right of access.

These propositions should be seen against the background of the enormity of the problems facing today's societies—environmental protection, traditional armed conflicts, ethnic conflicts, religious conflicts, overpopulation, starvation, unemployment, financial crises—and the thin time margins for developing and assessing strategies and taking decisions.

Thus, when discussing access rights, there are many good reasons to remember the basic information system postulate formulated by system theory. In James Grier Miller's version it reads:

65. MILLER, supra note 62, at 788.
Up to a maximum higher than yet obtained in any living system but less than 100 percent, the larger the percentage of all matter-energy input that it consumes in information processing controlling its various system processes, as opposed to matter-energy processing, the more likely the system is to survive.66

Or to put it more simply:

Know thyself!