

<http://www.cptech.org/at/ibm/ibm1984ec.html>

4. Undertaking given by IBM

3.4.1. Following lengthy negotiations the Commission recently decided to suspend the proceedings for infringement of the Community competition rules which it had initiated against IBM (International Business Machines), as the company had given an undertaking to change its practices in the Community. Here follows the full text of IBM's undertaking:

IBM undertakes in good faith as follows:

1. If IBM first announces a new System/370 product outside the EEC for which it is or will be seeking orders for delivery within the EEC, then IBM will either announce such product within the EEC on the same date as such announcement outside the EEC, or treat that date as if it were the date of announcement within the EEC for the purpose of this Undertaking.
2. On the announcement of a new System/370 product within the EEC, IBM will, upon request, supply in the EEC to any competing undertaking interface information concerning that product in the manner and within the time limits set out hereunder. It is IBM's intention in this Undertaking to supply the interface information necessary to attach and not to supply product design information.
3. If any new System/370 product is not at the time of announcement intended to use a new interface (hardware interface of program external), then IBM will publish this fact at the time of announcement in the EEC and will, upon request, identify the existing interface to be used by that product by reference to the relevant interface information.
4. For all interfaces between or to System/370 hardware products (except unique machine interfaces) and for all interfaces between System/370 CPUs and System/370 software products IBM will supply interface information within 120 days of the announcement of such a product in the EEC or at the date of general availability, whichever is the earlier.

For all interfaces between or to System/370 software products IBM will supply interface information as soon after announcement as the interface has become reasonably stable but in any event no later than the date of general availability.

IBM will continue to publish information concerning unique machine interfaces (as herein defined) in accordance with its present practices.

5. IBM has prepared Appendix A to identify the relevant IBM System/370 interfaces and to describe the relevant interface information which it believes necessary to enable competing undertakings to attach hardware and software products of their design to IBM System/370 products and IBM will implement this Undertaking by supplying that interface information to competing undertakings as set out in Appendix A.

Should Appendix A be revealed as or become deficient in some respect (through omission, change of circumstances or otherwise) IBM will amend or supplement it as required to maintain the effect of the Undertaking for the whole of its duration.

6. If IBM makes a change to an existing interface (hardware interface or program external of an existing release) in such a way that it would make System/370 products attaching to such existing interface inoperable, IBM will disclose the change to any competing undertaking an announcement which shall be sufficiently in advance of general availability to permit such undertakings to make the necessary adjustments in products so attached. Also, if IBM makes a change to the additional information supplied in lieu of program externals for the purpose of attachment, and the change causes an attached product to become inoperable, then IBM will, on request, either supply the changed information or provide sufficient assistance to make the attached product operate.

7. IBM will produce in timely fashion specific interface information to fulfill its obligations hereunder. IBM has no obligation to respond to requests for interface information before the expiry of the relevant time period and upon expiry of that time period has 14 days to fulfill requests in hand. In the usual case IBM will thereafter respond to requests for interface information within 15 days of receipt of request. However, IBM cannot undertake to respond in 15 days to requests which are insufficiently specific or in exceptional circumstances, but in such an event IBM will respond as soon as reasonably possible. IBM

[1] Bull. EC 7/8-1984, point 1.1.1 et seq.

96 Bull. EC 10-1984

will forthwith designate a representative situated within the EEC who will be responsible for receiving requests and providing information pursuant to this Undertaking.

8. Where IBM has supplied interface information pursuant to this Undertaking it will ensure that all competing undertakings who have been supplied with such information will receive details of any corrections or changes without undue delay.

9. Without prejudice to IBM's freedom to design its CPUs, upon the announcement of a new System/370 CPU which is to be supplied within the EEC, IBM will offer within the EEC and, upon application of a customer, will supply that CPU at IBM's option either without any main memory capacity or with only

such capacity of main memory as is strictly required in order that reasonable tests of the CPU can be effected.

10. IBM reserves the right to offer any System/370 CPU with main memory in such other capacity or increments thereto as IBM may determine.

11. For the purpose of the disclosure of interface information pursuant to his Undertaking, IBM will treat the effective date of this Undertaking as if it were the date of announcement of any System/370 product which has been announced but which is not yet generally available.

12. IBM reserves the right to make the supply of interface information subject to certain conditions necessary to ensure the protection of IBM's legitimate interests. Whenever IBM exercises such a right, it may do so in accordance with a written agreement specifying those conditions, as provided for in Appendix B.

13. In providing interface information pursuant to this Undertaking, IBM reserves the right to provide such information either by use of established documentation and related materials (such as source code) or by some other adequate means, including the preparation of new documents containing only interface information.

14. IBM recognizes the widespread interest in interconnecting systems and networks of different manufacturers. IBM favours such interconnections and has published and will publish extensive information about it including formats and protocols which facilitate attachment by competitors of their systems or networks to IBM SNA networks. IBM understands that to the extent that SNA is different from OSI, competitors depend on IBM information to be able to interconnect their products with IBM SNA products. IBM has an interest in issuing information on SNA formats and protocols as soon as

possible and it confirms that it will take all reasonable steps to expedite the availability of the relevant documentation.

Accordingly:

(a) On announcement of a System/370 product that implements enhancements to SNA on System/370, IBM will identify the functions in such products that implement such enhancements. At announcement, IBM will, upon request from interested persons, identify use of existing formats and protocols. Where that product uses enhanced SNA formats and protocols, then subject to paragraph 7, IBM will as soon after announcement as the relevant SNA formats and protocols are reasonably stable and the architecture has been formulated and described or at general availability whichever is the earlier, publish the SNA formats and protocols that implement such enhancements, together with appropriate product documentation, in order to enable attachment of other systems (which may be comprised of multiple products) and networks to IBM SNA networks.

(b) IBM will update the IBM SNA formats and protocols manual by the following:

(i) IBM will publish by the end of 1984 such an SNA format and protocol manual that will describe LU 6.2.

(ii) IBM will make available within 60 days of the effective date of this Undertaking a services description manual for LU 6.2 and an SNA format and protocol manual for SNADS. Apart from the foregoing, IBM believes that all essential information regarding SNA has been made available.<

[1] Mr S.A. Medici. Manager of Product Information, Department 1060 , Attention: EEC Undertaking Inquiry, IBM Europe SA. Tour Pascal, Cedex 40, 92075 Paris La Defense - Tel (33.1) 767 60 00.

(c) IBM will identify, in future announcements of the first ACF/NCP or successor products that implement enhancements to SNA not already identified pursuant to paragraph (a), the functions that implement the enhancements. IBM will release software externals for ACF/NCP and successor products on the terms and within the periods set forth for System/370 software products in Appendix A.

(d) IBM has actively participated in international standards efforts in support of open system interconnection (OSI) and will continue its active support of OSI as the standard for interconnecting systems, products and networks of different manufacturers.

15, To permit the determination of malfunction in connection with the products of competing undertakings attached at the interfaces disclosed pursuant to this Undertaking, IBM will, at its option, not later than at the time of general availability, either permit the use of any relevant IBM system diagnostic programs where such exist, or provide information sufficient for a competing undertaking to insert another diagnostic program.

16. IBM reserves the right to make a reasonable and non-discriminatory charge to cover the cost of reproduction and dissemination of interface information supplied pursuant to this Undertaking. IBM

also reserves the right to charge a reasonable and non-discriminatory royalty for the supply of proprietary information protected by any right enforceable at law.

17. IBM acknowledges that it may be necessary for the Commission to determine the extent to which this Undertaking is implemented. For this purpose, IBM will supply such information as the Commission may from time to time request.

18. This Undertaking will remain in force until one year after IBM has given notice to the Commission of its intent no longer to comply therewith or any part thereof or until the Commission takes a Decision against IBM with respect to the subject matter of this Undertaking. Such notice will not be given by IBM before 1 January 1989.

19. This Undertaking and all correspondence, memoranda or discussions with respect thereto) is made without prejudice and may not be used in any way by IBM or the Commission in this or any other proceeding and does not constitute in any way an admission by IBM or the Commission.

It is fundamental to this Undertaking that it shall not be enforceable by any other natural or legal person or any national authority or agency. IBM understands and asks the Commission to confirm that the Commission will rely exclusively upon Articles 85 and 86 of the Treaty and not upon this Undertaking in this or any other proceeding.

20. Definitions

(a) ANNOUNCEMENT: the commencement of marketing activity concerning a new product or an existing product with a new or modified interface including the acceptance of orders or the communication to customers of information concerning the new product but excluding:

(i) information communicated to a small number of selected customers reasonably necessary for the purpose of essential testing of such product;

(ii) occasional product disclosures or bids made for purposes of national security or to facilitate planning of future complex installations;

before such product is otherwise offered for sale or lease.

(b) ATTACHMENT; the ways and means, used or designated by IBM as a reasonable alternative, by which products work together and communicate with each other either physically or logically or both, and in particular:

(i) between or to hardware products, the logical, physical and electrical or other means to allow the products to work together and communicate with each other;

(ii) between two software products, the logical means for them to work together (normally program product externals) or to communicate with each other (formats and protocols);

(iii) between a CPU and a software product, the logical means designed by the instruction set for the software to execute.

(c) CENTRAL PROCESSING UNIT (CPU): that part of a computer system primarily responsible for interpreting, storing and executing instructions and controlling the functioning of the various products that make up the system.

(d) COMPETING UNDERTAKING: any undertaking established in any Member State of the EEC which:

(i) directly engages in research, development, manufacture or marketing in the EEC of a product which attaches to a System/370 product, and;

(ii) develops or manufactures products of the type for which it request information hereunder; and

(iii) is willing to accept, by written agreement or otherwise, conditions necessary to ensure IBM's legitimate interests (including reciprocal obligations where applicable) and obligations to pay legitimate fees and royalties as contemplated in this Undertaking concerning the supply of interface information.

(e) GENERAL AVAILABILITY: the date on which IBM first delivers a new System/370 product to any customer pursuant to an order made after the announcement of such product but excluding the

delivery of the product to a small number of selected customers reasonably necessary for the purpose of the essential testing of such product.

(f) INTERFACE: the logical and, where appropriate, physical interconnection and interaction between or to System/370 products which enables the products to function together in all the ways such products are intended to function.

(g) INTERFACE INFORMATION: a description of that portion of the interface of a System/370 product sufficient to enable a competent professional skilled in the art to attach a product of his design to an IBM System/370 product.

(h) MAIN MEMORY: the directly addressable storage part of a computer system from which instructions can be read and from which operands can be read or written by instructions in the instruction set.

(i) OPERATING SYSTEM: basic software which controls the execution of computer programs and which may provide services for the proper functioning of the system, such as resource allocation, scheduling, input/output and file management and error handling.

(j) SYSTEM/370 PRODUCTS are:

(i) CPUs capable of executing the instructions (or any substantial part thereof) of the instruction set specified in the System/370 principles of operation current at 1 January 1977 as extended by any successor document;¹

(ii) Hardware products (including input/output devices, terminals and control units) attached to any such CPUs and operating under the primary control of an operation system running on the System/370 CPU;

(iii) Channels or main memory where they are not integrated as part of the CPU but offered by IBM as a separate product;

(iv) Operation systems and software products which execute on (that is to say, function properly with) any System/370 CPU.

System/370 products are not:

(i) Spare parts or replacement parts used for repair and maintenance;

(ii) Parts supplied for model upgrades or features.

(k) UNIQUE MACHINE INTERFACE: any interface between two specific machines, or any interface which is designed for the attachment of a single machine function.

[1] Currently available CPUs such as 43XX, 308XX would be included in this definition. Currently available CPUs such as System/36, System/38, Series/1, 8100, IBM personal computer, would be excluded from this definition.

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The term does not include any CPU or operating system interfaces.

INTERNATIONAL BUSINESS MACHINES CORPORATION

Date: 1 August 1984(signed):

NICHOLAS deB. KATZENBACH

Senior Vice-President and

General Counsel

Appendix A

1 August 1984

Release of technical information on IBM System/370 products

to competing undertakings within the EEC

I - CPU to software interface

The IBM System/370 CPU to software interface is that which exists between a System/370 CPU and an assembly language program. Information will be provided to permit the attachment of assembly

language programs which will run on a CPU implementing the IBM System/370 principles of operation; or the attachment of a CPU designed in accordance with the IBM System/370 principles of operation to an IBM System/370 assembly language program.

The following existing documents contain the information required by this section. They are examples of the type of information which will be provided for extensions or changes to the IBM System/370 principles of operation:

(i) IBM System/370 principles of operation manual;

(ii) Channel OEMI manual;

(iii) Machine assists published as companion documents to principles of operation;

(iv) Processor functional characteristics manual published as companion document to principles of operation;

(v) Channel characteristics manual.

Information required by this section normally will be contained in a principles of operations manual and related architectural documents for each System/370 CPU. These documents will be available within 120 days from the date of announcement within the EEC (or not more than 15 days after general availability within the ECC, whichever is earlier) of that CPU.

II - Software interfaces

IBM System 370 software interfaces are contained in program externals.

Program externals are that set of copyrighted documentation made generally available to customers to enable them to use a program effectively. Externals documentation describes the function visible to the customer in sufficient detail to permit effective use of the function without describing design or implementation details of a specific realization. It will permit the design and preparation of programs which will work in conjunction with the IBM software.

Externals documentation for IBM System/370 software products is generally supplied in 'G' end 'S' series manuals. Software externals documentation for an IBM System/370 product will be released as soon after announcement as the interface has become reasonably stable but in any event no later than the date of general availability of the product within the EEC.

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Where such documentation may be inadequate or not well-defined or may not adequately describe a means of working with such IBM product, IBM will upon request provide such additional information as is reasonably necessary to enable customers and other vendors to attach their existing or future software products to IBM externals provided for that purpose.

III - Multiple machine interfaces

A System/370 multiple machine interface is designed to permit the attachment of a broad range of IBM and non-IBM machines to IBM System/370 systems, irrespective of machine function. An important interface of this type is the System/370 CPU channel to control unit interface. Information will be provided to allow the attachment of an product to a IBM System/370 multiple machine interface.

The following existing documents contain the information required by this section. They are examples of the type of information which will be provided for new multiple machine interfaces or for extensions or changes to existing interfaces:

(i) IBM System/370 channel to control unit OEMI:

(ii) Channel characteristics manual;

(iii) IBM System/370 direct control and external interrupt OEMI

Information required, by this section normally will be contained in an OEMI manual for each multiple machine interface. The OEMI for the System/370 CPU channel to control unit interface will be available within 120 days from the date of announcement within the EEC (or not more than 15 days after general availability within the EEC, whichever is earlier) of any product providing or using that interface. The OEMI manuals for other multiple machine interfaces will be available within 120 days from the date of announcement within the EEC (or not more than one month after general availability within the EEC, whichever is earlier) of any product providing or using such interfaces. In addition, maintenance documentation and other product description manuals will be available at general availability within the EEC.

IV—Unique machine interface

A System/370 unique machine interface is any hardware interface other than a multiple interface, i.e. one which exists between two specific IBM machines, or one which is designed for the attachment of a single machine function, such as attaching disk files to a controller. Any interface directly from a CPU to a control unit, device, or any other hardware unit is not a unique interface but will be treated as either a multiple machine interface or an integrated adaptor to device interface.

IBM generally does not create or publish interface information manuals as such for unique machine interfaces. Technical information covering these interfaces may be found in the maintenance documentation of both products and in certain supplementary documents.

The following existing documents are examples of what is provided under this section:

(i) Functional characteristics manual for control unit and device;

(ii) Users guide for control unit and device;

(iii) Maintenance library manuals for control unit and device;

(iv) Product attachment information supplementary documents, when provided.

These documents will be available not more than one month after general availability within the EEC of the products using that interface.

V - Integrated adaptor to device interface

A System/370 integrated adaptor to device interface is the machine interface between a specific System/370 I/O device and its control function which is physically within the covers of a System/370 CPU.

Information will be provided to allow the attachment of a product to the IBM System/370 integrated adaptor to device interface.

An OEMI manual will be published for each System/370 integrated adaptor to device interface. It will be available within 120 days of the date of announcement within the EEC (or not more than 15 days after general availability within the EEC, whichever is earlier) of any product providing or using that interface. In addition, maintenance and device description manuals are available at general availability.

Appendix B

1 August 1984

Outline for information disclosure agreement

IBM may require that competitive undertakings agree to the following conditions:

1. Requester must represent and upon request provide satisfactory evidence that (i) it is established and doing business in the EEC; (ii) it is a company which develops and manufacturers products of a relevant type for which it asks interface information.

2. Limitations on disclosure to third parties:

- (i) Agreement not to disclose to third parties prior to general availability anywhere other than confidential disclosure to employees or subcontractors.

(ii) Subcontractors may be required to sign same agreement.

3. Any competing undertaking seeking interface information from IBM must be prepared to disclose corresponding information to IBM on the same terms. Therefore:

(i) if a competing undertaking has requested IBM to supply interface information in order to develop, manufacture or sell a System/370 product which implements that interface, and

(ii) if such product is designed or modified to implement a non-IBM interface,

(iii) then IBM may request the competing undertaking to disclose any such non-IBM interface to the same extent and on the same terms (*mutatis mutandis*) as IBM makes disclosure to the competing undertaking.

4. Licenses and royalties:

(i) Externals license, including appropriate license fee.

(ii) IBM's normal license agreement and established license fee for copyrighted programs.

(iii) Other proprietary information protected by any right enforceable at law - a reasonable royalty based on usage.

5. No Waiver of patent rights.

6. Source code, if provided, will be subject to 'restricted materials' provisions of IBM's standard program license agreement. Ability to inspect competitor's source code to ensure no copying if competitor subsequently markets software with similar functions.

7. Commitment to pay reasonable costs for reproduction and dissemination of information.

8. Penalties for breach of such agreement or of any IBM patent, copyright for IBM products as provided by applicable law.

3.4.2. On 1 August, in response to the undertaking given by IBM, Mr Frans Andriessen, Member of the Commission with responsibility for competition policy, sent the following letter to Mr Nicholas deB. Katzenbach, Senior Vice-President and General Counsel of IBM:

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'Following your undertaking dated 1 August 1984 concerning IBM's future behavior in the matter of interface disclosure and memory bundling, I can inform you that the Commission has decided to suspend the proceeding initiated on 6 December 1980.

Furthermore, you may be assured that the Commission will not seek to reactivate the suspended proceedings so long as IBM's implementation succeeds in giving substantial satisfaction. You will appreciate nevertheless that the suspension of a particular proceeding cannot preclude the Commission, as a public authority, from terminating this suspension or from initiating a new proceeding in respect of IBM's conduct. Should the Commission reactivate the suspended proceeding it will rely

exclusively on Articles 85 and 86 of the Treaty, and not upon your undertaking, in this or any other proceeding.

You will readily acknowledge that the effect and implementation of IBM's undertaking must be kept under constant review by my services. Apart from other action, I have instructed my services to call a meeting annually to take stock of the implementation of your undertaking and its effects. If need be, adjustments will then be discussed. The essential purpose of your undertaking is to provide necessary interface information and we shall welcome close cooperation with you to carry this out. The way in which this is done will be important and the spirit of the undertaking should prevail over the letter of particular examples or particular phrasing.

During the discussions my services indicated that we would have to make a formal reservation about paragraph 6 of Appendix B. The inclusion of that paragraph should not be taken as acceptance by the Commission of IBM's policy on source code, which is currently under scrutiny by my services, as you know.

Your undertaking is in a market context where many users and other manufacturers are planning to implement standards based on open systems interconnection. In exercising its responsibility for the EEC internal market and with the agreement of the Member States, the Commission actively supports this development. For this reason, paragraph 14 cannot be read as a recognition of SNA as playing a role in Community standards policy.'

