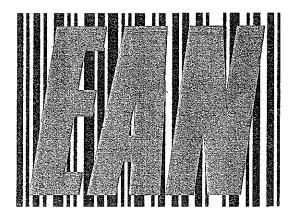
INTERNATIONAL ARTICLE NUMBERING ASSOCIATION E.A.N.



ANNUAL REPORT 1988

RUE DES COLONIES 54 KOLONIENSTRAAT 1000 BRUSSELS TEL.: 02/218.76.74

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INTRODUCTION

The international article numbering standard has had a dramatic impact on business worldwide. Without a standard identifying product numbers so many of the techniques and systems now in place in modern companies would have been very difficult, if not impossible, to implement.

The strength of international article numbering is that it is an open standard. It can be used by all companies. This openness is thanks to one principle that the codes must identify and must not classify.

And using identification codes in a non-significant way means that they can work for any type of company. This is the reason why standard article numbering spreads rapidly and readily from the grocery sector to general merchandise.

At its General Meeting of May 1988, the International Article Numbering Association, EAN, redefined its domain of activity to encompass products and product sectors in the widest sense.

Developments in the various member countries show that new sectors are interested in EAN. Examples are: the building industry, the bulk paper industry, hospitals and the pharmaceutical industry in general.

The non-significant, pure identity codes provided by EAN are the only way that this breadth of application is possible.

But pure identity codes are not always enough. The expansion into drugs, paper and packaging has shown that there is a real need to show information such as batch numbers, production line numbers and dates in bar code form. Even in the grocery sector, more stringent product liability laws are creating a need to control batch numbers more tightly.

The International Article Numbering Association has responded to this development by producing standards for "supplementary encodations". This does not alter the basic principle of non-significant identity coding but provides an additional facility which allows information too changeable to be held in computer files, and which must not clutter the pure identity codes, to be show in machine readable format.

These supplementary encodations will enhance the utility of the system to current users and make EAN even more attractive to a broad range of industries beyond the consumer goods sector.

EAN is accepted as the worldwide standard for product numbering in inter-company trade worldwide. The benefits of standard article numbers in communications and as bar code symbols on physical units are enormous. The vast number of EAN users together with the EAN's track record of success will ensure that the rapid expansion will continue.

With Colombia and Peru joining EAN at the end of the year, the International Association now spans 42 countries: 40 as fully affiliated organizations and 2 through links with neighbouring countries. In total more than 100,000 companies participate in the EAN system through the network of the EAN Numbering Organizations. By the end of the year, approximately 78,000 stores in EAN countries were using scanning at the point of sale, which means an increase of 150 % during the year! The predominance of Japan with an estimate of 60,000 scanning stores is still obvious but 12 other countries passed the + 500 mark. Another interesting feature is the expansion of EAN scanning stores to department stores and general merchandise outlets. When excluding Japan - for which we have no detail figures per 31 December 1988 - we find that over 20 % of all EAN stores are either department stores or non-food speciality shops.

A synopsis of the year's activities in each member country and the EAN statistics as of 31 December 1988 are given in the Appendix.

(Excerpts from: "EAN: A multi-industry standard" - A.T. OSBORNE - EAN NEWSLETTER Nr. 15).



GENERAL ASSEMBLY

The Annual General Meeting of EAN was held in Tokyo on 20 May 1988.

The General Assembly approved the annual report 1987 and the accounts 1986/1987 as well as the budget and the activity programme for 1988/1989. The Assembly was informed of the activities of the Executive Committee, of the implementation of the system in member countries and of the cooperation between EAN and UCC.

An "Internal Regulation for the EAN Presidency and Vice-Presidency", setting the rules and conditions for the nomination and election of future Presidents and Vice-Presidents, was approved.

This was the last General Meeting with Albert HEIJN presiding. Mr. HEIJN, who had been President since the start of EAN in 1977, retired after leading the Association throughout its history of successes. He was unanimously elected Honorary Founder President of EAN.

Jean COLLIN, Chairman of the Board of Directors of Campbell Europe Food & Confectionery N.V. in Belgium, was elected new President. Mr. COLLIN was previously Vice-President of EAN. Mr. Roland FAHLIN, President of ICA Ltd in Sweden, was elected Vice-President of the Association.

Three new members were accepted into the Association at the Meeting, bringing the total number of countries represented to 40. These three were: the Korea Distribution Code Center (South-Korea), the Thai Product Number Association (Thailand) and the Malaysian Article Numbering Council (Malaysia).

The General Assembly was informed of the main topics dealt with by the Technical Sub-Committee. The Assembly recognized the need to progress quickly towards standards for supplementary encodations. These standards will enable information over and above product identity, such as dates and batch numbers, to be shown in barcode form. The General Assembly conferred its decision power regarding this issue on the Executive Committee.

The General Assembly considered that the general principles of article numbering and symbol-marking as defined in the "Memorandum of Agreement

on the Formation of EAN" had served their purpose well, but that the system had developed and changed so that a new agreement on the basic principles was needed. The domain of application of EAN was therefore enlarged and redefined as follows:

- The international numbering system must, in the interest of trading companies, facilitate communication, data collection and exchange of information.
- It must make possible the identification of items, defined in the widest sense including non-saleable items (for example pallets) and items which have no physical existence (for example services), provided that the items so identified can be pre-defined and have a continuing existence.
- It must be extended to encompass other information additional to item identification in a separate series of codes which will supplement the item identification without interfering with it or disrupting it in any way.

The Regional Working Parties and the Working Party "Communications" presented their progress report.

Finally, the General Assembly confirmed the role of EAN in the international harmonization of national DPP projects and agreed that the EAN proceedings in this respect should be coordinated with those conducted by CIES.

Apart from this Ordinary General Meeting, the postal vote procedure was used in October 1988 to decide about the application of the "Instituto Colombiano de Codificacion y Automatizacion" (abbreviated to IAT) in Colombia and the "Asociacion Peruana de Codigos" (abbreviated to APC) in Peru. Thanks to the unanimous vote of the General Assembly members, the organizations of Colombia and Peru can benefit from EAN membership from early 1989 onwards.



EXECUTIVE COMMITTEE

The Executive Committee met two times:

- * In Florence on 18 March 1988
- * In Oslo on 28 October 1988.

As in previous years, one of the main tasks of the Executive Committee was to examine the reports of the Sub-Committees and of the Working Parties and to propose guidelines based on their conclusions.

The following issues were also dealt with by the Executive Committee in the course of 1988:

- Preparation of all matters for submission to the General Assembly.
- Examination of applications for EAN membership and allocation of prefixes to new member countries.
- Reports on contacts with potential member countries.
- Official languages of EAN: From 1 January 1989 onwards, English will be the only language for EAN documents (with the exception of some legal documents and general information leaflets).
 In Executive Committee and General Meetings, members can express themselves in English, French, German or Spanish but simultaneous translation facilities will be limited to English only.
- Supplementary encodations: In its October meeting, the Executive Committee agreed on the keypoints of the future "EAN/UCC-128 specifications for numbering and symbol-marking supplementary encodations". Given the extreme urgency of these specifications, the Executive Committee conferred its decision power on the Technical Sub-Committee for completion of all technical details. This will permit the final EAN specifications for supplementary encodations to become official by February 1989. As soon as these solutions become available, EAN will start a press and information campaign with all sectors of trade and industry.
- Free exchange of "variable weight manufacturer numbers": The Executive Committee agreed that, while an international solution for coding variable weight products is being made available, Numbering Organizations should agree to allocate "variable weight manufacturer numbers" for coding branded variable weight goods, free of charge, when foreign exporting companies are concerned.
- Release of the D-versions: Since the need for extended coding was recognized in various applications (eg. for the international coding

- of variable weight products), the Executive Committee gave mandate to the Technical Sub-Committee to make the necessary investigations on the D-coding versions.
- The coding of pharmaceutical products: The Executive Committee made the following recommendation: When approaching the national bodies (governments, associations, etc..) in charge of the administration of pharmaceutical products, Numbering Organizations should firmly encourage these bodies to apply the straight (i.e. non significant) EAN coding rules. Then, the EAN code can meet its real purpose, i.e. serve as a unique and unambiguous key to access the detailed information about the product, such as for instance significant codes assigned by governmental or nongovernmental bodies. The EAN Secretariat will defend the same principles in its contacts with International Associations in the health sector.
- International coordination of the coding of generic products: The Executive Committee agreed that it would be extremely difficult to achieve international coordination for products sold in variable quantity. As far as generic products sold by fixed quantity are concerned, possible solutions could be looked at together with international federations, representative for a given sector of industry, providing that these federations are willing to set up and maintain an international catalogue of standard numbers for their sector and providing their numbering systems fit within the EAN system.
- EAN and DPP: The EAN Association will continue to follow up the development of national DPP models and the harmonization of these models at European level, in close collaboration with the CIES.



SUB-COMMITTEES OF THE EXECUTIVE COMMITTEE

* GENERAL PURPOSES & FINANCE SUB-COMMITTEE

Membership:

Messis. A. HEIJN (till June 1988)

J. COLLIN

R. FAHLIN (from July 1988 onwards)

K. HAGEN

J. OLSEN.

The General Purposes & Finance Sub-Committee has the following principal objectives:

- To advise the Executive Committee on financial matters.
- To review the performances of the General Secretariat.
- To advise the General Secretary on the preparation of input to the Executive Committee meetings on non-technical matters.

The General Purposes & Finance Sub-Committee met three times in 1988.

Apart from the financial issues, the Sub-Committee dealt more specifically with the following items:

- Hiring of a technical executive at the Secretariat
- Role of EAN in DPP.
- Production of a new EAN Video.
- Final recommendation on the official languages at FAN
- EAN/UCC relationship.
- SOGITS, the EEC guideline for the normalization of barcodes.

* TECHNICAL SUB-COMMITTEE

Membership:

Messrs. E. BOONET - Chairman

M., LAPLANE - Vice-Chairman

Mrs. T. ANG

T. ANGUE (GENCOD)

Messrs. B.C. ENGBERG (CCG)
A. HUSI (Consultant/SACV)

G. IZARD (AECOC)

A.T. OSBORNE (ANA-UK) B. PASSAD (EAN-Sweden)

R.M. PEARCEY (SAANA)

G. VISZKEI (HCC)

H. JUCKETT (UCC)

The Technical Sub-Committee met five times during the year.

The main tasks of the Technical Sub-Committee are:

- To deal with all matters in the technical domain, which need detailed investigations or studies, submitted by the Executive Committee or via the General Secretary.
- The elaboration of technically feasible solutions regarding the applications of the UPC/EAN system and its extension into new domains.
- Preparation of all matters going to ESTAC.
- Advice or recommendations to the Executive Committee in technical matters.

During 1988, the proceedings of the Technical Sub-Committee were mainly dedicated to the following matters:

- * UPC/EAN systems development: During the last few years the EAN system has been extended to a more complex and comprehensive system covering almost all aspects of trade and industry. At several meetings, the Technical Sub-Committee discussed the future systems development and various related issues, such as symbol dependence and the need to define a standard interface between the reading and decoding system and the user's application system.
- * Supplementary encodations: Specifications for supplementary encodations (eg. date codes, batch numbers, consignment numbers) are an essential complement of the existing article numbering and symbol-marking specifications.

The need for supplementary encodations has been expressed by a great number of sectors. Some of the demands were for an open standard scannable by all parties in the trading chain. Others were for internal information, to be scanned by the company applying the symbol.

After a thorough investigation of various symbol-marking technologies, CODE 128 was selected as the symbology for supplementary encodations. EAN and UCC launched a common "CODE 128 test/verification programme" to demonstrate the efficacy of the proposed standard by simulation testing replicating key aspects of the intended scanning environment. An independent consultant was appointed to conduct the test/verification programme.



The tests performed on 566 different test symbols proved CODE 128 was an appropriate symbology for supplementary encodations. Apart from the basic attributes of CODE 128 - i.e. CODE 128 is a very reliable and compact symbology, allowing variable length and alphanumeric data to be encoded - it was considered an attractive symbology to the EAN/UCC community:

- first because CODE 128 is a new symbology and not yet widely used in other applications;
- secondly because AIM agreed to allocate the exclusive use of "Function Code 1" of CODE 128 to EAN/UCC. Any CODE 128 barcoded information carrying this Function Code can thus be uniquely identified as EAN/UPC encodation.

EAN and UCC already agreed the data content for a number of supplementary encodations, namely: various combinations of dates and batch numbers, product variants, free formats for internal use and the serial shipping container code. Each of these applications is being identified by means of a two-digit numeric prefix called "the application identifier".

In December 1988, the Technical Sub-Committee discussed the "Draft EAN specifications for numbering and symbol-marking supplementary encodations". They were officially released at the end of February 1989.

- * Review of the EAN Specifications: At each meeting of the Technical Sub-Committee, members reviewed the list of pending matters and issues to be further investigated.
- The objective was to conclude to a practical recommendation for each of these issues. These included: magnification of ITF symbols, location recommendations for pallets, ITF on curved surfaces, printability testing, EAN symbology solution for the variable quantity add-on and the further update of the general EAN Specifications.
- * International solution for the coding of variable weight products: EAN and the Numbering Organizations are increasingly confronted with requests for international solutions for the coding of variable weight products. The Technical Sub-Committee examined possible coding solutions, especially for variable weight consumer units branded by manufacturers and exported variable weight products, based either on the D-3 coding version or making use of a CODE 128 supplementary.
- * The Technical Sub-Committee also discussed the following issues: the international coding of fixed weight generic products; the coding of return tickets at automatic bottle return processing machines; SOGITS the EEC "Senior Officials' Group Information Technologies Standardization"; the UPC Marking Guidelines for General Merchandise and Apparel.

WORKING PARTIES

* COMMUNICATIONS

Membership:

Messrs. E. BOONET - Chairman Mrs. T. ANGUE (GENCOD)

Messrs. P. DOBIAS (CCCI)

N. FENTON (ANA-UK)

P. FRANZMAIR (EAN-Austria)

P. MUNSTERMAN (STICHTING UAC)

B. PASSAD (EAN-Sweden)

K. SCHULTÉ (CCG)

R. SCHUBENEL (SACV)

H. JUCKETT (UCC)

The objectives of the Working Party "Communications" are the following:

- To support the EDIFACT standards.
- To follow up the EDIFACT/UNECE WP4 proceedings and documentation.
- EAN interpretation and user documentation on EDIFACT.
- Development of "EAN subsets of the UNSM's" (UN Standard Messages) for use in the international communication amongst EAN users and for use at national level in EAN member countries which decide to adopt EDIFACT as their national communication standard.



- Contacts and cooperation with other sectors and organizations (such as ODETTE, CEFIC, IDEA), with the national trade facilitation organizations, and with the operators of value added-networks.
- Participation in the relevant EEC programmes.

The Working Party met at several occasions with the objective to prepare, assess and coordinate EAN's participation in the international UNECE and EDIFACT proceedings and to prepare the EAN-TEDIS meetings. In the second half of the year, the Working Party, enlarged by experts from other EAN member countries, mainly concentrated on the development of the "EAN subsets of the UNSM's".

Participation of EAN in the EDIFACT proceedings

For approximately two years, EAN has been participating in the UNECE-WP4 proceedings. In addition, EAN is now a fully recognized member of EDIFACT and receives systematically all invitations to participate and contribute to the various levels of the EDIFACT work.

Important for EAN is to take part in the most relevant meetings, which for the moment are:

- EDIFACT Board.
- EDIFACT Steering Committee.
- UN/EDIFACT Joint Rapporteur's meetings.
- Message Design Group "Trade" (MD1).
 TEDIS meetings on specific issues: security, legal aspects, ...

The EAN - TEDIS project

Since June 1988, the international EAN-EDIFACT project called "EANCOM", is also a recognized EEC-TEDIS programme.

The objectives of TEDIS (Trade Electronic Data Interchange Systems) are:

- To avoid a proliferation of close trade EDI systems and the widespread incompatibility which this entails
- To promote the creation and the establishment of trade EDI systems which meet the needs of the users, in particular small and medium-sized enterprises.
- To increase the awareness of the European telematic equipment and services industry to meet

user's requirements in this area.

 To support the common use of international and European standards, where these exist, and in particular the recommendations of the UNECE with regard to international trade procedures.

TEDIS' coordination action mainly consists in:

- * Providing logistic support.
- * Participation of an EEC expert in the EAN-TEDIS meetings.
- * Encouraging mutual exchange of information between working parties set up within the other sectorial projects (eg. ODETTE, CEFIC, ...) on the following subjects: telecommunications, electronic commercial messages, legal aspects, security, confidentiality.
- * Taking into account the specific requirements of the EDI user communities in the preparation of EEC policies with regard to telecommunications and standardization.

On 22 June 1988, the first EAN/TEDIS meeting was held on the premises of the EEC in Brussels. Apart from delegates from Numbering Organizations and the EEC, representatives of companies from Belgium, the Netherlands, Norway, Denmark, Italy and Spain attended the meeting.

This first EAN/TEDIS meeting was mainly devoted to the presentation of the TEDIS programme, of the EDIFACT procedures and the future plans for the "EANCOM" project. Numbering Organizations (EEC and EFTA member countries) were asked to look for companies volunteering for an international test of the EAN/EDIFACT messages.

The second EAN/TEDIS meeting was held on 28 September 1988. Again the meeting was well attended. The main part of this meeting was devoted to the "EAN Subset of the UNSM Commercial Invoice" and the preparation of international trials of this subset. Approximately 10 companies declared themselves willing to participate in a test of the invoice, while at least 10 companies would be willing to participate in a test of the purchase order message.

In November 1988, the EAN Secretariat made available the first version of the "EANCOM Manual" including:

* Description of the EANCOM project.



- * Explanation of the EDIFACT syntax.
- * EAN subset of the EDIFACT "Invoice message".
- * EAN subset of the EDIFACT "Purchase Order Message".
- * The segments directory; the data elements directory; the code sets directory.

Interconnection of the VANS

On 20 December 1988 in Brussels, the EAN Secretariat met representatives of the four major "VAN" suppliers (VAN = Value Added Network). These are: GEISCO, IBM, INS and HONEYWELL BULL. The main purpose of this meeting was to discuss and investigate the possibilities of interconnecting the different networks. Technical aspects, contractual agreements, security, confidentiality and cost distribution were the major issues discussed. These issues are of crucial importance for the further implementation of the EANCOM project.

Participants reached the following conclusions:

- The interconnection of the VANs can be envisaged if and when a sufficient market demand will arise.
- EAN is not expected to interfere in the purely technical aspects of the interconnection.
- On the other hand, EAN should define its requirements with regard to security and confidentiality.
- Short term needs (for example in the framework of the pilot trials of the EANCOM project) will be solved case by case, depending on the user's situation.

* REGIONAL WORKING PARTIES

As in previous years, the task of the Regional Working Parties mainly consisted in creating awareness and interest in potential member-countries and helping these countries to join EAN. The three Regional Working Parties are:

- Asia/Pacific Working Party

Membership:

Messrs. E. BOONET - Chairman

K. ASANO - DCC

B. SMITH - APNA

B. HOUSTON - NZPNA

M. CATIC - Malaysia.

Members of the Working Party addressed seminars and conferences in various Asian countries, thereby contributing to the awareness and interest in the EAN system in this part of the world.

In July 1988, Mr. E. BOONET together with the President of AIM, organized a two-weeks seminar programme sponsored by the International Trade Center of the UNCTAD/GATT, concerning "EAN and packaging" in four major cities of the Peoples' Republic of China. The seminars took two days each. Participants were from Chinapack, the China National Export Commodities Packaging Research Institute, the China Institute for Standardization and for Information, Classifying and Coding, as well as from several import/export corporations. These seminars were received with great interest and a real willingness to apply the correct principles from the start. In addition, one of the primary objectives for the P.R. of China should be to improve the quality of packing and printing considerably in order to obtain high quality and well-printed EAN symbols on the packages.

- European Working Party

Membership:

Messrs. E. BOONET - Chairman

P. DOBIAS - CCCI

P. GLATTFELDER - HCC

V. TELEGIN - USSR CCI

During 1988, the EAN Secretariat and the members of the Working Party had various contacts with organizations and companies in Poland, Romania and Bulgaria, which are the only European countries not yet member of the EAN Association.

- Central and South-American Working Party

Membership:

Messrs, E. BOONET - Chairman

L. CAÑAS - CODIGO

L. NOVAES - ABAC

J.M. BONMATI - AECOC.

L. FIÑOL - CIP

Mrs. L. SANCHEZ DE LA VEGA - AMECOP

During 1988, the members of this Regional Working Party pursued their contacts in various Central and



South-American countries. CODIGO, the Argentine EAN Organization, played an important part in the awareness campaign by organizing seminars and inviting representatives of companies and organizations in non-member countries to specialized meetings and conferences in Buenos Aires.

The Regional Working Party met in October 1988 in Sao Paulo to discuss the current membership situation in Latin America, as well as the specific problem areas of this part of the world. In October 1988, the International Article Number Association received the official membership applications of Colombia and Peru. Both these applications were submitted to a General Meeting using the written voting procedure. In addition, the Camara Nacional de Comercio de Chile sent its application during the last days of 1988, and should thus normally become a member of the International Association from 1 July 1989 onwards.

ESTAC

ESTAC, the EAN Systems Technical Advisory
Committee, is the EAN body which establishes liaison
with equipment suppliers. According to the present
structure of this body, any equipment supplier in the
EAN domain can participate in its proceedings.

Cooperation between ESTAC and STAC in the US is essential. Mr. M. LAPLANE, chairman of ESTAC, participated in the various STAC meetings and presented EAN's input on various issues to the North-American partners.

An ESTAC meeting was held on 14 June 1988. Progress reports and equipment related matters were discussed, more specifically in the following domains:

- Supplementary encodations and Code 128.
- D-versions.
- Symbol decoding problems.
- Key-entry of EAN and UPC numbers.

In order to reach a greater involvement and commitment of equipment suppliers in the technical work of the EAN Association, a restructuring of ESTAC is being considered. The discussions initiated during 1988 should lead to a conclusion by the General Meeting 1989.

SECRETARIAT

In 1988, the permanent staff of the General Secretariat was composed as follows:

- Etienne BOONET, Secretary General
- Dominique VERTROOST, Executive Officer
- Henri BARTHEL, Executive in Charge of the Follow-Up of the EAN Systems (since 1 July 1988)
- Peter VANDER AUWERA, Assistant ICOF (till August 1988)
- Linda DE BELDER, Administrative Assistant
- Patricia ROGIVAL, Administrative Assistant
- Linda VAN ROOSBROECK, Administrative Assistant.

The General Secretariat was in charge of:

- Every day administration of the Association:

- * Correspondence and bookkeeping.
- * Contacts and provision of information.
- * Publications.
- Contacts with and information to new member countries. Contacts with potential member countries.
- Preparation of all EAN meetings:
- * Preparatory contacts and practical organization.
- **Agendas and notifications.
- * Circulation of information related to the agendas.
- * Elaboration and forwarding of working papers.
- * Translation of documents whenever required.
- Writing and forwarding the reports of the General Assembly, of the Executive Committee, of the Working Parties and the Sub-Committees.
- Information to the member organizations by means



- of the internal newsletter "EAN Flash" and circular letters.
- Explanation of EAN rules in case of queries.
- Contacts with third parties PR and marketing.
- Activities in new and non-member countries.
- Organization of surveys within the membership. Etc...

LIAISON WITH UCC

Also in 1988, cooperation with UCC at the various levels of the EAN association was a key issue. EAN and UCC exchanged numerous documents and letters. Mr. H. JUCKETT attended the EAN Executive Committee meetings and took part in the EAN Technical Sub-Committee. Messrs J. COLLIN and E. BOONET attended the UCC Board of Governors meeting while Messrs. M. LAPLANE and A. HUSI represented EAN at the meetings of STAC and various technical committees.

During 1988, EAN and UCC worked on the common development of the following projects:

- EAN/UPC systems development.
- Supplementary encodations and the "Code 128 test/ verification programme".
- Version D-3 enabling guidelines.
- Number system 0 capacity of manufacturer ID numbers and the opening of other number system characters.

The Technical Sub-Committee of EAN examined and

passed its views on various UCC projects and documents, such as the UCC Shipping Container Specifications, the UPC Marking Guidelines for Apparel and General Merchandise and the UPC Serial Shipping Container Code.

EAN and UCC agreed from the start that the project related to Code 128 and supplementary encodations should be run in common with the objective to achieve one worldwide specification in this domain.

At the EAN General Meeting of June 1987, EAN and UCC agreed on an alliance programme, making it possible for companies in EAN member countries that export to North-America, to apply for a UPC manufacturer number through their local EAN Numbering Organization. During 1988, 16 Numbering Organizations participated in the alliance programme and a total of 152 applications were processed according to the alliance principles. Since practice proved that the alliance programme works satisfactorily, it will be continued in 1989.

CONTACTS WITH THIRD PARTIES

Companies and organizations in Algeria, the PR of China, Chile, Hong-Kong, Guatemala, Indonesia, Kuwait, Lebanon, Malta, Mauritius, Morocco, Pakistan, Saudi-Arabia, Senegal, Sri Lanka, Tunesia and Uruguay contacted the General Secretariat seeking either EAN membership or information on symbol-marking their products for export to EAN countries.

The EAN secretariat was contacted by various international associations seeking advice or information for numbering and symbol-marking the products within their sector. These associations were:

AEIH (the European Clothing Federation), IFPI (the International Federation of Phonogram and Videogram Producers), EUGROPA (the Federation of European Paper Merchants and Wholesalers), EUCOMED (the European Confederation of Medical Suppliers Associations) and ODETTE (the barcoding committee of the automotive industry). Members of these various Associations were informed that the EAN system (basic identification + supplementary encodations) can perfectly meet their requirements. Since no sector works in isolation, all sectors of trade and industry will benefit from adopting the common EAN/UPC standards.



EAN had regular contacts with the EEC. Apart from the frequent contacts in the framework of the TEDIS programme, EAN followed the SOGITS (= Senior Officials Group Information Technologies Standardization) proposal concerning barcodes. This EEC-DG XIII standardization mandate, which is now forwarded to CEN/CENELEC, the European Committee for Standardization, comprises the preparation of a generic barcoding standard and the preparation of application standards in priority sectors, such as routing and transport.

Mr. E. BOONET, Secretary General, met Mr. E. VARDACAS, Secretary General of CEN, several times on this issue and provided CEN with full information on the current and future EAN standards. The possibility for EAN to become an "associated body" of CEN or of ISO will be investigated during 1989.

EAN is member and participated in the proceedings of IDEA (International Data Exchange Association) and the Board of the COMPAT Organization.

PUBLICATIONS - REPRESENTATION AT INTERNATIONAL CONFERENCES

During March 1988, the new "EAN Vade-Mecum" was sent to all EAN Numbering Organizations. This document contains the fully updated versions of all official EAN documents, the organizational structure of EAN, memberlists, the "General EAN specifications", EAN reports and recommendations. In addition, the "General EAN specifications" are available for sale to equipment suppliers and international companies, which want to acquire these specifications.

In October 1988, EAN published an "EAN Newsletter" containing membership and scanning statistics for each member country and articles drafted by managers and executives of EAN Numbering Organizations. Over 4,000 copies of the Newsletter were circulated.

EAN initiated the first steps to produce a new "EAN video", which will present a general and up-to-date picture of the EAN system and association as well as

the benefits for the numerous users, worldwide.

During 1988, EAN made presentations at various international congresses and conferences, amongst which:

- COMPAT 88, the Hague (March 1988).
- IRR Conference: "From barcoding to trading communications", Amsterdam (March 1988).
- Third International Packaging Symposium "Recent developments in Packaging", Izmir (May 1988).
- EAN and the Automation Projects in Japan, Tokyo (May 1988)
- EAN Seminar of the European Clothing Federation, Vienna (September 1988).
- LOGISYS Konference, Copenhagen (September 1988)
- EUROLOG Congress "The realities and challenges of European Logistics into the 90's", Milano (November 1988)
- International IBM Seminar "EDI in Distribution", Brussels (November 1988).

DIRECT ALLOCATION OF MANUFACTURER NUMBERS

In 1987, EAN started to implement its policy for the direct assignment of manufacturer numbers to exporters in non-member countries. At present, EAN has allocated such numbers to exporting companies in the Cayman Islands, Chile, Hong-Kong, India, Indonesia, Lebanon, Malta, Morocco, Nigeria, Sri Lanka, Sudan and Tunesia.

Manufacturers with a company number issued by EAN are not considered as members of the International Association, but as users of the EAN system. When an EAN Numbering Organization is formed and accepted in a given country, all manufacturer numbers which have been issued directly by the International EAN Association, revert to the control of this Numbering Organization.



APPENDIX: SYNOPSIS OF THE ACTIVITIES IN 1988 IN THE EAN MEMBER COUNTRIES

For each of the EAN member countries, a synopsis of the activities has been prepared, based on a survey organized by the General Secretariat.

ARGENTINA

ASOCIACION CIVIL ARGENTINA DE CODIFICACION DE PRODUCTOS COMERCIALES ("CODIGO")
Paraguay 577 - 3°
1053 BUENOS AIRES.

Tel.: 54.1.312.54.19 Fax: 54.1.312.58.46

Executive Staff: CAÑAS MARTINEZ Lorenzo, General Manager

Newsletter: Boletin Bimestral

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, CODIGO had 1,115 member companies (compared to 646 at the beginning of the year) and approximately 19,500 source-marked items. 44 stores were scanning of which 40 supermarkets and other self-service grocery stores and 4 non-food speciality shops.

During 1988, CODIGO held several seminars for companies and various associations. CODIGO participated with an exhibition in the "Jornadas de Supermercadismo de Tucuman" with the support of the AECOC executive staff. CODIGO also participated in the "Jornadas de Supermercadismo Argentino", an international event organized by the Camara Argentina de Supermercados and the Federacion Argentina de Supermercados during which subjects of general interest to the supermarket sector were discussed.

A Working Party "despatch units" was set up in order to examine the implementation of despatch unit coding in Argentina and to establish the relevant EAN specifications. Another Working Party "Standardization of Pallets" started its activities.

CODIGO provided various services to member

companies including technical support on product numbering and symbol-marking issues and information to supermarkets on diskette.

Publications in 1988 were:

- * "Guia de Codigos 1988" listing all member companies of CODIGO and all source-marked items.
- * "Boletines Bimestrales" which are updates of the "Guia de Codigos" along with some general information.
- * "Guia de Lectura de Codigos" providing details on the CODIGO symbol testing service.

AUSTRALIA

AUSTRALIAN PRODUCT NUMBER ASSOCIATION Ltd. ("APNA") Unit 8, 417 Ferntree Gully Road Mount Waverley VICTORIA 3149

Tel.: 61.3.544.64.00 Fax: 61.3.543.85.27 Telex: 139750

President: Mr. G. SADLER, COLES MYER Ltd

Executive Staff: SMITH Brian, Executive Director
WILKINSON Debbie,
Executive Assistant
PALAZZOLO Maria, Technical Officer

Newsletter: APN News

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the AUSTRALIAN PRODUCT NUMBER ASSOCIATION Ltd. had 3,253 manufacturers, 199 distributors and 71 other members. APNA enjoyed an average weekly membership growth of 24 per week. This enormous influx in membership was due to many manufacturers in the general merchandise sector being encouraged to begin bar coding their goods by Australia's department stores, such as Grace Bros., Myer, K-Mart and Target.



The total stores scanning in Australia now stands at 1,098 of which 1,081 supermarkets and other self-service grocery stores, 14 department stores and 3 non-food speciality shops. The first department store to scan was Grace Bros. in New South Wales, which went live on 3 October 1988.

Draft specifications in General Merchandise, Variable Weight and Greeting Cards were written after Working Party meetings were held to resolve several concerns. They have now been approved and will be incorporated into the Consumer Unit Operating Manual.

A survey on the accuracy of scanning was commissioned in conjunction with the Victorian Government's Office of Prices and the Retail Traders' Association of Victoria. It was completed in October 1988.

A new publication entitled "Scanning: the facts" has been produced. It is aimed at educating retailers' staff, Consumer groups, politicians, schools and the general public. Copies are available from APNA.

In general, APNA had a successful 1988, and are now looking forward to the same for 1989.

AUSTRIA

EAN-AUSTRIA Mayerhofgasse 1/15 1040 WIEN

Tel.: 43.222.65.86.01 Fax: 43.222.505.86.01.22

Telex: 111871

President: Dr. W. MAIWALD, Präsident Kommerzialrat

Executive Staff: BURIAN-BRAUNSTORFER Eva

Maria, General Manager VLCEK Erich, Official in charge FRANZMAIR Peter, Official in charge

Newsletter: EAN-AUSTRIA Info

SYNOPSIS OF THE ACTIVITIES IN 1988

During 1988, the membership of EAN-AUSTRIA grew to 1,703, i.e. 1,376 manufacturers, 162 distributors and 165 other companies. In all, approximately 2,200 company identification numbers had been allocated. 354 stores were scanning EAN symbols at the point-of-sale. Several DIY- markets started scanning during the year. EAN-AUSTRIA estimated that the symbol-marking rate on food items was about 100 %. All labels on beer bottles now carry the EAN symbol and symbol-marking finally started on dairy products as well.

Information and consulting was given at 17 seminars for approximately 300 participants throughout the country. Information boots were installed at six fairs.

The major activities were devoted to ECODEX, the Economic Data Exchange System for the Austrian trade. ECODEX, Austria's retail EDI-Service, is fully operational since April 1988 and is based on the IBM/INS telecommunication infrastructure. ECODEX is currently supporting SEDAS-Standard/C for the invoice and the order.

At the end of 1988, 100,000 records were transmitted every month by about 40 participating companies.

A first EDIFACT - User Group was established in the Austrian electronic industry. Participants used ECODEX for the EDIFACT file exchange and received SEDAS orders from the retailers.

Another remarkable ECODEX application was within the Austrian DIY-sector, which started a three months pilot-project in September 1988. Ten Austrian DIY-markets and their suppliers exchanged SEDAS orders with ECODEX electronically.

EAN-AUSTRIA expects the ECODEX participation and transaction volume to increase up to 100 companies and to 9 million records per month.

For the communication with other business sectors like banks and transport companies as well as for international transactions, ECODEX supports the EDIFACT message standards. EAN-AUSTRIA is also committed to participate in the EANCOM/TEDIS project and in international tests of the EDIFACT standards.



BELGIUM AND THE GRAND DUCHY OF LUXEMBURG

ASBL ICODIF VZW Rue Marianne 34 1180 BRUXELLES

Tel.: 32.2.345.99.23 Fax: 32.2.346.02.04

President: Mr. J. COLLIN, Chairman of the Board of Directors CAMPBELL EUROPE, FOOD & CONFECTIONERY N.V. (1988) Mr. M. RAES, Director GB-INNO-BM (1989)

Executive Staff: BRAEM Jef, Executive Officer ICODIF and ICOD
BOONET Etienne, Director ICOF
VERTROOST Dominique, Technical
Adviser ICOF
VANDER AUWERA Peter, Project
Leader "Communications" (till
August 1988)
SCHMIT Jean-Paul, EAN Coordinator
GD of Luxemburg

Newsletter: ICOF Bulletin

SYNOPSIS OF THE ACTIVITIES IN 1988

During 1988, the membership of ICOF (the Manufacturer's branch of the Belgian numbering organization grew to 1,128 companies while the membership of ICOD (the Distributor's branch) grew to 60 companies. The source-marking rate was in excess of 95 % on grocery items. In addition, it is estimated that approx. 60 % of all despatch units are source-marked.

During 1988 the number of scanning stores was almost doubled. At the end of the year, 648 stores were scanning. Belgian's largest cash & carry chain Colruyt equipped its 106 stores with hand-held scanners. EAN and ITF symbols are read at the check-out in autodiscrimination. In addition, this distribution chain uses scanning at the goods receiving, in the store management and in the order picking. Other major retail chains, like Delhaize-Le-Lion, Battard and Kerkhof-Grijspeerdt started or continued to install scanning equipment in their stores. Scanning is also expanding to general

merchandise shops.

Two retail chains started scanning coupons. At the end of the year, 55 coupon issuer numbers had been allocated.

Good progress was achieved in the development and implementation of the ICOM communication standards. By the end of the year, approx. 120 companies or company branches were connected to either of both appointed clearing houses (IBM and GEIS). Whilst the purchase order is still the main message in use, other messages such as the invoice, the transport message, product and address information were tested with a limited number of companies. Use of these messages should spread during 1989. Since June 1988, all ICOM messages include the EDIFACT header and trailer segments.

Ten seminars on communications, some of which run in collaboration with the clearing houses, were held during the year. All seminars were well received and attended by a great number of delegates which proved the interest of Belgian manufacturers and distributors in EDI and the communication standards developed by ICODIF.

ICOF launched a PR action in order to improve the information to its member companies, the press and third parties. The newsletter of the organization was completely restructured. A production of a video explaining the main projects and activities of the association was started and is available since February 1989.

Brazil

ASSOCIACAO BRASILEIRA DE AUTOMACAO COMERCIAL ("ABAC") Av. Paulista 2644 10° Andar Conj. 102 CEP 01310 SAO PAULO Tel.: 55.11.256.88.69

Telex: 39015

President: Mr. C. CASTELLI SCHROEDER, Bom Preço Supermarket



Executive Staff: GUIMARAES Isabel C,

General Secretary

SCHIAVETTO Antonio C., Press &

Media

GROSSMAN Fabio, Technical

Adviser

Newsletter: Informatio ABAC

SYNOPSIS OF THE ACTIVITIES IN 1988

During 1988, ABAC's membership grew to 455 companies, with 305 falling into the manufacturer category, 77 into distribution and 73 into other categories. Two stores were scanning EAN symbols.

1988 was characterised by an exceptional inflation rate which led to an almost generalized stand-by policy regarding investments, especially in the retail area. In spite of this difficult period, ABAC was active in the following domains:

- Introduction of the EAN symbol marking on pharmaceutical products and general merchandise.
- -Working party activity: standardization of trading communications, on "paper documents" and by EDI. In this respect ABAC strengthened its collaboration with AECOC. A group of interested companies, including service providers, was formed. This group intends to work on an open and common development basis.
 - Several seminars were held, conducted by manufacturers of POS equipment, software houses and service providers in order to inform participants about their products and product characteristics. One of these seminars aimed at the specialized press: The other information sessions were intended for printing professionals.
 - In October 1988 ABAC held its Annual Commercial Automation Seminar, which was attended by 230 persons. An equipment and software exhibition was held at the same venue. The Regional EAN Working Party "Latin America" also met during the seminar, with representatives of EAN, AECOC and various Latin American countries.

CYPRUS

CYPRUS CHAMBER OF COMMERCE & INDUSTRY

("Cyprus CCI") P.O. Box 1455 NICOSIA

Tel.: 357.2.449.500 357.2.462.312

Telex: 2077

President: Mr. A. AVRAAMIDES, President of the Cyprus CCI.

Executive staff: PASCHALIDES Leonidas, Officer of

the Cyprus CCI and Secretary of the

Numbering Organization

Newsletter: Emporoviomichaniki

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the CYPRUS CHAMBER OF COMMERCE AND INDUSTRY had 122 manufacturer members and 4 distributor members. In all 114 company identification numbers were allocated. Five stores are scanning of which 4 supermarkets and other self-service grocery stores and 1 non-food speciality shop.

CYPRUS CCI intends to make important efforts to expand the membership nationwide. In addition, the Organization has currently been exploring its needs in order to select the most appropriate computer equipment for the future.

Czechoslovakia

CZECHOSLOVAK CHAMBER OF COMMERCE AND INDUSTRY ("CCCI")

38 Argentinska 170 05 PRAGUE 7 Tel.: 42.2.872.41.11

Telex: 121862

President: Mr. J. JAKUBEC Ing., President of the CCCI



Executive Staff: DOBIAS Pavel, Judr. Director RADNIKOVA Kristina, Executive

Secretary

TUCKOVA Zuzana Ing., Executive

Secretary

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the CZECHOSLOVAK CHAMBER OF COMMERCE AND INDUSTRY had 930 members, i.e. 609 manufacturers, 77 distributors, 138 associations and 106 other members. 109 company numbers have been allocated altogether. One department store was scanning.

Although the symbol marking rate was only 3 % on grocery products and 2 % on general merchandise, all records, tapes, video cassettes and CD records made in Czechoslovakia were marked at source. The preparations for symbol-marking books and pharmaceutical products continued.

Several seminars and lectures for specialists were held and information regarding EAN issues was published in various periodicals. The specifications for numbering and symbol-marking despatch units will be published early 1989.

DENMARK

DANSK VAREKODE ADMINISTRATION EAN ("DVA") Kronprinsessegade 34,3 1306 KØBENHAVN K

Tel.: 45.1.13.92.92 Fax: 45.1.91.13.75

President: Mr. A. REISFELT, Managing Director
Danish Organization of Independent

Grocers.

Executive Staff: OLSEN John, Secretary General

RASK Arne, Engineer
JOHANSEN Kurt, Consultant
JAKOBSEN Jan, Consultant

Newsletter: DVA-NYT

SYNOPSIS OF THE ACTIVITIES IN 1988

The DANSK VAREKODE ADMINISTRATION has no individual members. On the whole 1,497 company identification numbers have already been allocated. In all 530 shops were scanning, of which 526 supermarkets and other self-service grocery stores, 1 department store and 3 non-food speciality shops.

FINLAND

THE CENTRAL CHAMBER OF COMMERCE OF FINLAND

P.O. Box 1000 00101 HELSINKI 10

Tel.: 358.0.650.133 Fax: 358.0.650.303 Telex: 123814

President: Mr. R. TALVIO, Director Suomen Sokeri Oy

Executive staff: LINDROOS Sven-Gustav, Director

Newsletter: EAN-INFO

SYNOPSIS OF THE ACTIVITIES IN 1988

The Article Number Committee at the CENTRAL CHAMBER OF COMMERCE OF FINLAND has no individual members. At the end of 1988, 813 manufacturer numbers had been allocated, i.e. an increase of 65 % during the year.

By December 1988, 675 supermarkets, 139 department stores and 24 general merchandise shops were scanning (against 325 scanning stores in 1987). The symbol-marking rate on the grocery assortment was 92.%.

The Finnish "EAN-INFO" letter was published twice during 1988. A new operating manual for the EAN-system was published.

In autumn 1988 it was decided to start a test on sales data.

Several new product sectors decided to adopt the EAN coding. Discussions with the building material sector started.



FRANCE

GENCOD SARL 13 Boulevard Lefèbvre 75015 PARIS

Tel.: 33.1.48.28.63.54 Fax: 33.1.45.31.09.50

Telex: 204715

Managers: Mr. J. PICTET, General Delegate IFLS Mr. B. SUZANNE, General Director SYNDIFRAIS

Executive Staff: ANGUE Thérèse, General Director de CLOSMADEUC Joël, External Relations
SION Bernard, Technical Adviser GEORGET Pierre, Technical Adviser LENOIR Christian, Technical Adviser DANTIN Eric, Technical Adviser de GUERRY Denys, Technical

Newsletter: GENCOD Information

SYNOPSIS OF THE ACTIVITIES IN 1988

Adviser

At the end of 1988, 8,600 manufacturers and 440 distributors were members of GENCOD. In all, 3,471 stores are scanning EAN codes at the point of sale. This means that 45 % of all hypermarkets and 33 % of all supermarkets in France are using scanning. The number of specialized stores scanning EAN codes has nearly doubled since June 1988. Amongst them are bookshops, shops for automotive spare parts, DIY stores, etc...

A working party composed of retailers finalized a set of rules which should ensure satisfactory price information to the final consumer. These "Golden Rules" were mailed to all retailers.

The national coding rules for fruit and vegetables were approved and are now in use. Each fresh product was given a national code.

The structure for product information and description at consumer unit and despatch unit level was defined for use on magnetic tape or by EDI.

The pilot stage of the EDI service started at the end of the year. The service, called ALLEGRO, is

operated by BULL. Three major retailers, MONOPRIX, AUCHAN, CODEC, and 10 manufacturers SOPAD, COLGATE, LEVER, PROCTER & GAMBLE, BRIDEL, D'AUCY etc... are participating in the trials. 450 company representatives attended a presentation of the service. They are the potential users of ALLEGRO in 1989.

During 1988 GENCOD held 63 seminars in Paris, 5 regional meetings and 10 seminars in different large cities.

A new illustrated booklet and a new 12 minutes video, both on the EAN coding rules, were issued.

GERMAN DEMOCRATIC REPUBLIC

CHAMBER OF FOREIGN TRADE OF THE GERMAN DEMOCRATIC REPUBLIC - EAN BUREAU Schönholzer Strasse 10/11 1100 BERLIN

Tel.: 37.2.4.82.20 Fax: 37.2.4.82.84.08 Telex: 114840

President: LEMNITZER Hans-Joachim, President of the Chamber of Foreign Trade of the German Democratic Republic

Executive Staff: RICHTER Renate (Dr.), Executive Director

SYNOPSIS OF THE ACTIVITIES IN 1988

The Chamber of Foreign Trade of the GDR has 1,395 member companies in trade and industry.

At the end of 1988, the EAN BUREAU had allocated 28 EAN manufacturer numbers. There are 2 scanning stores in the German Democratic Republic.

During 1988 the EAN BUREAU collaborated in legal discussions concerning the introduction of the EAN-system in the German Democratic Republic. Several articles on EAN symbol marking were published in journals. The first booklet of the Chamber of Foreign Trade of the GDR containing advice for users when applying for EAN identification numbers was published. Various lectures about the



EAN-system were given to exporting companies.

The national EAN specifications were elaborated. In addition, the EAN-BUREAU organized seminars and conferences with potential member companies in order to promote, introduce and implement the EAN-system.

GERMANY, THE FEDERAL REPUBLIC OF

CENTRALE FÜR COORGANISATION ("CCG") Spichernstrasse 55 5000 KÖLN 1

Tel.: 49.221.57.49.02 Fax: 49.221.57.49.159

Telex: 8882151

President: Mr. B.C. ENGBERG, Managing Director Deutsche UNILEVER

Executive staff: HAGEN Karlheinz, Director
WAGENER Günter, Executive
Secretary - Projectmanager "EAN"
SCHULTE Karl, Projectmanager
"Telecommunications"
SPITZLAY Heinz, Projectmanager
"Scanning data and logistics"

Newsletter: Coorganisation

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, 8,319 manufacturers and 3,503 distributors were members of CCG. 2,252 stores were scanning of which 1,508 supermarkets and other self-service grocery stores, 194 department stores and 550 non-food speciality shops.

The most important event of 1988 was certainly the agreement on a close collaboration between CCG and DIN (the German Standards Organization, once the opponent in the FAN lawsuit).

After the incidents of 1985, DIN made serious efforts to achieve a closer collaboration with CCG and to bring all CCG developments regarding data and merchandise movements in the consumer goods area (which are de facto standards) within the official German standardization proceedings.

CCG was willing to accept this approach. Conflicts between DIN standards and CCG standards would be practically excluded and all CCG developments would have the approval of an official authority.

This cooperation was realized by the creation of the "DIN-Normenausschuss Daten- und Warenverkehr in der Konsumgterwirtschaft" (NDWK), represented by CCG. This Committee has a Board, the members of which are representives of consumer organizations and of the companies concerned (such as for example: equipment manufacturers, the packing industry, the transport sector, etc.).

Its working parties, which operate in cooperation with the CCG working parties, are active in the domain of EDI and trade documentation, and logistics like printing and reading techniques.

Since the creation of NDWK, the proceedings of CCG cover the following domains of activity:

I. Standards (NDWK)

Development of technical standards in the field of data-communication and physical distribution in the consumer goods sector (EANCOM, SEDAS, MADAKOM, SINFOS, EAN, ITF, Code 128, etc).

II. Agreements

Development and implementation of rules for the organizational use of the standards. Adjustment of these standards according to experience gained from day-to-day practice.

III. Services

Where considered useful or appropriate a special service was set up in order to promote the use of the system. At present the following services exist:

- Allocation of company and EAN article numbers including an advisory service on barcode printing.
- SEDAS data service.
- MADAKOM data pool.
- SINFOS-basic data communication.

For most projects and services, CCG developed manuals and/or organized seminars.

The CCG periodical "Coorganisation" reported on a regular basis about the various developments.



GREECE

HELLENIC CENTER OF ARTICLE NUMBERING ("HELLCAN")

c/o Federation of Greek Food Industries Xenofondos 15 A

ATHENS 105 57 Tel.: 30.1.32.20.230 Fax: 30.1.32.37.943

Telex: 222924

Managers: Mr. L.P. KOSKOS, President of the

National Council of Free Enterprises Mrs. F. DIMOU, Member of the Board of the Federation of Greek Food Industries.

Executive Staff: GEORGAKOPOULOS Sotiris,

Technical Adviser VELONI Annie TRUPOS Helena

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, HELLCAN had 150 manufacturer members and 1 other member. There are no EAN scanning stores yet in Greece.

HUNGARY

HUNGARIAN CHAMBER OF COMMERCE - EAN BUREAU ("HCC - EAN BUREAU") POB 106

1389 BUDAPEST Tel.: 36.1.120.434 Telex: 224745

President: Mr. J. ZAANYI, Vice President of the HCC

Executive Staff: VISZKEI György, Executive Director VARGA Marta, Executive Officer SZEBENI Endréné, Executive Assistant

SYNOPSIS OF THE ACTIVITIES IN 1988

By the end of 1988 the EAN BUREAU of the HUNGARIAN CHAMBER OF COMMERCE had 434 members i.e. 432 manufacturers and 2 distributors. The symbol-marking rate reached 15 % and the number of scanning stores increased to 10 of which 7 supermarkets and other self-service grocery stores,

2 department stores and 1 non-food speciality shop.

AIM-Europe, with the collaboration of the Hungarian Chamber of Commerce, organized a symposium and exhibition in Budapest on the results of barcode techniques and automatic identification in Budapest. The event was given the name "Scan Hungary".

In 1988, the EAN BUREAU of the HCC organized a conference on improving the EAN code-system in Hungary. 600 representatives of manufacturers and trade-companies attended the conference.

In cooperation with the Bulgarian Chamber of Commerce and Industry, the HCC held a two-day consultation and symposium for 35 experts.

ICELAND

ICELAND EAN COMMITTEE c/o VERZEUNARRAD ISLANDS

Hus Verslunarinnar 108 REYKJAVIK Tel.: 354.1.83.088 Fax: 354.1.686.564

Telex: 2316

President: Mr. V. EGILSSON, Director of the ICELAND CHAMBER OF COMMERCE

Executive Staff: ALFREDSSON Haukur, Head of Department Technological Institute of Iceland.

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the ICELAND EAN COMMITTEE had 42 manufacturer members and 16 distributor members. One supermarket and 13 non-food speciality shops were scanning.

During 1988, 23 new company identification numbers were allocated. Approximately 60 % of product volumes sold in grocery stores were EAN source marked. The pharmacy sector is also preparing to adopt the EAN system at the point of sale.

A computer exhibition dedicated to barcodes was held. The ICELAND EAN COMMITTEE participated in it and presented the EAN system while equipment suppliers exhibited varied barcode equipment.



Together with this exhibition, there was a half-day conference on EAN and the use of barcodes in retail and industry. Approx. 100 participants attended the conference.

Two other seminars, one on "Automated Data Capture" and the other on "EAN Article Numbering and Symbol Marking" were held.

The use of symbol-marking on despatch units has not started yet.

ISRAEL

ISRAEL CODING ASSOCIATION ("ICA") c/o Manufacturers Association of Israel Industry House 29 Hamered Street TEL-AVIV 68125

Tel.: 972.3.658.903

Fax: 972.3.662.026 - Telex: 342651

President: Dr. A. GINIGER, Managing Director, TAYA Ltd.

Executive Staff: GABOR Kurt, Managing Director NADEL Amnon, Secretary General

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the ISRAEL CODING ASSOCIATION had a total of 640 manufacturer and 20 distributor members. 10 stores of which 9 supermarkets and other self-service grocery stores and 1 department store were scanning.

ITALY

INDICOD Via Serbelloni 5 20122 MILANO Tel.: 39.2.79.19.65

39.2.79.59.94 Fax: 39.2.78.43.73 Telex: 330899

President: Mr. L. BORDONI, Director CENTROMARCA

Executive Staff: LENTI Giovanni, Secretary General

Newsletter: Notiziario Indicod

SYNOPSIS OF THE ACTIVITIES IN 1988

INDICOD had, at the end of 1988, 7,577 manufacturers, 39 distributors, 102 publishers and 61 other members. The 39 distributor members represent approx. 3,400 retail shops. The grocery assortment, including fresh products, may be considered as fully symbol-marked. A growing expansion of the EAN system in the following product sectors: household articles, jewellery, tools and stationery, has been noticed. Other sectors like textile and apparel, insist on an international add-on solution to reflect the numerous product variations.

Special attention was given to decrease the error rate in product numbering and symbol-marking by circulating information leaflets or by means of individual letters.

A service company, called INDIDATA was established in order to study and to implement an INDICOD data bank project and to develop EDI standard messages according to the EANCOM project objectives.

All technical problems were dealt with by the Technical working party of INDICOD and by specific working parties which are representative of trade and industry.

The symbol marking of despatch units is moving slowly due to technical and economic problems at the automatic packaging lines of the production companies.

The INDICOD distribution members confirmed their willingness to make their sales data available to INDICOD. The costs for running the data bank either by INDICOD or by a third party will be estimated.

The implementation of the communications standards has started. The standard message structures for the invoice and the purchase order have been released. The Italian clearing-houses confirmed their willingness to allow for compatibility amongst their networks.

During the year, INDICOD organized eight information seminars. New rules for EAN-8 coding were circulated.



JAPAN

THE DISTRIBUTION CODE CENTER ("DCC")

No. 3 TOC - Bidg. 7-23-1

Nishigotanda Shinagawa-ku TOKYO #141

TOKYO # 141 Tel.: 81.3.494.4073

Fax: 81.3,494.4080 - Telex: 33755

Chairman: Mr. E. KAGEYAMA

Executive Staff: ASANO Kyosuke, Executive Director

of the Code Center

ONO Kozo, Deputy Manager of the

Code Center

SAITO Seiichi, Chief Researcher of

the Code Center

SATO Makoto, Chief Researcher of

the Code Center

FUKADA Mutsuo, Chief Researcher

Control of the Aug

of the Code Center

SEKIKAWA Hitomi, Chief Researcher

of the Code Center

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the DISTRIBUTION CODE CENTER had 26,908 manufacturer members and 9,922 distributor members.

Introduction of scanning

According to a survey conducted by DCC, 64,000 POS terminals (EAN type) were installed in about 21,500 stores at the end of March 1988. By the end of the year, the total installation of scanning lanes was estimated to be approximately 200,000 and the number of scanning stores 60,000.

At present, a total of 37,000 product manufacturers have been granted a manufacturer number with DCC, which represents a source-marking potential of about two million items.

In 1988 investigation was made to apply source marking to industrial goods such as construction materials, electronic parts, tools, etc. In 1990 clothing is expected to be the focal issue of discussion on source marking.

Newsletter: DCC News

Store	Number of scanning lanes			Number of scanning	
Category	Fixed scanners	Handheld scanners	Total	stores	
- Department stores - General Merchandise Stores - Supermarkets, of which mini-supermarkets - Convenience stores - Agricultural Cooperatives - Cooperatives - Shopping Centers - Home Centers - Home Centers - Speciality stores: Clothing Furniture, Interior goods Household, electric appliances Cameras, precious metals, glasses & clocks Books, Stationery Character goods Pharmaceutical products & Cosmetics Toys Records, Instruments Liquor Shoes Sports - General retail shops - Others	358 11,439 13,828 1,265 325 1,614 2,492 654 46 513 114 26 22 17 13 0 74 14 0 11 0 8 995 1,448	333 8,723 2,535 707 9,344 80 92 480 392 6,082 1,223 38 1,277 360 38 150 720 138 117 837 108 108 1,520 690	691 20,162 16,363 1,972 9,669 1,694 2,584 1,134 438 6,595 1,337 64 1,299 377 51 150 794 152 117 848 108 116 2,515 2,136	68 1,114 4,802 926 5,958 395 577 371 119 5,178 1,012 36 797 204 31 150 696 104 117 823 91 52 1,568 1,200	
TOTAL	33,710	30,271	63,981	21,348	



JICFS (JAN Item Code File Service) System

- The JICFS is the system which supplies information on the EAN codes and their corresponding product description such as item name, size, volume, specification, recommended retail price, etc to a wide range of retailers, wholesalers, marketing companies, and computer system suppliers. Product information is provided directly by the manufacturers to the database managed by DCC-Japan.
- As of December 20, 1988, the database contained JICFS data about 280,000 products, mainly food and miscellaneous goods. By the end of 1989, DCC-Japan plans to increase the number of database items to about 600,000. The product range in the database will be expanded to include electric appliances, toys, utility clothing, etc.
- Data on individual items stored in the JICFS database are supplied to the users via 13 distributors. Users have begun to use the database for maintaining their PLU files, their master files for purchase order data exchange between retailers and vendors, and their product master files for scan data services.

Scan Data Service Pilot System

- The Scan Data Service system is an experimental system designed to collect and use POS-scan data. DCC-Japan and ten database service (DBS) companies have been experimenting with the system since October 1980. This experiment is scheduled for completion in December 1990.
- In this system, scan data from 200 stores throughout Japan are being collected on a weekly or monthly basis. The DBS companies supply these data after analyzing and processing it according to the needs of manufacturers, wholesalers and retailers.
- This system has currently been collecting data on food products and miscellaneous goods.
- In 1989, DCC-Japan plans to determine the requirements for running the Scan Data Service system as an independent private business.

VAN (Value Added Network) "BENTHAM"

 VAN is a network system for supporting the on-line exchange of purchase order data between retailers and vendors. DCC-Japan has developed a standard

- VAN system for the Japanese distribution called "BENTHAM".
- "BENTHAM" offers on-line data exchange network services to small and medium-sized independent retailers, wholesalers and manufacturers who wish to send on-line purchase order data to multiple vendors but cannot install such system by themselves for cost or other reasons. A major characteristic of the BENTHAM network system is that it is jointly planned and operated by several wholesalers.
- The BENTHAM operation started in April 1988.
- DCC-Japan is supporting the installation of on-line data exchange systems which connect retailers, wholesalers, and manufacturers. At present, about 40 on-line data exchange network systems including BENTHAM are operating in industry segments or areas.
- This VAN requires the use of EAN codes.

Shopping Mall (district) POS Systems

- Japan has a large number of areas where stores, predominantly small and medium-sized independent retailers, gather to form a shopping district. In POS shopping districts, independent retailers individually install POS terminals and use a computer system together. Such organization reduces the system cost for each retailer.
- Shopping Mall POS systems have the following two major objectives:
- a. To improve customer service by issuing shopping-mall cards.
- b. To reinforce the merchandise control of each store by means of the EAN code and efficiently improve the assortment of goods in stock.
- DCC-Japan is experimenting with the system in the following shopping malls:
- a. "Musashi Koyama Shopping Mall" (Tokyo). A large shopping area consisting of 280 stores. An experimental merchandise control system using tags of the EAN code system started in November 1988.
- b. "Chitose Karasuyama Shopping Mall" (Tokyo). A medium-sized shopping mall consisting of 156 stores. An experimental stamp system which uses IC cards started in November 1988. By March 1989, they plan to distribute about 3000 IC cards to customers.
- c. "Kumamoto-City Central Shopping Mall" (Kumamoto-City). A large-sized shopping mall consisting of about 380 stores. An experimental



customer service system is planned to start in March 1989. In this experiment, shopping mall cards (magnetic-strip type) will be used for merchandise control.

d. "Kooriyama Central Shopping Mall"
(Kooriyama-City). A medium-sized shopping mall consisting of about 100 stores. A customer service system using shopping-mall cards is now subject to research and development.

Experiments on this system are planned to start in 1990.

MALAYSIA

THE MALAYSIAN ARTICLE NUMBERING COUNCIL ("MANC")

c/o Federation of Malaysian Manufacturers 17th Floor, Wisma Sime Darby Jalan Raja Laut

P O Box 12194

50770 KUALA LUMPUR

Tel.: 60.3.293.12.44 Fax: 60.3.293.51.05

Telex: 32437

Chairman: Mr. P. LOW, Chairman of Malaysian Sheet

Glass Berhad

Executive Staff: TAN KEOK YIN, Executive Director

AU SOO KEUN (Ms), Assistant

Director

SYNOPSIS OF ACTIVITIES IN 1988

The MALAYSIAN ARTICLE NUMBERING COUNCIL was officially accepted as a member of the International EAN Association from 1 July 1988 onwards. At the end of 1988, MANC had 46 manufacturer members and 1 other member. One retail chain introduced scanning in four of its supermarkets.

At the beginning of the year, four seminars on bar coding and the EAN system were held in different parts of the country to familiarise the public with product numbering. A simple guidebook on the Malaysian Product Numbering System was printed and distributed to manufacturers, retailers and the business sector as well as the Malaysian Ministry of Trade and Industry.

Manufacturers were encouraged to source-mark their products with EAN barcode labels. Briefings on product numbering and printing the barcode symbol were given to key staff of companies wishing to implement the system.

MEXICO

ASOCIACION MEXICANA DEL CODIGO DE PRODUCTO AC ("AMECOP")

Homero 109-1101 Col. Polanco

C.P. 11560

MEXICO D.F.

Tel.: 52.5.545.77.37 Fax: 52.5.395.03.99

Telex: 1763639

President: Mr. H. DAVIS, President AURRERA

Executive Staff: SANCHEZ DE LA VEGA Maria de

Lourdes, Manager

Newsletter: Boletin AMECOP

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, AMECOP had 60 manufacturer, 20 distributor and 13 other members. 43 stores were equipped with scanning.

During 1988, AMECOP held various conferences in factories, industrial companies and for executives in charge of retail, merchandising, marketing and advertising.

AMECOP participated in the conventions of the National Chamber of Canned Food, the National Association of Spray Industry and of the Retail Industry. At the national, convention of the Retail Industry, AMECOP had its own stand with POS information and an exhibition of the first Mexican source-marked items.

At the end of the year, large supermarkets took the first steps to install scanning systems. It is worth mentioning that scanning is not only spreading to large supermarkets, but also to small and medium-sized supermarkets.



THE NETHERLANDS

STICHTING UNIFORME ARTIKELCODERING ("UAC") Tourniairestraat 3 1065 KK AMSTERDAM

Tel.: 31.20.17.08.14 Fax: 31.20.15.75.09

Telex: 18765

President: Mr. J.A.N. VAN DIJK, M. Ec., Chairman Board of Directors, VAN NELLE

HOLDING N.V.

Executive Staff: GIETELINK Peter, Managing Director

MUNSTERMAN Piet, Secretary

Newsletters: UAC Bulletin and TRANSCOM Bulletin

UAC Perspectief

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, UAC had 1,236 members, of which 1,139 manufacturers, 39 distributors and 58 other members. 740 shops, of which 531 food supermarkets and other self-service grocery stores and 209 general merchandise speciality shops, were equipped with scanners. The symbol marking rate on food products is over 99%. The symbol marking rate on general merchandise products has grown significantly during 1988, resulting from a growing flow of membership applications from general merchandise manufacturers.

New UAC members belong primarily to the following sectors: do-it-yourself products, food and grocery products, logistic services, electro-technical goods and car-shop products, but also: chemical products, books, records, pharmaceutical products, textile and fashion products. During 1988 UAC strengthened its commitment to promote the use of the EAN-system in logistic applications, since the basic value of EAN is its ability to connect the flow of goods and the flow of information.

Transcom: is a set of standards for electronic interchange of trade messages, such as purchase orders, invoices, delivery, article and address information. Since 1988, the Transcom standards comply with the internationally agreed EDIFACT standards. Consequently the number of Transcom users started to grow very rapidly and reached the number of 75 by the end of 1988.

CUM: is the project for Central Exchange of Scanning Data which started in 1986. By the end of 1988, 169 supermarkets were sending their scanning data to the CUM office.

NEW ZEALAND

NEW ZEALAND PRODUCT NUMBER ASSOCIATION

Ltd. ("NZPNA") P.O. Box 11-110 WELLINGTON Tel.: 64.4.846.669

Fax.: 64.4.854.376

Chairman: Mr. K. DALDORF, Managing Director GUS

Wholesalers.

Executive Staff: HOUSTON Barry, Executive Director

DAWSON Bernice, Executive Officer

Newsletter: NZPNA Newsletter

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the NEW ZEALAND PRODUCT NUMBER ASSOCIATION had 1,630 manufacturers, 326 distributor and 49 other members. In all 330 stores were equipped with scanning of which 269 supermarkets and other self-service grocery stores, 1 department store and 60 non-food speciality shops. Approximately 98-99 % of the grocery assortment and 18-20 % of the general merchandise assortment was symbol marked.

There was a substantial increase in the number of liquor stores which installed scanning during the year, to the extent that approximately one fifth of all scanning sites are in liquor stores.

The first of a number of portable scanning systems installed in Direct Store Delivery vans appeared during the year. With these systems the van driver scans all stock into his van. Each delivery is scanned and a detailed receipt given. At the completion of his deliveries the van driver hands his terminal to the office and overnight the inventories and accounts are updated.

The agricultural sector commenced product numbering and scanning, while discussions were undertaken with the apparel industry to determine the



application of the EAN standards for clothing.

Training seminars were held for manufacturers and also for printers during the year. A training video was started on scanning and scanning management. Development work was commenced on education skills on barcoding and scanning with a view to introducing them into schools. A publication describing scanning and its benefits was also commenced.

A number of manufacturers have commenced barcoding their despatch units and one major food supplier has started scanning goods from production into inventory.

Together with the NZ Customs Department the NZPNA co-hosted a Symposium on EDI. Three network suppliers have emerged and a number of EDI pilots are being undertaken. An EDI Association has been formed and the NZPNA is providing a secretariat service.

The NZPNA also played a major role in the establishment of AIM NZ.

Norway

NORSK VAREKODEFORENING ("NVF") Spireaveien 6 0580 OSLO 5

Tel.: 47.2.65.10.00

Fax: 47.2.64.39.52 - Telex: 76082

Chairman of the Board: Mr. E. AAMODT, SAMAS ARNET AAMODT

Executive Staff: JOHANSEN Evelyn, Executive Manager

Newsletter: EAN-NYTT

SYNOPSIS OF THE ACTIVITIES IN 1988

The Norwegian Numbering Organization NORSK VAREKODEFORENING has no individual members. By the end of 1988, 1,257 manufacturer numbers had been allocated. 250 of these numbers were for coding variable weight items. The symbol-marking rate on grocery items was in excess of 95 %, and it has grown significantly on general merchandise items

during 1988.

In all, 998 stores are scanning of which 653 food supermarkets and other self-service grocery shops, 29 department stores, 94 book stores and 222 non-food speciality shops.

During the year, NVF has checked more than 200 symbols and has given advice regarding print quality and symbol location.

The newsletter "EAN NYTT" was published twice, and the school information programme "Hva er EAN" was updated and reprinted.

During 1988, NVF played an active part in "EANCOM", the international EAN Communications project.

PAPUA NEW GUINEA

PAPUA NEW GUINEA PRODUCT NUMBERING ASSOCIATION ("PNGPNA")

P.O. Box 1621 PORT MORESBY Tel.: 675.21.30.77

Tel.: 675.21.30. Telex: 22246

Executive Staff: MILLETT John

SYNOPSIS OF THE ACTIVITIES IN 1988: N.A.

PORTUGAL

ASSOCIACAO PORTUGUESA DE IDENTIFICACAO E CODIFICACAO DE PRODUCTOS ("CODIPOR")

Campo Grande 286-5°

1700 LISBOA CODEX Tel.: 351.1.758.62.72

Fax: 351.1.759.95.08

Telex: 62357

President: Mr. A.R. MELLO CAMPELLO, Director NESTLE

Executive Staff: ROUSSEAU José, General Secretary CARREIRA Maria Luiza, Adj. General

Secretary



SYNOPSIS OF THE ACTIVITIES IN 1988

During 1988, CODIPOR's membership grew by 88%, reaching, by the end of the year, 432 members (357 manufacturers, 42 distributors and 33 other members). According to the latest Nielsen report, 57% of all Portuguese products were EAN symbol-marked. The average symbol-marking rate, thus including imported products, was 71 %. 83 stores, of which 10 supermarkets and other self-service grocery stores, 2 department stores and 71 non-food speciality shops were scanning. A substantial increase in the number of EAN scanning stores is expected in 1989.

The national EAN specifications for numbering and symbol-marking despatch units and variable weight products were published. A total of twelve seminars were held on these subjects.

CODIPOR organized its Third National Congres in Figueira da Foz, which was attended by 250 delegates from trade and industry.

During the year CODIPOR contributed to various meetings and conferences throughout Portugal and had its own stand at ALIMENTACAO/88 and INFORCOM.

SINGAPORE

SINGAPORE ARTICLE NUMBER COUNCIL ("SANC") c/o THE SINGAPORE MANUFACT. ASSOCIATION The SMA House 20 Orchard Road

SINGAPORE 0923 Tel.: 65.338.87.87 Fax: 65.338.33.58 Telex: 24992

Chairman: Mr. TAN JIN SOON, Director

Executive Staff: KWOK Janice, Executive Secretary

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of the year, SANC had 112 manufacturer, 14 distributor and 8 other members. Five stores were scanning of which one supermarket, one department store and three non-food speciality shops.

During the year 1988, SANC's focus was on organizing activities that would create greater awareness of the use of barcodes in specialised industrial and retail sectors.

On 18 March 1988, SANC held a seminar on the "Correct techniques for printing barcodes" with the assistance of the Singapore Trade Development Board. The seminar was conducted by the SANC chairman, Mr. Tan Jin Soon.

On the occasion of the official opening of the new SMA House, eight SANC members exhibited and demonstrated barcoding equipment to all invited guests in the SMA Product Display Center.

On 6 May 1988, SANC organized a seminar on how computerization through use of barcodes could be of use to the Pharmaceutical Institutions (Hospitals), Retailers (Pharmacies) and Manufacturers (Industry). More than 100 participants including doctors, pharmacists, manufacturers, SANC and SMA members and senior government officials from the Ministry of Health attended the seminar. The General Manager of the Singapore National Computer Board, Mr. Lim Swee Say, was the Guest-of-Honour at the seminar.

On 29 June 1988, SANC Chairman, Mr. Tan Jin Soon and Executive Secretary, Ms Janice Kwok made a presentation to senior officials from NTUC Fairprice Co-operative Ltd on the advantages and mechanics of operating an automated retail system through the use of EAN barcode scanning at the Point of Sale. A video presentation on EAN scanning at work in a supermarket was shown to NTUC representatives.

On 19 August 1988, SANC organized a Mandarin presentation and exhibition for NTUC Franchise retail outlets on automated scanning at the Point of Sale. More than 50 participants attended the presentation and 7 SANC member companies exhibited POS scanning equipment. SANC will be organizing similar sessions for two other large retail outlets.

SANC newsletters are published on a regular basis and sent to all member companies. The newsletter will update SANC members on its new members, vital technical issues related to barcoding, SANC seminars, exhibitions, presentations and forthcoming events, and general information about EAN activities.



SOUTH AFRICA

SOUTH AFRICAN NUMBERING ASSOCIATION ("SAANA") P.O. Box 41417 CRAIGHALL 2024 JOHANNESBURG

Tel.: 27.11.787.43.87 Fax: 27.11.787.23.23

Telex: 421460

President: Mr. S.U.M. MARTINENGO, Deputy
Managing Director, CHECKERS STORES

Executive Staff: PEARCEY Robert, Executive Director

Newsletter: SAANA Newsletter

SYNOPSIS OF THE ACTIVITIES IN 1988

During 1988, the membership of SAANA grew to 1,917 companies, with 1,772 falling into the manufacturer category, 42 into distribution and 103 companies into other categories. Overall the barcoding level of mass merchandise supplied to major chains exceeded 95 %, with one retail chain reflecting a level of just over 98 %. The level of source marking in hardware is around the 75 % level, while general merchandise is now around the 24 % level.

At a recent meeting between Cash & Carry operators and their suppliers, it was decided to set a deadline of the 1st June 1989 for despatch units and C & C packs to be barcoded at source by suppliers.

Seminars

Barcoding seminars for members were held in Johannesburg, Durban and Cape Town during June and were attended by over 200 delegates. The new format of dividing the one day seminars into two separate sessions proved succesful and was well received. The first session was aimed at new members and concentrated on all aspects of barcoding, while the second session consisted of speakers from retail and cash & carry chains as well as speakers from market research companies. It was interesting to note that over 95 % of delegates attended both sessions.

A morning-only seminar was held in Johannesburg in July for members and other interested parties to

provide input on the progress being made by SAANA in developing EDI standards. The guest speaker was Nigel Fenton from the ANA-UK, who provided delegates with an update on the usage of TRADACOMS and TRADANET within the UK. He also provided an update on progress in other countries in Europe as well as on developments with respect to EDIFACT. The seminar was attended by approximately 150 delegates.

Activities

Activities during the year were mainly confined to developing the SAANA EDI Standards, which were officially released on the 1st November. A special function was held during November to launch the Standards and obtain media coverage. The SAANA EDI Standards have been based on the EDIFACT Syntax rules and make use of a subset of the EDIFACT Service Segments, but have not used the UN-TDED nor UNSM formats as these were considered to be too complex for national needs. It is anticipated that the first year will be devoted primarily to testing of the message formats and to negotiating Interchange Agreements between trading partners.

The SAANA EDI Working Group will continue with its efforts and has recently appointed a special General Merchandise & Apparel EDI Sub-Committee to look into the development of message formats to meet the needs of this specialised market sector. It is hoped that the formats for this sector will be completed within a six months' period.

The EDI Technical Committee, appointed by the SAANA EDI Working Group to investigate and report on communication alternatives including value added networks, has completed its assignment and has submitted two comprehensive reports to the Working Group for consideration.

South-Korea

THE KOREA DISTRIBUTION CODE CENTER ("KDCC") 45, 4-Ka, Namdaemun-ro Chung-Ku SEOUL

Tel.: 82.2.757.07.57 Fax: 82.2.757.94.75

Telex: 25728



President: Mr. Sang-Ha KIM

Executive staff: Yong-Sang PARK, Secretary General Choong-Kee MINN, Deputy Secretary

General

Tong-Joon PARK, Manager

SYNOPSIS OF THE ACTIVITIES IN 1988

The Korea Chamber of Commerce and Industry was admitted to EAN membership at the EAN General Meeting of May 1988. The Korea Distribution Code Center was established as a division of the Chamber of Commerce, with the specific task to perform all functions of an EAN Numbering Organization.

KDCC started allocating manufacturer identification numbers in July. At the end of 1988, the Korea Distribution Code Center had 43 manufacturer members and 7 distributor members. In all, 17 stores were installed with scanning equipment.

Ten distributors are preparing for the introduction of POS systems aiming at scanning in early 1989. Seven seminars held during the year were attended by a total of 500 persons from trade, industry and other sectors. Especially the seminar on POS Systems held in June was a great success. Guest speakers were Mr. K. ASANO, Executive Director of DCC-Japan and two other experts from Japan.

The national EAN manuals were compiled and circulated to member companies and prospective members.

SPAIN

ASOCIACION ESPAÑOLA DE CODIFICACION COMERCIAL ("AECOC") Calle Mallorca 288, entlo 08037 BARCELONA

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Telex: 99616

President: Mr. F. RIERA-MARSA, NABISCO BRANDS

ESPANA

Executive Staff: BONMATI José Maria, General

Director

IZARD Gabriel, Technical Director

AGUSTIN Antonio, Marketing Director HERNANDEZ DE LORENZO Mar. Administrative Assistant MONSO Julia, Scanning Project Manager SANCHEZ COLL Alejandro, Communications Project Manager CROSAS Domenec, Marketing Project Manager RUBIES Antoni, DPP Project Manager DOMENEC Manuel, Journalist

Newsletter: CODIGO 84

SYNOPSIS OF THE ACTIVITIES IN 1988

By the end of 1988, the Spanish Numbering Organization AECOC had 3,983 manufacturer, 137 distributor and 91 other members (mostly printers and equipment suppliers). 912 retail stores were using slot scanners or hand held readers. 97 % of all food products were source marked. The marking of general merchandise is increasing quickly, especially on textile, ironmongery and drug-store products. In the pharmaceutical sector, the symbol marking rate is 100 %.

EAN activities

During 1988 AECOC dealt with 500 error advising cards (tarjetas Aviso de Error) sent by scanning retailers. 5,000 free of charge checks of printed symbols were carried out. AECOC organized 15 seminars for its member companies and participated in various meetings and conferences.

AECOM - communication system

During 1988 AECOC published new specifications for commercial communication standard messages, based on the EDIFACT syntax rules. The aim of AECOC is to organize the first EDI transactions in the forthcoming months. For this reason AECOC set up the AEDED data elements directory (compatible with UNTDED) and incorporated the EANCOM recommendations (EDIFACT header, location code structure, etc.). By November 1989 AECOC expects to appoint a pilot clearing house.

DPP

During 1988, AECOC spent considerable time to



develop a DPP Model adapted to the Spanish needs. The major tasks were:

- Creation of a Working Group composed of more than twenty firms, representative of Trade and industry.
- Direct participation in the European DPP Harmonization Project promoted by the CIES.

In this way, AECOC will be able to use the Unified European DPP Model, which includes all specific requirements of the Spanish Distribution.

The next steps will be:

- To launch a first DPP model version by the end of Spring 1989.
- To create a national "average productivity data base" in order to facilitate the use of the model in the initial period.
- To publish a number of DPP applications such as for example Space Management.

General Activities and publications

Organization of the "3as Jornadas Nacionales AECOC" in Barcelona. More than 400 company managers attended this event. In addition AECOC had its own stand at the most important exhibitions in Spain. AECOC continued publishing its bi-monthly magazine CODIGO 84 (6,200 copies) and published a specialized book about the standardization of pallets and pallet loads.

SWEDEN

SWEDISH EAN COMMITTEE ("EAN-SWEDEN")

Box 5408

114 84 STOCKHOLM Tel.: 46.8.11.05.90

Fax: 46.8.667.57.05

President: Mr. R. LINDMAN, Chairman LEVER AB

(1988)

Mr. R. FAHLIN, President ICA-FÖRBUNDET (1989)

Executive Staff: PASSAD Björn, Executive Officer

FRIGGEBO Bengt, Executive Officer

Newsletter: EAN-INFO and EAN in Media

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the SWEDISH EAN COMMITTEE had allocated 1,535 company identification numbers. At the same time the number of scanning stores was about 1,050, of which 950 in the food sector and approximately 100 in the general merchandise area. The stores in the food area represented 11 % by number but almost 30 % by turnover. The symbol-marking rate in supermarkets and other grocery shops was in excess of 95 %. In the general merchandise area the symbol-marking rate is growing rapidly.

Information from the grocery chains indicated that, within the next few years, the number of scanning stores in the food area will increase by roughly 200 stores a year. The development in the area of specialized retailers is more difficult to estimate, although the national associations of iron, paint and fashion retailers have decided to adopt the EAN system and scanning procedures.

EAN-SWEDEN continuously watched over the quality of source marked symbols. The "error report system" produced some 20 error cases per month, of which 10 were number errors, 5 symbols "out of specifications" and the remaining 5 symbol location errors.

In order to get experience and to sort out how to handle the issue of access to sales data, the manufacturers set up a test with a "mini-clearing-house". The retailer chains are supporting the test by delivering sales data.

The DAKOM working party (DAKOM is an open "mailbox" network system for ordering, invoicing and delivery information used by about 140 participants) worked at the development of EDIFACT-messages. This work will hopefully make it possible to use either the DAKOM or the EDIFACT standards within DAKOM.



SWITZERI AND

SCHWEIZERISCHE ARTIKELCODE VEREINIGUNG/ ASSOCIATION SUISSE CODE DES ARTICLES ("SACV")

Güterstrasse 133 Postfach 4002 BASEL

Tel.: 41.61.20.73.11 Fax: 41.61.20.73.15 Telex: 965133

President: Mr. H. THULI, COOP SUISSE

Executive Staff: SCHUBENEL Robert, Director

HELDT Joachim, Project Manager KIENLEN Francis, Project Manager WEBER Marlies, Head Administration

Newsletter: SACV Bulletin

SYNOPSIS OF THE ACTIVITIES IN 1988

The ASSOCIATION SUISSE CODE DES ARTICLES had 743 manufacturer, 232 distributor and 77 other members by the end of 1988. In all, 344 stores were equipped with scanners of which 173 supermarkets and other self-service grocery stores, 149 non-food speciality shops and 22 Cash & Carry stores.

The important membership increase in 1988 (+ 20.5%) was mainly due to the fact that the large supermarket chain "Jumbo" intends to implement scanning by the end of 1989. As Jumbo has an important do-it-yourself and gardening section, solutions had to be found for symbol marking timber and other construction materials, mostly stocked and sold outdoors.

This situation forced SACV to run more seminars. During 1988, six seminars for EAN coordinators were held as well as one special seminar for the pharmaceutical sector.

During the year, SACV published two large bulletins and two express bulletins, each in German and French.

In 1987, SACV signed an agreement with the pharmaceutical organizations allowing the IKS number (intercounty drug control number) to be represented with an EAN symbol.

In autumn 1988, 15 % of all medicaments sold in Switzerland were marked with an EAN symbol. A joint working party of producers and importers of medicaments and of pharmacies promotes the system, with the objective of a 95 % EAN symbol-marking rate on pharmaceutical products within three years.

This opened new possibilities for EAN in the health sector. Studies are going on for the use of EAN in hospitals (medicaments, antiseptic items, etc.) and for health insurance purposes (EAN symbol on certificates of health insurances). In addition, an EAN barcoding solution for serums and vaccines which are under federal control, should be presented during 1989.

The commitment of SACV to EDIFACT had the consequence that SACV was appointed member of the Swisspro Board and was offered the chairmanship of the EDIFACT/CH working party. This gives SACV the opportunity to have direct influence on the various standardization proceedings.

In all, 1988 was a successful year, but there are still a lot of issues which will need to be solved in the future!

Taiwan roc

ARTICLE NUMBERING CENTER OF R.O.C. ("ANC of ROC")
4th Floor, 10 Lin Sen South Road
TAIPEI

Tel.: 886.2.39.39.145 Fax: 886.2.39.13.171

Executive Staff: LIN HUI, Secretary General

Newsletter: CAN News

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, 250 manufacturers were members of the ARTICLE NUMBERING CENTER OF ROC. 111 stores were scanning of which 21 supermarkets and other self-service grocery stores, 9 department stores and 81 non-food speciality shops.



At the beginning of 1988, the ANC of ROC organized a training course for companies concerned with retailing. Ten major retailers sent out 3,000 letters to their manufacturers and distributors. The possibilities for store automation were investigated and a seminar on barcode printing was organized.

In April the CNS (China National Standard) Barcode Committee was established. Through the effort of the ANC of ROC and the National Bureau of Standards (Ministry of Economic Affairs) the CNS was official mid-August.

In May 1988, a reception was held to announce the results of the barcode promotion.

During 1988 conferences were held in Kaohsiung, Taichung and in Taipei to introduce barcoding with manufacturers and distributors of the various regions of Taiwan.

In October the "Store Automation Committee Resolution" held its first meeting. At this meeting the development of a common POS software system was discussed. During 1988 this Committee held two more meetings with the following results:

- The China Data Processing Center proposed a POS software system.
- Mr. F. Hsu, Vice-President of FIT Group was elected President.
- In order to stimulate manufacturers and distributors who applied for an EAN manufacturer number to print the barcodes on their products a "CNS Commodity Barcode and Despatch Units Barcode Conference" was held. This conference was sponsored by the National Bureau of Standards, the Ministry of Economic Affairs and co-sponsored by retailers and ANC of ROC.
- A "Manufacturer and Distributors Meeting" sponsored by retailers will be held in order to promote the EAN system with potential member companies.
- The managers of Familymart were invited to give a lecture on their experience with adopting the POS system in Japan.

In December 1988, ANC of ROC participated in the "Store Automation Exhibition '88" and in the "CNS Barcode Promulgation Conference".

THAILAND

THAI PRODUCT NUMBERING ASSOCIATION LTD ("TPNA")

1695 Phaholyothin Road Bangkhen

BANGKOK 10900 Tel.: 66.2.541.12.09

Fax: 66.2.236.76.31 - Telex: 20181

Chairman: Mr. Chatchai BOONYARAT, President FEDERATION OF THAI INDUSTRIES

Executive Staff: SOMKIT PHAIRATPIBOON, Executive Director

SYNOPSIS OF THE ACTIVITIES IN 1988

The THAI PRODUCT NUMBERING ASSOCIATION joined the International EAN Association on 1 July 1988.

At the end of 1988, TPNA had 4 manufacturer members and 4 distributor members. Three department stores were scanning.

During its preliminary stage to introduce the EAN system in Thailand, TPNA organized two events to introduce the concept of article numbering with the major suppliers of the Central Department Store Group. There were over 150 delegates participating in this half-day session held at the Central Plaza Hotel.

The other event was organized by the Department Stores Association of Thailand. Most of the Association Members attended the seminar which was devoted to the implementation of barcodes in the retail industry. TPNA was invited to be one of the guest speakers and spoke about the "Prospect of Barcode implementation for manufacturers in Thailand".

On October 4th, 1988, the Executive Director of TPNA was officially appointed committee member of the "Standard for Bar Code Symbol for Commodity Goods" of the Thai Industrial Standard with the Ministry of Industry.

TPNA gave an interview for the November 1988 edition of the Exporters' Review Magazine published by the Department of Export Promotion of the



Ministry of Commerce. In response to this article, TPNA received various membership applications.

Three department stores in Thailand are already using EAN scanning systems at the POS, namely the Central Department Store and C.C. Center in Bangkok and the Tantraphand Department Store of Chiengmai in the Northern Part of Thailand.

TURKEY

UNION OF CHAMBERS, OF COMMERCE, INDUSTRY, MARITIME TRADE AND COMMODITY EXCHANGES OF TURKEY ("UCCET") Atatürk Bulvari 149 ANKARA

Tel.: 90.41.18.42.88 Fax: 90.41.18.32.68

Telex: 42343

President: Mr. Ali COSKUN, President of the Union

Executive Staff: ELVERDI Iskender, Deputy Secretary

General

YARAMAN Metin, Head of Trade

Department

SYNOPSIS OF THE ACTIVITIES IN 1988

Following the acceptance of Turkey's membership at the beginning of 1988, a national Article Numbering Center was established within UCCET

The exporting firms initiated the application of the bar coding system in Turkey. Currently, nine companies have been granted an EAN manufacturer number. In addition, about 50 firms, producers of consumer goods, applied for membership, but have not been allocated an EAN manufacturer number yet as they have not completed the administrative formalities.

Two brochures were prepared and sent to 500 major firms and member Chambers explaining the principles of bar coding, the benefits of the EAN system, the activities of UCCET and the terms of membership to the Center.

During a press conference in July 1988, Mr. Ali COSKUN, President of UCCET, announced the bar coding system and the activities of the National Article Numbering Center to the public. UCCET concluded a contract with six firms, which will render technical consultancy services and provide the member companies with EAN filmmasters. These firms shall also assist the membership in equipment related matters and in the introduction of the bar coding system with producers, wholesalers and retailers.

In September 1988, UCCET organized a seminar to introduce the bar coding system, illustrated by practical applications, to managers of trade and industry.

United Kingdom and Ireland

* United Kingdom

ARTICLE NUMBER ASSOCIATION (UK) Ltd. ("ANA-UK")

6 Catherine Street LONDON WC 2B 5JJ

Tel.: 44.1.836.2460 Fax: 44.1.836.0580 Telex: 299388

Chairman: Mr. J. BERRY, Director THE BOOTS COMPANY

Executive Staff: OSBORNE Andrew, Secretary

General

FENTON Nigel, Executive Secretary EVANS Ruth, Technical Executive

Newsletter: ANA NEWS

SYNOPSIS OF THE ACTIVITIES IN 1988

By the end of 1988, the ANA membership had grown to 6,098 of which 5,596 were manufacturers, 331 distributors and 171 other members. The source marking rate for groceries remained in excess of 98 % and source marking of general merchandise such as records, books, DIY, cosmetics and toys was rapidly approaching this level.

Nearly 2,800 stores were scanning EAN codes at the point of sale by the end of the year. These were split roughly forty-sixty between supermarkets and other types of retailing.



Amongst the retail chains which made rapid progress during the year were Boots, Sainsburys, Dixons, Tesco, Gateway, Do-It-All, Kwiksave and Adams Childrens Wear. Point of sale scanning began spreading quickly into new sectors such as garage forecourt shops and retailers of electrical appliances.

Use of traded unit scanning also continued to expand. More manufacturers began to scan standard symbols in warehouses, including one in the tools industry. There was increased use of scanning at the point of sale in cash and carry wholesalers and in retailers' warehouses.

Progress towards 99 % source coding of despatch units by the end of 1991, according to ANA's five year timetable, continued. In the autumn an independently conducted survey showed that source marking was running at about 40 %.

In support of the five year timetable the Association held a "Traded Unit Coding Forum" at which manufacturers discussed future developments with equipment suppliers including suppliers of label printer/applicators, ink jet printers and flexo-roller marking equipment.

ANA launched initiatives in three industry sectors: the office supply industry, the sports goods industry and the fashion industry. Emphasis was placed on the use of article numbering in logistics - combining point of sale information, scanning in production, warehousing and distribution and EDI to improve the flow of goods through the trading pipeline and to increase responsiveness to consumer demand.

1988 saw a high profile media campaign against POS scanning in the UK, following allegations of overcharging in some retail stores. ANA responded by explaining why scanning is more accurate than conventional checkouts and emphasising the benefits to consumers. The Association also redoubled its work to ensure that relevant government departments, trading standards officers and consumer groups remain aware of all the facts.

During the year there was dramatic growth in the use of EDI in the UK. The number of subscribers to TRADANET more than doubled to 950 by December 1988. The UK's other principal network EDICT also reported major growth. The total number

of TRADACOMS standards users exceeded 1,500.

Several new TRADACOMS message standards were developed for example to cater for data exchange within the periodical and publishing industry. ANA was a key sponsor of EDI 88: the UK's national EDI conference which this year attracted record numbers of delegates.

Whilst ANA reaffirmed its commitment to the support and development of TRADACOMS, in direct response to user demand, the Association is also working hard to ensure its members interests are represented in the development of the EDIFACT standards for international EDI transactions.

For example, ANA chairs the UK Standards Working Group which co-ordinates UK input to the EDIFACT project. The Department of Trade and Industry's Vanguard project is also funding a major study on the subject of EDI message standards.

Towards the end of the year, the network services TRADANET and EDICT announced the launch of an interlinking facility to allow subscribers to one service to exchange data with trading partners connected to the other.

The major event of ANA's year was the conference "Opportunity for Efficiency". Senior directors from some of the UK's leading edge companies spoke about the strategic business advantages of using the article numbering standards. Delegates heard that increasingly the use of scanning is seen as fundamental to a total systems approach and to improved logistics.

* Ireland

ARTICLE NUMBER ASSOCIATION OF IRELAND ("ANAI")
Confederation House
Kildare Street

DUBLIN 2

Tel.: 353.1.779.801 Fax: 353.1.777.823

Telex: 93501

President: Mr. F. QUINN, Chairman, SUPERQUINN Ltd.



Executive Staff: MC CABE Thomas, Secretary

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, ANA of Ireland had 474 manufacturer, 11 distributor and 13 other members. This is an increase of 23 % during 1988.

The number of EAN scanning stores doubled in 1988 from 14 to 30.

ANAI held a seminar on EDI in July 1988 in Dublin. Ongoing discussions were held with VAN service providers to get an EDI trial done between retailers and suppliers in Ireland in 1989.

A new secretary, Mr. T. Mc Cabe was appointed in May 1988 to replace Mr. J. Gibbons who retired.

USSR

THE USSR CHAMBER OF COMMERCE AND INDUSTRY ("USSR CCI")
Kuibyshev Str. 6

MOSCOW 103684 Tel.: 924.56.45

Telex: 411126

President: Mr. V.L. MALKEVICH

Executive Staff: YEFREMOV V.I.

VOKHMIN V.F. NASONOV G.K.

SYNOPSIS OF THE ACTIVITIES IN 1988

At the end of 1988, the USSR CHAMBER OF COMMERCE AND INDUSTRY had 3,431 manufacturer, 370 distributor and 1,692 other members. Two stores were scanning under the pilot project.

During 1988, the USSR CCI provided general information concerning the introduction of scanning. National specifications were set up for the numbering and symbol marking of consumer units. Negotiations with official bodies on numbering and symbol marking of books according to the EAN/ISBN rules have been undertaken.

The USSR CCI in cooperation with AIM EUROPE organized a two-day conference and exhibition on barcoding and automatic identification. The conference showed an increased interest in scanning and was attended by more than 500 representatives of industry, trade and other organizations. The event was given the name "Scan Moscow".

VENEZUELA

ASOCIACION PARA LA CODIFICACION INTERNACIONAL DE PRODUCTOS EN VENEZUELA ("CIP")

c/o As. Nac. de Supermercados y Afines Av. Diego Cisneros con calle Bernardette Centro Empresarial Los Ruices 1er Piso, Ofc. 116, Los Ruices CARACAS

Tel.: 58.2.344.490 Telex: 23167

President: Mr. L. FIÑOL, Adj. General Manager CASA PARIS

Executive Staff: BEHRENS Morella, Vice-President MEJIA José Luis, General Manager

SYNOPSIS OF ACTIVITIES IN 1988

At the end of 1988, CIP had 16 manufacturer, 4 distributor and 3 other members. Five stores were scanning of which 3 supermarkets and other self-service grocery stores, 1 department store and 1 non-food speciality shop. 8,300 source-marked products were registered in the data bank of the Association.

During 1988, 11 companies, all manufacturers of grocery products, joined the Numbering Organization. In order to improve the promotion of the EAN system, CIP hired an additional staff member.

There is now a first barcode filmmaster supplier in Venezuela.

The second Ordinary General Assembly was devoted to the following subjects:

- Elaboration of new information leaflets.



- The need to promote the system with small retailers.
- The organization of seminars in Venezuela, also open to participants of other Latin American Countries.
- The financial situation of the Association. In 1988, 150 products were marked with EAN barcode symbols.

Yugoslavia

YUGOSLAV ARTICLE NUMBERING ASSOCIATION ("JANA")

c/o Privredna Komora Jugoslavije Terazije 23

11000 BEOGRAD

Tel.: 38.11.339.461 38.11.335.709 Fax: 38.11.326.691

Telex: 11638 - 12423

President: Mr. Z. DRAGOVIC, Chamber of Economy

of SR Montenegro

Executive Staff: MITIC Bozidar, Secretary

SYNOPSIS OF THE ACTIVITIES IN 1988

By the end of 1988, the YUGOSLAV ARTICLE NUMBERING ASSOCIATION had 583 manufacturers, 30 distributors and 23 other members. Three supermarkets, 42 department stores and 4 non-food speciality shops were scanning. The symbol-marking rate increased to 60 % on grocery items and 25 % on general merchandise products.

In 1988, JANA organized 3 seminars and 9 conferences/symposiums for representatives of different professions. During these symposiums the EDIFACT system as well as the EAN/TEDIS project were presented.

JANA also organized a study trip for 40 participants, including visits to the Federal Republic of Germany, the Netherlands, Belgium and United Kingdom. The purpose of this trip was to meet other Numbering Organizations and major equipment suppliers and to learn about advanced scanning systems, the introduction and operation of POS/EPOS systems in retail stores, in these various countries. The trip was very successful and useful to all JANA members.

INTERNATIONAL ARTICLE NUMBERING ASSOCIATION E.A.N.



RUE DES COLONIES 54 KOLONIENSTRAAT 1000 BRUSSELS TEL.: 02/218.76.74



EAN STATISTICS AS OF 31 DECEMBER 1988

1. Membership with the EAN Numbering Organizations

NUMBERING	MEMBER COMPANIES					
ORGANIZATION (Country)	Manufacturers	Distributors	Others	Total		
ABAC (Brazil)	305	77	73	455		
AECOC (Spain)	3,983	137	91	4,211		
AMECOP (Mexico)	60	20	13	93		
ANA * U.K.	5,596	331	171	6,098		
* Ireland	474	11	13	498		
ANC OF ROC (Taiwan)	250	- -	_	250		
APNA (Australia)	3,253	199	71	3,523		
CCC OF FINLAND (Finland)	0,200			813 (*)		
CCCI (Czechoslovakia)	609	77	244	930		
CCG (Germany, Fed. Rep.)	8,319	3,503		11,822		
CIP (Venezuela)	16	4	3	23		
CODIGO (Argentina)	1,090	15	10	1,115		
CODIPOR (Portugal)	357	42	33	432		
CYPRUS CCI (Cyprus)	122	4	_	126		
` - '	26,908	9,922	_	36,830		
DCC (Japan)	20,900	3,322		1,497 (*)		
DVA (Denmark)	1,376	162	165	1,703		
EAN-AUSTRIA (Austria)	8,600	440	100	9,040		
GENCOD (France)	432	2		434		
HCC (Hungary)	150	۷		151		
HELLCAN (Greece)		- 16	'	58		
ICELAND EAN CMT (Iceland)	42	60	-	1,188		
ICODIF * Belgium	1,128 30	5		35		
* GD of Luxemburg	l	39	163	7,779		
INDICOD (Italy)	7,577 640	20	100	660		
ICA (Israel)	l	30	23	636		
JANA (Yugoslavia)	583	7	23	50		
KDCC (South-Korea)	43	1	-	28 (*)		
KFADDR (German Dem. Rep.)	46		-	47		
MANC (Malaysia)	46	- 326	49	2,005		
NZPNA (New Zealand)	1,630	320	49	2,003 1,257 (*)		
NVK (Norway)				N.A.		
PNGPNA (Papua NG)	1 770	42	103	1,917		
SAANA (South Africa)	1,772	232 `	77	1,917		
SACV (Switzerland)	743 112		8	1,032		
SANC (Singapore)		14 39	58	1,236		
STICHTING UAC (Netherl.)	1,139	39	50	1,236 1,535 (*)		
SWEDISH EAN CMT (Sweden)				_ ` `		
TOBB (Turkey)	9	- 4		9 8		
TPNA (Thailand)	4	4	1 600	-		
USSR CCI (USSR)	3,431	370 	1,692	5,493 		
			TOTAL:	105,171		



2. EAN Scanning

COUNTRY	SUPERMARKETS & OTHER SELF SERVICE GROCERY STORES	DEPARTMENT STORES	NON-FOOD SPECIALITY SHOPS	TOTAL NUMBER OF SCANNING STORES
JAPAN FRANCE U.K. GERMANY, FED. REP. ITALY AUSTRALIA SWEDEN NORWAY SPAIN FINLAND THE NETHERLANDS BELGIUM DENMARK AUSTRIA SWITZERLAND NEW ZEALAND TAIWAN SOUTH AFRICA PORTUGAL YUGOSLAVIA ARGENTINA MEXICO IRELAND G.D. OF LUXEMBURG SOUTH-KOREA ICELAND ISRAEL HUNGARY CYPRUS VENEZUELA SINGAPORE MALAYSIA THAILAND BRAZIL USSR GERMAN DEM. REP. CZECHOSLOVAKIA PAPUA NEW GUINEA GREECE TURKEY	2,628 1,128 1,508 1,081 950 653 675 531 618 526 195 269 21 67 10 3 40 6 29 1 9 7 4 3 1 4 2	104 1 194 14 29 139 - - 1 9 - 2 42 - 5 - 17 - 1 2 - 1 1 - 3 - 1 1 - 3 -	739 1.663 550 3 00 316 24 209 30 31 49 60 81 33 71 4 4 32 1 13 13 TOTAL:	60,000 (*) 3,471 2,792 2,252 1,250 (*) 1,098 1,050 998 912 838 740 648 7530 354 344 330 111 100 83 49 44 43 30 18 17 14 10 10 5 5 5 5 4 3 2 2 2 2 1 1 1 78,166
(*) Estimate			TOTAL:	70,100



3. Scanning worldwide

