Mission Statement

"The Mission of the International Article Numbering Association EAN, and the Numbering Organisations, is to take a leading role in establishing a global multi-industry system of identification and communication for products and services based on internationally accepted and business led standards.

The objective is to improve the efficiency of integrated logistics while contributing added value to partners involved, as well as to consumers."
# TABLE OF CONTENTS

Message from the President ................................................................. 2
Message from the Secretary General ..................................................... 3
Development of EAN ............................................................................. 4
The EAN System .................................................................................. 4
Organisation of EAN ............................................................................ 5
Secretariat ............................................................................................ 6
EAN Cooperation with UCC ................................................................... 6
Direct Allocation of Manufacturer Numbers ........................................... 6
Representation at International Conferences ......................................... 6
EAN Liaison ......................................................................................... 7
Worldwide Membership - World Map ..................................................... 7
General Assembly ............................................................................... 8
Report on Committees ......................................................................... 8
  - Strategy Group ............................................................................ 8
  - Executive Committee .................................................................... 8
  - Management Board ...................................................................... 8
  - Communication Systems Committee .......................................... 9
  - Technical Systems Committee .................................................... 9
  - ESTAC ....................................................................................... 10
  - General purposes and Finance Sub-committee ............................. 10
Appendix ............................................................................................. 11
EAN Statistics ..................................................................................... 11
  - Allocation of Company Identification Numbers by Members ..... 11
  - EAN Scanning Stores .................................................................. 11
  - Use of EDI Standards in EAN Organizations ............................... 11
Message from the President

At a time of major political and economic change worldwide, companies must be able to respond in a regulated fashion to increasingly complex trading patterns. The International Article Numbering Association EAN, helps business to face this challenge by continuously evolving and adapting to meet the needs of commercial enterprise for standard identification, barcode and communication systems.

The global, multi-sector aspect of EAN’s activities is our greatest strength. Our ability to treat all products in a standard way gives us the flexibility and breadth of application demanded by users - and our global infrastructure provides the necessary education and support to members worldwide.

With the addition of Bulgaria, People’s Republic of China and Central America to the Association, we now span 53 countries throughout the world. Ongoing discussions with several other countries are expected to lead to further new members in the near future.

The continuing expansion of EAN and its services is due to the effective interworking of the Association with member organisations, and to liaison with other bodies. A key issue in our development is our close cooperation with the UCC. This produced several tangible results during 1991, discussed later in this report.

Finally, speaking for all the members of EAN, I would like to extend our heartfelt thanks to Mr. Etienne Boonet, who served as Secretary General of EAN since its foundation 14 years ago. We appreciate his valuable work and support during that time and wish him continuing success in his position as Director General of ICODEF, the Belgian EAN Association.
Message from the Secretary General

Article numbering is the core of the EAN system and the key to all other EAN standards. The impact of standard numbering has spread worldwide and throughout an increasing range of industries.

However, product identification, bar coding and electronic data interchange (EDI) of information on goods and services are not an end in themselves. Rather, they provide a means to improve trade and industry globally through accepted and easily-recognisable standards.

The International Article Numbering Association EAN, has always been a business-driven organisation. While the Association's role is to define and develop these standards, it does so in response to the needs and demands of Numbering Organisations and users globally - and it is their everyday use which makes them work. These standards offer a worldwide, user-driven system, based on the identification of products, processes and services, from POS to raw material, open and in-house systems. This is the message which we must communicate to the marketplace.

A major achievement in 1991 was the release of the UCC/EAN Application Identifier standard which provides standard definitions and a unique symbology for representing information in addition to the EAN article identification. It is based on the principles of generic and simple data fields which ensure and facilitate the provision of a multi-sectoral, cross-industry standard.

Most of the Application Identifiers are defined to improve management over the supply chain. Location codes, for example, help to ensure that the right goods go to the right place. Serial and batch numbers aim at traceability and can be used to streamline quality control and recall procedures.

Another major development is in the field of electronic communication and EAN is increasingly playing an active role in the design and promotion of Electronic Data Interchange (EDI) standards.

The annual survey on EDI projects conducted at the end of 1991 shows the adoption of EANCOM as the national standard by several Numbering Organisations, including Colombia, Denmark, Ireland, Italy, Portugal, Switzerland and Taiwan. Numbering Organisations in the Netherlands and Sweden have begun partial or full migrations from their national standard to EANCOM. There was also increasing interest in, and usage of, EDI for international communications.

At the close of the year, over 300 EANCOM users were operational and more than 1,100 users are expected by end of 1992.

To serve the needs of our members more efficiently, a new organisational structure was adopted at the Extraordinary General Assembly held in Stockholm on 11 October 1991 (shown on page 4).

The General Secretariat in Brussels is also working on an Operational Plan which encompasses three main areas of activity: support, development and promotion. Specific actions are underway in each area.

The resources of the Secretariat are available to all EAN members - we encourage you to use our services and look forward to hearing from you during the year.
In 1974, manufacturers and distributors of twelve European countries formed an ad-hoc council. Its brief was to examine the possibility of developing a uniform article numbering system for Europe, similar to the UPC system already in operation in the U.S.A. As a result of these investigations, a UPC-compatible system, called “European Article Numbering” was created.

The Association was formally inaugurated in February 1977, with the signing of the “Memorandum of Agreement on the Formation of EAN”. The new body was set up as a non-profit international association under Belgian law, with its General Secretariat located in Brussels. International status was quickly acquired through extending membership to include organisations from other continents. To reflect this increasing globalisation, the name was changed to the International Article Numbering Association EAN in 1981.

- Standard bar codes to allow automatic and secure capture of the identification and additional data;
- Standard formats for trade transactions communicated from computer to computer.

The EAN system enables unambiguous identification of any type of merchandise, regardless of origin or destination. It can be used with any product, foodstuffs, books, pharmaceuticals and even items which do not physically exist, such as services.

Thanks to symbol-marking standards, the symbols representing the article number can be scanned at any point in any trading chain and the UCC/EAN Alliance Proposal ensures full compatibility and worldwide acceptance of EAN and UPC marked goods.

Specific issues are entrusted to expert working parties meeting four or five times a year. The Technical Systems Committee (TSC) handles the development of coding and barcoding standards. The EAN Systems Technology Advisory Committee (ESTAC) ensures that liaison takes place with equipment manufacturers. The Communications Systems Committee (CSC) concentrates on EDI matters, specifically the development of CENCOM.

The Secretariat is located in Brussels, Belgium, where EAN is registered as a non-profit making international association under Belgian law. The working language is English.

---

The Development of EAN

The EAN System

Organisation of EAN
On 1st January, 1992 the staff of the General Secretariat was as follows:

**VAN LENNEP Reinhold**
Secretary General

**BARTHÉL Henri**
Technical Director

**FONTANI Frank**
Technical Executive

**WALSH Monica**
Administrative Assistant

**ROGIVAL Patricia**
Administrative Assistant

**DE GREEF Jobèle**
Administrative Assistant

---

**Functions of the secretariat**

- **Administration**
  - Everyday correspondence and book-keeping
  - Contacts and provision of information
  - Preparation of budgets
  - Organisation of all EAN meetings & writing up of Minutes
  - Information to members by means of circular letter, reports, newsletters, news flashes, etc.
  - Drafting all legal documents (statutes, contracts, cooperation agreements, etc.)
  - Writing up EAN General Specifications and the Vademecum
  - Dealing with membership applications
  - Contacts with and information to potential members

- **Ensuring the Implementation of the Operational Plan - Support / Development**
  - Advise and training to new members
  - Conducting surveys among the membership and circulating results
  - Explanation of EAN rules in case of queries
  - Encouraging the exchange of know-how and cooperation between members and initiating new projects where necessary
  - Participating in and coordinating the work of all EAN technical committees in the development of EAN standards
  - Attending to violations of technical rules

- **Operational Plan - Promotion**
  - Representing the International Association at international conferences and seminars.
  - Issuing promotional and educational material to familiarize the largest number of companies and organisations possible throughout the world about the EAN system.
  - Collaborating and liaising with other international organisations, user groups, etc. in the development of EAN standards.
  - Working closely with UCC to encourage total system awareness.
  - Representing EAN in the EDIFACT Board, EDIFACT committees and the UN/CEFACT WP4.
  - Ensuring good contacts and relations with the media in general.
During 1989, both EAN and the Uniform Code Council (UCC), the equivalent standards body for the U.S. and Canada, expressed the wish to formalise the cooperation principles between both organisations. These principles were subsequently approved in 1990 by the General Assembly of EAN and the Board of Governors of UCC and made official by the signature of the "Cooperation Agreement" on 31 October 1990 in Phoenix, Arizona. The agreement stipulates that:

"UCC and EAN will be guided by the following principles to the maximum feasible extent:
- UCC and EAN will work to achieve technical compatibility and common system architecture where global product distribution is feasible or desirable.
- UCC and EAN will work to develop common solutions to product identification problems where trade between UCC users and EAN users is involved.
- UCC and EAN will support development of a common approach towards electronic data interchange standards where used in the distribution of products.
- UCC and EAN will share technical information."

In 1987, EAN implemented a policy of directly assigning manufacturer numbers to exporters in non-member countries. To date, numbers have been allocated to exporting companies in the British West Indies, Benin, Ecuador, Guyana, India, Indonesia, Ivory Coast, Kuwait, Lebanon, Madagascar, Malta, Mauritius, Morocco, Nigeria, The Philippines, Sri Lanka, Saudi Arabia, Sudan, Tunisia, the United Arab Emirates and Zaire.

During 1991, EAN made presentations at various international congresses and conferences, including:
- CODIPOR Congress, Vitamoura (May)
- COMPAT'91, Copenhagen (June)
- UAC Year Symposium, Amsterdam (June)
- EANCOM information Day, Brussels (July)
- Third International Congress of EDI users, Brussels (September)
- International Retail Conference, London (September)
- Conference on "Article Numbering and Bar Code Scanning", Hong Kong (October 1991)
- IR Conference, Paris (October)
- SCAN-TECH Europe 91, Dusseldorf (October)

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 Organisation is formed and accepted in a given country, all manufacturer numbers issued directly by EAN revert to the control of this Numbering Organisation.

Cooperation with the UCC was a key issue for EAN in 1991. EAN was represented at the UCC Board of Governors and at STAC. UCC representatives attended the EAN General Meeting and several meetings of the EAN TSC.

Many documents and letters were exchanged between the two bodies, and common development work was undertaken on the following projects:
- Further development of the UCC/EAN-128 Application identifier Standard
- Examination of requests for the allocation of EAN-128 application identifiers
- Revision of the printability tables and expansion of the specifications to non-film master symbols in general.

Since 1987, EAN and UCC have operated an alliance programme, allowing companies in EAN member countries which export to North America to apply for a UCC manufacturer number through their local EAN Numbering Organisation. During 1991, many applications were satisfactorily processed under this agreement. Due to its successful implementation, the programme will continue in 1992.

- Observer status as a non-governmental organisation;
- Influences UN/EDIFACT message development.

EC DG XIII, TEDS European Community, Directorate General XIII (Telecommunications, Information Industries and Innovation) Trade Electronic Data Interchange Systems
- EAN participates in TEDS activities
- TEDS supports EAN standards for EDI (EANCOM)

AIM (Automatic Identification Manufacturers Association)
- AIM participates in EAN's ESTAC meetings.

CEN CEN/TC225 European Committee for Standardisation, Technical Committee on Barcoding
- EAN is a liaison body to CEN/TC225
- EAN standards are being considered for publication as CEN standards
Worldwide Membership of the EAN Association
The Annual General Meeting of EAN was held in Melbourne on 18/19 April 1991. The General Assembly approved the annual report 1990 and the accounts 1989/90 as well as the budget and the activity programme for 1991/1992.

Mr. R. FAHN, President ICA (Sweden) and Mr. J. AN VAN DUK were unanimously elected President and Vice-President of EAN. Mr. J. COLLIN, who was President of the EAN Association over the last three years, was elected Honorary President of EAN.

Three new organizations were accepted into the Association, namely the Chamber of Commerce and Industry of Bulgaria, the Article Numbering Centre of China and the Instituto Centroamericano de Codificación Comercial. The latter organization is a multi-national organization grouping six countries, i.e. Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. Two organizations resigned from the international Association: the EAN Organization in the ex-DDR was incorporated in CCG-Cologne, thus resulting in a single organization and the EAN Organization from Papua New Guinea was disbanded due to the limited number of companies to support the Organization.

Most of the General Meeting was devoted to the new organizational structure of the Association and the approval of a mission statement and a number of new strategies for the Organization.

The following mission statement was approved:

"The mission of the International Article Numbering Association, EAN, and the Numbering Organizations, is to take a leading role in establishing a global multi-industry system of identification and communication for products and services based on internationally accepted and business-led standards.

The objective is to improve the efficiency of integrated logistics while contributing added value to partners involved, as well as to customers."

Based on this mission statement, three strategies were identified. These are:
- Support
- Development
- Promotion

For each of these strategies, a basic strategy and an operational strategy were defined. Each year, an operational plan will be drafted to implement these three strategies and identify the priorities.

The General Assembly approved the new organizational structure of the EAN Association. The key points of the new organizational structure were:
- Setting up of a new Management Board, composed of a maximum of 15 members, including the President and the Vice-President
- Hiring of a full-time Secretary General, to manage the strengthened General Secretariat
- Dissolution of the Executive Committee and of the General Purposes and Finance Sub-Committee
- Establishment of a new "Numbering Organizations Manager Meeting", with an advisory function to the Management Board.

The General Assembly also approved the new Internal Regulations for the calculation of fees and votes.

In future, the fee levels will be calculated according to population, gross national product per capita and company numbers allocated. The first two criteria reflect the potential size of the EAN system in a given country (or group of countries), whilst the third criterion reflects the actual use of the EAN system.

Finally, the General Assembly endorsed a number of technical specifications, amongst which:
- The new list of EAN-128 Application Identifiers
- The coding of refund receipts
- The removal of the DUK-16/11-16 from the International EAN Specifications.

On 11 October 1991, the General Assembly held an Extraordinary Meeting in Stockholm. This meeting was fully devoted to the formal approval of the new organizational structure and the discussion of the budgetary implications. The following decisions were made during the meeting:
- Approval of the new EAN Statutes
- Approval of the Internal Regulations for the Management Board and the Numbering Organizations Manager Meeting and adaptation of existing Internal Regulations to the new Organizational structure.
- Approval of the budget increase for 1991/1992
- Agreement on the framework of the operational plan.

Finally, the General Assembly discussed the possibility of altering the name and the logo of the EAN Association to better reflect the worldwide character of EAN and its spread into new domains of application.
The Strategy Group was set up by the General Meeting of May 1990 to make recommendations on Strategy and Tactics to the General Assembly.

**Membership**

Messrs. R. FAHLIN, Chairman  
J. BERRY, [UK]  
E. BOISENET, Secretary General  
L. CANAS [Argentina]  
B.C. ENGEBERG [Germany]  
B. HOUSTON [New Zealand]  
M. IATLANE [France]  
J-A-N. VAN DUK [The Netherlands]

The Strategy Group met five times in 1991. The last three meetings were held together with the General Purposes and Finance Sub-Committee.

During 1991, the Strategy Group dealt with the following issues:

- Final drafting of the EAN position statement and basic strategies
- Discussion of the need for an international EAN user groups
- Name and logo of the EAN Association
- Development and recommendation to the General Assembly of a new Organizational Structure for the EAN Association, including new statutes and internal regulations for the various branches of the Association
- Proposed composition of the Management Board
- Economic implications of the new Organizational structure
- Agreement on the profile of the new Secretary General
- First discussion on the operational plan
- Preparation of the Extraordinary General Meeting of 11 October 1991. At the Extraordinary General Meeting of 11 October 1991, the Strategy Group was discontinued.

The Executive Committee met twice in 1991:
- on 15 February in Budapest  
- on 10 October in Stockholm

The main tasks of the Executive Committee were to prepare the General Assembly Meetings and to make recommendations based on the reports of the Technical Committee and working parties.

More specifically, the Executive Committee dealt with:

- Nominations for the Technical Committee and the "Communications" Working party
- New Applications for membership and assigning of prefixes
- EAN policy concerning the development and promotion of the Application Identifier Standard approval of an "EAN 990" EPC programme
- Progress report on EAN 7223 "EABuc" and discussion of implications on the EAN membership
- The decision to transfer the head office of the Association to new premises

At the Extraordinary General Meeting of 11 October 1991, the Executive Committee was disbanded.

**Membership**

Messrs. R. FAHLIN, Chairman  
J-A-N. VAN DUK, Vice Chairman  
J. BERRY [UK]  
J. M. BONMATI [Spain]  
L. CANAS [Argentina]  
J. COLLIN [Belgium]  
M.E. DAVISON [New Zealand]  
B.C. ENGEBERG [Germany]  
J. OLSEN [Denmark]  
G. PETIT [France]  
B. SMITH [Australia]  
A. SZEKE [Hungary]  
J-S. TAN [Singapore]  
Mrs. L. SANCHEZ DE LA VEGA [Mexico]

The members of the Management Board were elected on 11 October 1991. The Management Board enjoys all the powers of management and administration necessary for the operation of the Association and the implementation of the mission statement and basic strategies. These include:

- Definition of tasks and projects within the policy defined by the General Assembly
- Proposals to the General Assembly and follow up of the operational plan
- Preparation of budget proposals and financial statements
- Supervision of the activities of the General Secretariat
- Decisions on setting up or terminating working parties
- Decisions on changes and additions to existing EAN specifications
- Monitoring progress of working parties

The Management Board held its first meeting in Amsterdam on 8 November 1991. At this first meeting, the Management Board took the following actions:

- Mr Reinhold VAN LENNEN was appointed as the new Secretary General of the EAN Association, as from 1 January 1992
- The further detailing of the operational plan was discussed
- Several topics submitted by the Technical Committees were approved.
Membership
Messrs. H. BATHHEL, Chairman
E. AMMOC
S. CRONBACH
P. FRANZMANN
P. GEORGET
F. MEIER
P. MUNSTERMAN
E. NIELSEN
A. SANCHEZ
K. SCHULTZ

Objectives and Responsibilities
The main objectives and tasks of the Communication Systems Committee are:
- To provide EAN users with a practical, multi-industry international EDIFACT standard: EANCOM
- To take into account the use of existing national standards to achieve a compatibility with the international standard.
- To develop EANCOM within the framework of EDIFACT and thus monitor, influence and propose solutions as a user group within the EDIFACT organization.
- To provide the promotional, educational and documentary support in order to raise awareness and facilitate implementation of the EANCOM standard.

The Communication Systems Committee (CSC) met five times during 1991. The proceedings were mainly dedicated to the following matters:

EANCOM January 1992
The CSC devoted a considerable amount of time and effort in 1991 to develop the new release of EANCOM - EANCOM January 1992, replacing the first manual published in July 1990. The new release incorporates several additions, changes and improvements to the July 1990 manual. In general these consist of:
- Addition of accepted user change requests to existing messages.
- Development of implementation guides for 5 new messages.
- A detailed and professional documentation offering more user guidance.

The EANCOM January 1992 manual is divided into three parts:
Part I provides a description of the EANCOM project, an overview of the EDIFACT syntax, interchange structures, EANCOM documentation conventions, implementation guidelines for EANCOM and specific rules.
Part II provides the EANCOM messages information list and consists of the following eleven standard messages:
- Party Information
- Price/Sales Catalogue
- Purchase Order
- Purchase Order Response
- Purchase Order Change Request
- Despatch Advice
- Invoice
- Remittance Advice
- Sales Data Report
- Sales Forecast Report
- General Message

For each message, a full description of its function as well as segment by segment implementation guides, rules and examples are provided.

Part III consists of the EANCOM Data Elements and Code Sets Directory.

Distribution of EANCOM January 1992
The EANCOM manual is made available locally to interested users, service providers and national and industry EDI bodies through the network of 46 EAN Numbering Organizations worldwide. The new release of the EANCOM manual was announced with a wide circulation of press releases at an international and national level.

The CSC established 15 July 1992 as the latest date for users to migrate from the July 1990 version to the January 1992 version of EANCOM.

EAN participation EDIFACT proceedings
As an international user group, EAN is an active and influential participant in the EDIFACT proceedings. The CSC analyzed and determined appropriate EAN strategy and input to the EDIFACT proceedings. During 1991 EAN was actively involved in the following EDIFACT bodies and meetings:
- UN/EDIFACT Joint Rapporteurs Meetings
- Western European EDIFACT Board
- Western European EDIFACT Management Bureau
- Western European Technical Coordinating Committee
- Western European Trade Message Design Group
- Western European EDIFACT Awareness Group
- Western European EDIFACT Awareness Group

EANCOM policy
The CSC addressed several EANCOM policy and practical issues during 1991, including:

- Procedures for the new EANCOM January 1992 release
- Contacts with industry associations in the furniture, health and textile sectors. The EANCOM standard was adopted by EMED for the interchange of trade messages in the health sector.
- Analysis of EDIFACT proceedings, stability and directory convergence
- Cooperation with other industry sectors including CEFIC (Chemical), EDIFICE (Electronics), ODITE (Automotive), RINET (Insurance)

Message development
The CSC began planning for additional EANCOM messages to be developed during 1992. The Inventory Report and Receiving Advice messages will receive high priority. Messages will also be developed for communication by trade and industry with the transportation and financial sectors.
EANCOM as international and national standard

Results of the annual survey on EDI projects conducted at the end of 1991 reflected the adoption of EANCOM as a national standard by several Numbering Organizations including Colombia, Denmark, Ireland, Italy, Portugal, Switzerland and Taiwan. Numbering Organizations in the Netherlands and Sweden have begun partial or full migrations from their national standard to EANCOM. There was also increasing interest and use of EANCOM for international communications.

By the end of 1991 there were over 300 EANCOM users with this figure expected to grow to over 1,100 users by the end of 1992. Detailed figures can be consulted in appendix C.

EANCOM Information day

In July 1991 EAN organized with the support of the EC-ITDIS (European Commission Trade and Industrial Data Interchange Systems) program an EANCOM Information Day. Users, interested companies, service suppliers and EDI user group representatives were invited to participate to receive an EANCOM update and offer their comments. The meeting was well attended and speakers exchanged practical experiences with regards to EDI and EANCOM implementations. EANCOM as a multi-sectoral, international standards received support from user and interested companies present.

EANCOM education

Four regional seminars were organized during 1991 by the CSC and presented by the EAN secretariat providing EANCOM educational support to EAN Numbering Organizations. The seminars were held in Western Europe (Brussels), Eastern Europe (Budapest), Asia-Pacific (Melbourne) and Latin America (Bogota).

They were well attended and perceived to be highly useful as an information exchange forum.

Technical Systems Committee

Membership

Messrs:  H. BARTHEL, Chairman
        M. LAYALT, Deputy Chairman

Mrs.  T. ANGUE

Messrs.  G. OSBORNE
         B. PASSAO
         R.M. PEARCEY
         L. SCHADE
         R. SCHUBERGER
         G. VISEI

Objectives and responsibilities

The Technical Systems Committee is a permanent body responsible to the Management Board. Acting in an advisory capacity, its main objective is to provide for a central base of knowledge guaranteeing competent consideration of all technical matters concerning EAN and its applications in order to ensure continuity in EAN system thinking.

The TSC is responsible for elaborating technically feasible solutions to problems or new application domains identified by user companies, through a relevant body of the Association, or identified internally within EAN. The TSC is also responsible for maintaining a close liaison with SIA and other UCC technical committees in order to produce globally compatible solutions.

The Technical Systems Committee met five times during 1991. The proceedings were mainly dedicated to the following matters:

UCC/EAN Application Identifier Standard

The UCC/EAN Application Identifier Standard offers to business and industry worldwide a multi-sectoral, cross-industry standard for the coding of data beyond the main identification codes. The continuing development of the standard reflects the user-driven expansion of EAN's and UCC's domain of application.

On-going developments included the review of new Application Identifiers following specific user requests. The current list of Application Identifiers offers the possibility to code data including item identification, traceability numbers, dates, measurements, reference information codes as well as data for traceability or internal applications.

The TSC also reviewed the technical aspects of the standard such as the linking together of several data fields into one symbol, a technique known as concatenation, the printing and transmission of function 1 - a key element providing data security within the UCC/EAN-128 symbology, magnification factors and symbol location.

The above developments were reflected in the release of an updated standard specification in July 1991. The updated specifications incorporated a number of new application identifiers, an expanded introduction, short descriptions of applications for each application identifier and guidelines on systems design and software processing.

EAN label

The TSC began developing an EAN standard label with the objective of creating a multi-industry barcoded label combining the information to enable the efficient handling, tracking and distribution of dispatch units throughout the supply chain.

The TSC is identifying the information needed in the EAN label to meet the above objective as well as the interrelation of the various data fields. The EAN label will contain a selection of Application Identifiers defined in the UCC/EAN Application Identifier Standard along with specific implementation rules and a standard layout enabling automatic and unambiguous processing of the information.

Work on the EAN label has directly involved several user companies in manufacturing, distribution and transportation.

The work is carried forward to 1992.
CEN

The TSC reviewed and submitted the EAN and UPC standard symbology specifications to CEN to go forward as European Standards.

The UCC/EAN-128 symbology has also been recognized within the CEN Standard symbology specification of Code 128. UCC/EAN-128 defined by the presence of a function 1 symbol character immediately following the Code 128 start character, provides users with an unambiguous and secure interpretation of the data encoded in the symbol.

EAN is also actively supporting the standardization of symbology identifiers within CEN and in liaison with AIM U.S. and AIM Europe.

The TSC assessed the implications to EAN of the CEN TC 225 and its related working group proceedings, reviewing barcode quality standard specifications, data contents and applications. Appropriate strategies to be undertaken by EAN were developed.

EAN will submit the UCC/EAN Application Identifier Standard to CEN to go forward as a European Standard.

Coding of Product Variants

The TSC developed an international guideline for the coding of product variants with the objective of harmonizing national policies. A final draft of the international guideline will be submitted for Management Board approval by mid-1992.

Version D-3

The General Assembly of April 1991 approved the release of the International specification for Version D-3. The TSC continued the review of the specifications which are to be released during the third quarter of 1992. Version D-3 will provide an international standard for the coding of variable content products.

Coding of Refund Receipts

The TSC recommended and the General Assembly approved the release of preface 960 for coding of refund receipts produced by equipment handling empty containers automatically. The recommendation includes guidelines on the possible structure of the code.

Coding of Newspaper

The TSC recommended and the General Assembly approved the use of a 5-digit add-on as an alternative to the 2-digit add-on for the coding of newspapers under prefix 977. Consultation with ISDS on the structure of the code is carried forward to 1992.

Symbol location on Film Wrapped Units

The TSC reviewed the problem of "show through" on film wrapped units. Symbols on inner units contained in the film wrapped unit can be read by mistake if "show through" the film wrap. A recommendation was published outlining possible measures to be taken in order to prevent symbols on inner units from showing through.

Symbol Location on Books

The TSC recommended and the General Assembly approved a new recommendation on the location of symbols on books. The new recommendation moved the symbol to the bottom of the back cover closer to the binding or spine of a book.

STAC

The UCC STAC meetings are systematically attended by two EAN representatives. EAN input was prepared and results of meetings were assessed. The year saw a great deal of coordination and cooperation between the TSC and STAC in particular concerning developments of the UCC/EAN Application Identifier Standard.

EAN closely followed the UCC discussions on the UCC Appendix A Print Quality Specifications, the development of a calibration standard for UPC/EAN verifiers, the review of the symbol location guidelines and the development of a UCC expanded coupon code. These ongoing work items will be further discussed during 1992.

Membership

The TSC warmly thanked Mr. C. ENGDRG for the years of service and expertise he provided within the committee and welcomed Mr. J. SCHADE as a new member.
Membership

Messrs. M. LAPLANCE, Chairman
H. BARIHEL, Deputy Chairman
P. BAUER, Siemens
D. BLAKE, Mentling Blake
H. CLARK, AIX-Europe
J.C. CRIOZET, Digital Vision
M. JACOBEUS, Symbol Technologies
A. MILNE, IBM
J.M. NOVAK, Spectra-Physics
S. STATT, NCR

ESTAC, the EAN Systems Technology Advisory Committee, is the permanent contact body with equipment suppliers. Its main objective is to discuss technical matters with suppliers of equipment and software in conjunction with the EAN/JCE system in all areas of application.

The Committee met twice in 1991. The following matters were addressed:

- Light margin, truncation and magnification factors. Although the scanning technique available today is much more tolerant than they were ten years or more ago, any reduction in the specifications would reduce the safety factors built into the equipment and reduce the overall performance.
- Symbology Identifiers. Most of the equipment manufacturers did not take the risk to implement a draft standard released by AMIBUS. However, the issue was considered as important for processing properly scanned data in an open environment.
- UCC/EAN Application Identifier Standard. The Committee issued a number of recommendations regarding the structure of the data encoded in the UCC/EAN-128 symbology.
- Review of CEN draft symbology specification. The first draft of the EAN/JCE symbology specification, presented in a format requested by CEN European Committee for Standardisation, was reviewed by a group of experts.

Membership

Messrs. R. FAHLEN
J. COLLIN (Until April 1991)
J.A.N. VAN DUIN (From April 1991)
K. HAGEN
J. OLSEN

The General Purpose and Finance Sub-Committee had 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.

During 1991, the General Purpose and Finance Sub-Committee met together with the Strategy Group.

At the Extraordinary General Meeting of 11 October 1991, the General Purpose & Finance Sub-Committee was disbanded.
ARGENTINA

ASOCIACION CIVIL ARGENTINA DE CODIFICACION DE PRODUCTOS COMERCIALES (CODIGO)

Paraguay 577 - 3º
1057 BUENOS AIRES
Tel.: 54.1.312.52.13
Fax: 54.1.312.58.46

President
Mr. Federico BRAUN.
S.A. IMP. EXP. LA PATAGONIA

Technical Director
VIDIALE Enrique

Executive Staff
ESCORPIO Ariel
NAVA Diego
CANDIA Luisa

Newsletter
Boletin CODIGO

CODIGO has 2,162 members - 2,130 manufacturers, 12 distributors, 12 publishers and 8 service companies. To date, a total of 33,650 company numbers have been allocated. 153 stores [150 supermarkets, 3 general merchandise stores] have introduced scanning.

Seminars and Activities

- Display Stand at ENVASE '91, an international exhibition for the packaging industry.
- Participation at a conference entitled "El Scanning es un buen negocio?" (Is Scanning good business), part of the "Jornadas '91 de Supermercados Argentinos", an event organised by the Argentinian Supermarket Federation.
- Participation in a seminar on coding of corrugated cartons and packages using DUN-14 or ITF-14 symbologies.
- Attendance at "FANCOM-BOGOTA", a seminar on EDI organised by IAC (Colombia) for Latinamerican EAN organisations.
- Publication of a report on dispatch unit coding by CODIGO members.
- Agreement IELEN-CODIGO. This will enable the standardisation of information on member companies and coded products.

Publications

- "BOLETIN INFORMATIVO CODIGO": Newsletter on topics of general interest on barcoding and symbol marking.
- Produced information supplement for magazine "Actualidad en Supermercados".
- Published article in "ENVASES", supplement to daily "El Cronista Comercial".

Services

- Symbol checking of barcodes on packages: The testing of barcode symbols, carried out in the past by an outside party, is now done by CODIGO at point of sale or in-house. Information is collected about the printed symbol, printing techniques, printers etc.
- Comprehensive advice to companies on barcoding solutions.
- Transmitted by disquette of information on companies, coded products to Supermarket members.

AUSTRALIAN PRODUCT NUMBER ASSOCIATION LTD (APNA)

Locked Bag, 10
Oakleigh, VICTORIA 3166
Tel.: 61.3.569.97.55
Fax: 61.3.569.15.25

President
Mr. Geoff SAULER,
IDES METER LTD

Chief Executive
SMITH Brian

Executive Staff
RAMIREZ Marcela,
Administration Manager
PALAZZOLO Maria, Technical Manager

Newsletter
APNA News

At the end of 1991, APNA had 3,635 manufacturer, 40 distributor and 826 other members. In all, 6,052 company identification numbers had been allocated. 2,587 stores were scanning comprising 1,927 supermarkets and other self-service grocery stores, 585 department stores and 75 general merchandise stores & pharmacies.

1991 has been a year of expansion for APNA. The Organisation moved into larger premises to accommodate the increase in staff and services provided to their members and the industry sector as a whole. There was also a high demand for symbol testing and industry information services. APNA published new information brochures, updated the "APNA News", their Specifications for the paper industry and published an introductory Code of Practice for retail stores. Practical workshops for new members were also conducted.
AUSTRIA

EAN-AUSTRIA,
GESSELLSCHAFT FUR
KOOPERATIVE
LOGISTIK GmbH
Weihburggasse 1/15
1040 WIEN
Tel.: 43.222.505.86.01
Fax: 43.222.505.86.01.22
President
Dr. Willi MANWALD, Komm. Rat.,
EXAKT-DRUCK
Chief Executive
BURIAN-BRAUNSTORFER Eva
Maria, Director
Executive staff
VLEK Erich, Official in charge
FRANZMAYR Peter, Official in charge
Newsletter
EAN-AUSTRIA Info

BELGIUM AND
GRAND DUCHY
OF LUXEMBURG

ASBL ICODIF VZW
Rue Royale 29
1000 BRUXELLES
Tel.: 32.2.217.45.24
Fax: 32.2.217.43.47
President
Mr. M. RAES,
GIB GROUP [1991]
Mr. J. COLLIN
CAMPBELL FOOD &
CONFECTIONERY [1992]
Chief Executive
JOONET Etienne, Director General
Executive Staff
FRITROOST Dominique, Director
BRUEM Jef, Director
WELLEMAES Gilbert, Project Manager ICOM
Newsletter
ICODIF BULLETIN

Belgium

During 1991, the membership of ICOM (Belgian Manufacturers' branch of ICODIF) grew to 1,532 companies while the membership of ICOM (Distributors' branch) grew to 190 companies.

During the year, the organizational structure of ICODIF underwent a change. From now on, the role of ICOM and ICODIF will be limited to membership formalities. All publications, seminars, conferences, services and external contacts will be provided by ICODIF.

At the end of the year, 1,651 stores were scanning, which is an increase of 60% as compared to 1990. Several retail and wholesale chains are now fully equipped. GIB GROUP, the Belgian largest retail chain, decided to install scanning systems in its 125 stores by the end of 1992. At the end of 1991, the first 26 outlets were already successfully installed. In addition, MKRO has decided to equip all its food stores during 1992 and started a pilot test in one outlet during 1991.

ICODIF increased its symbol testing activities and checked a large number of printed symbols during the year. Manufacturers and printers were instructed on how to correct possible errors.

ICODIF continued to develop and promote its national EDI standard, ICOM. At the end of the year, major distributors and their suppliers announced their intention to implement this standard on a large scale. The ICOM Working Party continued with its message design work and assessed the tests of various messages. In parallel, ICODIF followed the EANCOM developments and provided the necessary information to Belgian companies that wished to adopt the EANCOM standard for international communication. Two EANCOM pilot projects were started between hospitals and suppliers of medical devices and pharmaceutical products.

Four seminars on "Numbering and symbol marking", including the "UCC/ EAN Application Identifier Standard" were held during the year, as well as four seminars on ICOM. In October, ICODIF organized a well attended two-day barcoding conference. Speakers from leading manufacturing and
ASSOCIACAO
BRASILEIRA DE
AUTOMACAO
COMERCIAL (ABAC)
Av. Paulista 2644
10º Andar Conj. 102
CP: 01310
SÃO PAULO
Tel: 55.11.256.88.69
Fax: 55.11.231.28.08

President
Mr M.J. Ferreira e SILVA
Grupo BOMPRECO

Chief Executive
RODRIGUES Wagner Tadeu,
General Manager

Executive Staff
LOPEZ Simone Silva, Technical Adviser
AZEVEDO Marcelo Henrique, Technical Adviser
Newsletter
INFORMATIVO ABAC

At the end of 1991 ABAC had 880 manufacturer members, 65 distributors and 87 other members. In all, 25 stores were scanning and 10,512 items marked.

During 1991, ABAC conducted 40 seminars for companies and associations. Over 441 companies were contacted through these seminars. An information seminar with packaging suppliers was organized to explain EAN symbol quality requirements.

ABAC has a free symbol testing service for its members. Each company receives a detailed report on the quality of its barcodes and is requested to correct errors if necessary.

The annual meeting, organized in collaboration with ABRAS, the Brazilian Association of Supermarket Stores, was a big success.

A media campaign on product coding was also conducted with ABRAS with insertions in their monthly magazine "Super Hiper".

BULGARIAN CHAMBER
OF COMMERCE AND
INDUSTRY (BCCI)
L.I.A. - Stamboliski Blvd.
CP: 5592 2.87.26.31
Tel: 22374
Fax: 2238.27.87.32.09

President
M. Vlamidir LAMBEV

Chief Executive
BOJUNOV Bojidar, Vice-President

Executives
PETCOVA Anna, Secretary

The Bulgarian Chamber of Commerce and Industry (BCCI) became a member of the EAN in May, 1991. BCCI is in the process of creating and introducing a national numbering system for the coding of goods and articles and to date has organised 5 seminars and issued 9 publications.

retailing companies explained how barcoding contributed to their business efficiency. ICODIF also lectured at several conferences on barcoding and EDI organized by third parties.

Two general introductory leaflets were produced and distributed.

Grand Duchy of Luxemburg

At the end of 1991, the Chamber of Commerce of the Grand Duchy of Luxemburg had 80 member companies. Approximately 20 stores were scanning.
CENTRAL AMERICA

INSTITUTO CENTROAMERICANO DE CODIFICACION COMERCIAL

1A. Av. 8-01 zona 10
Guatemala
GUATEMALA
Tel.: 502.2.321.777
Fax.: 502.2.321.784
Chief Executive
RAMON ALVAREZ Jose, Manager

At the end of 1991, the ICC had 14 manufacturers, 4 distributors and 7 other members. 40 stores were scanning.

The "Instituto Centroamericano de Codificacion Comercial - ICC" was formed and accepted as a member of the International Article Numbering Association during 1991. The ICC represents all six Central American countries.

During the first year, the objective has been the promotion of ICC. Special emphasis has been given to the basic aspects of bar coding such as reasons for using bar codes in industry and commerce, benefits of their use, procedures companies should follow to introduce bar codes on their products, and other uses of bar codes. Three one-day seminars were organized. Companies from a broad section of industry and commerce were invited. Many other special conferences were organized for companies interested in the subject.

In order to reach each and every country more efficiently, the establishment of an ICC branch in all Central American countries is planned through their respective Chambers of Commerce and Industry. In this regard, the ICC has been preparing the establishment of its subsidiaries and expects to have set up at least three by next year.

Great interest has been expressed among supermarkets and some department stores in the implementation of scanning. A rapid growth of scanning stores in Central America is expected in the coming year and the biggest supermarket chains have already started to prepare for full scanning.

CHILE

CNC-DEPARTAMENTO DE CODIFICACION COMERCIAL (CNC-DEPCO)

Vecinal 140,
Las Condes
SANTIAGO
Tel.: 56.2.33.35.16
56.2.33.32.98
Fax.: 56.2.31.30.24
President
Mr. Oscar ANDRIES TRUIENTIN,
SUPERMERCADOS JUMBO
Chief Executive
RECARBARREÑ MEDEIROS Carlos,
Executive Director
Executive Staff
GONZALEZ MORANDE Jorge,
Technical Adviser
ELGUETA ANDRADE Hector,
Executive

At the end of the year, DEPCO had 860 member companies and 22,000 items had been source marked. Twelve supermarket chains were scanning. Great progress was achieved in symbol-marking books and magazines and in the pharmaceutical sector, three major pharmacy chains introduced scanning in their drugstores.

During the year, 25 seminars were held for companies and associations and over 250 companies were contacted as a result.

In the technical area, DEPCO set up an official EAN symbol quality control service for its members.

DEPCO issued an information brochure "BARCODES" for its members and also published several articles in specialized journals, such as "MERCADO MODERNO" and others.
The Article Numbering Center of China was set up in 1988 and joined the International EAN Association in April 1991. By the end of 1991, ANCC had 648 manufacturer members, 57 distributors and 21 other members. In all, 648 company identification numbers had been allocated and more than 100,000 products barcoded. Two supermarkets were scanning by the end of 1991.

During the year, ANCC organized various activities to introduce the use of barcoding and encourage more manufacturers to source mark their products. At the end of 1991, ANCC had set up 30 branches in different provinces. The main activities organised during the year were:

- Organisation of the “first national conference on bar coding”
- Preliminary studies for the implementation of rules and specifications for numbering and symbol marking.
- Field testing of printed symbols and film masters for members and preparatory work for the setting up of the “Chinese National Bar Code Testing Centre”.
- Seminars and training: ANCC held 4 conferences to train its branches. In all, there were 26 training seminars for manufacturers held by branches or by ANCC directly.
- Publication: A brochure introducing ANCC and 2 manuals on barcoding technology were published. The video “Bar Code it Right” and “EAN Odyssey” were translated.
- Preparation and release of five national barcode standards.

At the end of 1991, IAC had 115 manufacturer, 17 distributor and 38 other members. 2 supermarkets and other self service grocery stores were scanning.

IAC created five working parties: Technical (barcoding), EDI, DPP, LOGISTICS and SALES DATA.

During 1991, IAC organised 25 seminars and initiated the first EDI pilot project. In collaboration with EAN, IAC held the first EANCOM seminar in Latin America at which Argentina, Brazil, Chile, Mexico, Venezuela and Colombia participated.
At the end of 1991, the Chamber of Commerce of Cuba had 6 members and 74 products had been marked.

The EAN office in the Chamber of Commerce is engaged in consolidating its technical expertise at present. The EAN Secretariat has been asked to provide technical services and advise. It was agreed that Mr. L. Canas, from Argentina, would provide this support to EAN bureau specialists and their members during a visit to Havana.

At the end of 1991, the Cyprus Chamber of Commerce and Industry had 199 manufacturer and 11 distributor members. In all, 199 company identification numbers had been allocated and five supermarkets and two department stores were scanning.

The increase of new members is mainly due to the fact that existing scanning stores decided to make a better and more extensive use of their equipment by requesting their suppliers to barcode their products. In addition, the barcoding system is expanding to cover new lines of products, especially those for export.
At the end of the year, the membership of CSS EAN had grown to 427 manufacturer members, 3 distributors and 10 other organizations. To date, 481 EAN company identification numbers have been allocated. Although the actual membership represents a 87,23% increase over 1990, the volume of Czech goods symbol marked with EANs is still very low. The increase applied mainly to imported items and represented about 10% for grocery items, 20% for cosmetics, and 30% for records.

The increase in the number of scanning stores was mainly due to the privatization of commercial organizations. The privatization of CSS EAN will also take place in 1992.

CSS-EAN produced publications in 1991 on consumer unit coding, location of the EAN symbol, supplementary coding using the EAN/UPC-F28 symbology and in-store numbering of variable weight products. In addition, a document entitled "Czechoslovak Technical Standards on EAN Coding, Printing and Marking of Despatch Units (TIF)" was released.

A technical commission was created for the standardization of EDI and EANCOM was chosen as the official EDI standard. The use of EANCOM in the health industry is under examination. The EANCOM manual was translated into Czech.

A national conference "CS EAN 91" was organized with international participation. A presentation was made to firms, involved in the supply of barcoding and scanning equipment.

CSS EAN organized trips for Czechoslovak experts to SCAN TECH EUROPE 91 and contacted UCC regarding the possibility of joining the EAN/UPC Alliance Programme.

With increased privatizations in the commercial sector, the use of the EAN system is expected to increase dramatically during 1992.

The DANSK VAREKODE ADMINISTRATION has no individual members. A total of 2,061 company identification numbers have been allocated and approximately 1,500 stores are scanning. The number of EAN numbers allocated continued to increase in 1991 in particular, for convenience goods, health care products and general merchandise. The largest general merchandise store in Denmark has decided to put EAN codes on every article. This means that by the end of 1992, more than 500,000 articles will have been marked.

A special working group has been set up to examine the problem of ambiguity in various sectors such as retail, transport, and warehousing. This task is mainly being achieved by the development of EDI and the establishment of an unambiguous ordering and invoicing system. The use of the Danish version of EANCOM, "EANCOM", originally launched in 1990 and containing both EANCOM and banking messages, really expanded during 1991 particularly in the retailing sector. 1991 was also the year when the first international EDI-implementation based upon EANCOM was established with Danish participation.

EAN/DVA has been very active in developing the use of EAN/EAN location codes and/or the EAN-article numbering system in various sectors such as building/construction, optics, sports, clothing, books, oil/gas, health care, etc.

The biggest challenge for the future is the harmonization and coordination of the use of EDI within businesses and across sectoral boundaries. DVA is thus very much involved in the creation of national conventions for trade, transport, banking and tax/customs.

A similar initiative will probably be taken at Nordic level.

These initiatives are seen as away of avoiding confusion and isolation and of supporting the use of EDIFACT based EDI-messages including EANCOM.

At the end of 1991, DVA had allocated 8,000 EDI numbers.
FINLAND

THE CENTRAL CHAMBER OF COMMERCE OF FINLAND
Falenintie 14 B
P.O. Box 1000
00101 HELSINKI 10
Tel.: 358.0.650.133
Fax: 358.0.650.303

President
Mr. M. AHTIAR
LUKO SPAR OY

Chief Executive
Mr. Sven-Gustav LINDBLAD,
Director

Newsletter
EAN-INFO

FRANCE

GENCOD SARL
13 Boulevard Lelebvre
75015 PARIS
Tel.: 33.1.48.18.63.54
Fax: 33.1.45.31.09.50

President
Mr. B. SUZANNE,
SYNDIFRAN

Chief Executive
ANGUE Thérèse, General
Director

Executive Staff
COSMADEU Joli, External
Manager
CIN Bernard, Project Manager
GEORGET Pierre, Technical
Manager

Newsletter
GENCOD INFORMATION

The Article Numbering Committee of the CENTRAL CHAMBER OF COMMERCIAL OF FINLAND has no individual members. At the end of 1991, 1,592 manufacturer numbers had been allocated. This represents an increase of 20% over 1990.

The source-marking of non-food items increased rapidly and the coding of despatch units with DUN-14s expanded to reach 29% of all despatch units.

By December 1991, 1,917 supermarkets, 203 department stores and 12 non-food specialty shops were scanning, totalling 2,240 installations. This means that 38% of grocery stores are scanning, representing about 70% of the turnover.

Discussions between retailers and manufacturers on sales data continued. Practical solutions were examined with the Marketindex company.

The EAN manual was updated, including new sections on the EAN-28 supplementary coding.

In the area of data communication, the Article Numbering Committee worked closely with the Data Transmission Committee at the Central Chamber of Commerce. This Committee supported the introduction of the EANCOM standard messages on an international level. Work in the EDINOR project continued with the other four Nordic countries.

By the end of 1991, 12,470 manufacturers, 530 distributors and 4 others associations were members of GENCOD. A total of 26,530 company numbers had been allocated and 7,750 stores were scanning, including 4,400 supermarkets, 180 department stores and 3,170 general merchandise stores and pharmacies. The number of stores using scanners or wand readers is now so high that the official figures do not reflect the reality. At least 72% of hypermarkets and 57% of all supermarkets are equipped.

Two categories of new members were noted: a large number of small companies who had to barcode their products and large companies from the non-food sector.

France TELECOM, became a member of GENCOD and from now on all industrial products procured by the company will be item marked with EAN codes. ALCATEL, the Telecommunications company also became a new member and will use EAN-28 coding on its cable drums.

By the end of the year, 415 workstations were connected to the ALLEGRO EDI Service. About 120,000 documents per month are now being sent via this Service. Some 40% of the users of ALLEGRO are DWI Companies; 34% are producers of fresh products and 13% are textile producers.

GENCOD held 52 seminars - in Paris and in other large cities: 29 seminars were held on product coding and symbol marking and 23 on EDI and ALLEGRO. GENCOD organized 6 meetings on ALLEGRO and new developments such as Code-128 and the exchange of experiences among participants. An exhibition was organized at every meeting giving equipment suppliers or software companies the opportunity to present their solutions for the implementation of different applications.

GENCOD also held a conference on Logistics in Paris with 450 participants. It participated in 3 exhibitions, and had a large stand at a DIY exhibition, as this sector is rapidly developing EAN applications and ALLEGRO.

Documents on the coding of textiles and clothing were published.
At the end of 1991, CCG had 12,065 manufacturer and 2,585 distributor members. More than 50% of the manufacturer members represent general merchandise branches.

By the year end, 7,238 stores were scanning. The symbol-marking rate reached nearly 100% in the food sector and increased rapidly in the textile and hardware sectors. CCG participated in particular activities in the textile and fashion sectors dealing with numbering, barcoding and EDI.

**NDWK**

In 1991, the activities of the DIN-Committee "Daten- und Warenumschlag in der Konsumgüterwirtschaft (NDWK)" were mainly concerned with three subjects:

- NDWK supports the EDIFACT-development at national level and endeavours to give EANCOM the DIN-certification as a tested EDIFACT-Subset.
- As the national committee corresponding to CEN-Technical Committee 225 "Bar Coding", NDWK has to safeguard the German interests in the context of European standardization.
- Environmental protection was one important reason to use reusable means of transportation. NDWK has for instance standardized the wooden pallet, size 800 x 600 mm (DIN 15146, Part 4).

**SEDAS - Exchange of Invoices**

More than 300 companies are now exchanging invoices on a bilateral basis. In 1990, the pilot project for the exchange of invoice information was successfully completed. Contracts for the exchange of invoices using EDI were made with the network providers General Electric I.S. and IBM.

**SDS - Exchange of order information**

87 manufacturers and 26 distributors participated in the SDS-order data exchange. The volume of order information increased to about 250,000. In 1991 more than 4.8 million order lines were exchanged through the clearing house.

**SINFOS - Communication of basic data**

CCG engages in activities concerned with the running of the SINFOS-Service SINFOS, which is a national Data Bank on articles (EAN catalogue) and contains marketing and logistical information, was implemented mid-1991. At the end of the year, approximately 40 companies participated in this information system.

**MADAKOM - Access to sales data**

110,000 items were collected in the MADAKOM panel in 1991. The MADAKOM-Pool contains the sales data from 140 outlets and from 16 distribution chains. The outlets represented are 16 department stores, 44 consumer markets, 34 supermarkets and 48 discount shops.
HELLENIC CENTRE OF ARTICLE NUMBERING
S.A. (HELLCAN)

Ethnikis Antistaseos 69 & Eptanissou 2
152 31 CHALANDINI
Tel.: 30.1.67.11.990
30.1.67.24.129
Fax: 30.1.67.26.080

President
Mr. I. VAIKIZIS, CONTROLGRAPH

Chief Executive
THEODORAKOPOLOU Jenny,
Vice President

Executive Staff
DIAMO Lucretia, External affairs
Newsletter
Information Notes

At the end of 1991, HELLCAN had 365 manufacturer, 1 distributor and 1 other member. In all, 365 company identification numbers had been allocated and one store was scanning.

One of the major general merchandise chains, Prinos, will introduce scanning during 1992. Other Supermarket chains are preparing to introduce scanning in the near future.

Seminars and press releases in 1991, with the purpose of giving general information about the EAN system, were addressed mainly to the industrial sector.

HONG KONG ARTICLE NUMBERING ASSOCIATION (HKANA)

D1, 13F UNITED CENTRE
95 Queensway
HONG KONG
Tel.: 852.8612.819
Fax: 852.8612.423

Chairman
Mr. G. ELLEDGE

Chief Executive
LIN Anna

Executive Staff
GRIMSEY William, Vice-Chairman

Newsletter
HKANA NEWS

By the end of 1991, HKANA had 308 manufacturers, 275 distributor and 23 other members. A total of 587 company identification numbers were allocated.

Progress In Scanning and Source Marking

1991 saw a continued growth of article numbering in Hong Kong with most large food retailers now members of HKANA. As of December 1991, two leading supermarkets had introduced scanning into 131 stores, representing 45% of their total. The second phase of the development will be directed towards convenience stores; two stores are already scanning on a pilot basis. As a result of the support of retailers to introduce scanning, the rate of source-marking in grocery products has increased dramatically from 25% in 1989 to about 95% at the end of 1991.

Activities

1. Trade Education
   - HKANA continued to provide symbol testing services to the industry, including testing of both printed bar code symbols as well as film masters.
   - Organised 12 workshops on "Bar Code It Right" for members.
   - Published 4 issues of "HKANA News".
   - Participated in Computer Expo '91 (Auto ID).
   - Organised an HKANA Pavilion in Cenist Asia '91 with the support of 13 hardware and software vendors.
   - Organised in conjunction with a UK retail consultancy a conference on article numbering as part of Cenit.

2. Consumer Education
   - Released two sets of Codes of Practice for retail stores that are introducing scanning.
   - Organised "Lucky Bar Code Shopping Spree" for consumers to identify correct bar codes in supermarkets as part of a consumer awareness programme.

3. Others
   - Commissioned a market research report to study the "Usage of Scanning Systems and Article Numbering among Hong Kong Retailers".
HUNGARY

HUNGARIAN CHAMBER
OF COMMERCE -
EAN BUREAU (HCC)

Dr Istvan DEBRECZENY,
Dunapack Ltd.

President

Chief Executive

EXECUTIVE STAFF

JUDIT Szirmay Kovacs,
Executive Officer
ENDRENE Szebeni, Executive Assistant

During 1991, HCC's membership increased rapidly and by the end of the year had a total of 713 members including 710 manufacturers and 3 distributors. A total of 713 company numbers have already been allocated and 165 stores have introduced scanning. These comprise 40 supermarkets, 5 department stores and 120 general merchandise stores and pharmacies.

The symbol marking rate on food products has increased by 300 per cent and has now reached 30 per cent of the total number of items. For pharmaceuticals and cosmetics, 70 per cent of items are now symbol marked.

During the year HCC organised several seminars and the UCC/EAN-128 specifications as well as the EANCOM manual were translated into Hungarian.

In February, HCC welcomed the members of the EAN Executive Committee to Budapest and hosted an EANCOM seminar for Eastern Europe.

ICELAND

ICELAND EAN
COMMITTEE

Mr Viðar Örliðsson,
ICELAND CHAMBER OF
COMMERCE

Chief Executive

EXECUTIVE STAFF

SOFIA HÖFSDOTTIR, Manager

There is a growing trend towards the use of the EAN system in Iceland. EAN Iceland has now a total of 268 members comprising 217 manufacturers and 51 distributors. In 1991 several specialized stores started scanning and there was a continuing growth in the retail sector. In all, by the year end, 60 stores had introduced scanning and over half of these were in the supermarket and general grocery sector.

EAN Iceland helped a large sales organisation dealing in seafood to use the new EAN/UCC application identifier standard as a basis for its new information system. This organisation exports both to Europe and the United States.

During 1991, EAN Iceland organised and participated in the first EDI project in Iceland entitled ISEDI '91. This project was a collaboration between several organisations and companies. The participating companies came from several sectors including retail, manufacturing, transport and banking. For this project, both EANCOM and location codes were used.
At the end of 1991, the ISRAEL CODING ASSOCIATION had a total of 1,347 members. 1,956 company identification numbers had been allocated and 130 stores were scanning.

**EDI**

An EDI project is at present in its preliminary stages. EDI standards in use elsewhere are being examined and requirements for Israel are being defined. An EDI Committee has been created.

A number of working groups have been set up to deal with different areas of activity.

**National Numbering of fruits and vegetables**

The technical Committee of the Israel Coding Association is examining a proposal for the numbering of fruits and vegetables.

**Bar-Code Quality on the final product**

In order to improve barcode quality, the Israel Coding Association has recently informed its members that barcode symbols will not be checked at the film master stage but in their final form on the printed package.

**Quality inspections**

The Association continues to examine the quality of barcodes in supermarkets. During 1991, 11 quality inspections were carried out in the different retail chains.

It is expected that in 1992 about 15 inspections will be carried out. Products which did not meet the required standards in the past will be checked again for signs of improvement.

---

Indicod has 12,885 member companies including 11,545 manufacturers, 45 distributors, 241 publishers and 54 others. 17,536 company numbers have already been allocated and 3,950 stores are now scanning. Most of these stores (3,796) are supermarkets or self-service grocery stores and the remainder are department stores.

The EAN system has expanded considerably in both the food and non-food sectors. In the food sector, the numbering and symbol marking of traded units has seen a dramatic increase.

Much time was spent in promoting the EAN solution at a number of conferences. The EAN/128 coding structure was adopted by the Publishing Industry and Ceramic Tiles Manufacturers supported the coding of traded units.

In addition, multi-media education packages (videos, computer-based training units) were developed to train companies on the technical aspects of EAN coding and the benefits of using the system. A video presentation was made at two international Trade Fairs and an exhibition was organised in Milan at the end of the year on the evolution of the distribution system up to the era of barcoding. This exhibition may travel to other cities in Italy in the near future.

Indicod also carried out a quantitative and qualitative survey on consumer attitudes towards barcoding. The findings of this survey formed the basis for an advertising campaign with advertisements appearing in major Italian newspapers and magazines during the months of November and December. The slogan of the campaign was "Il linguaggio dell'efficienza" - "the language of efficiency".

The implementation of a scanner data bank was completed and tested using data from a selection of stores belonging to five national retailer organisations. Since this test proved successful, the involvement of more stores and organisations is underway.

The EDI system has progressed and a number of companies are now exchanging ordering and invoicing information using EANCOM. Throughout 1992, some 100 to 150 companies will use EANCOM to transmit commercial messages via GEISCO and INTESA value-added networks. INTESA is a national joint venture between FAT and IBM.
THE DISTRIBUTION
CODE CENTRE (DCC)

No. 3 TDC - Bldg. 7-23-1
Nishigotanda
Shinagawa-ku
TOKYO #141
Tel: 81 3.3494.4029
Fax: 81 3.3494.4080

President
Mr. Eiji KAGEYAMA

Chief Executive
ASANO Kyosuke, Executive Director

Executive Staff
ONO Kouzo, General Manager
SATO Masato, General Manager
SEKAWA Hiroshi, Chief Researcher

Newsetter
DCC NEWS

Situation on the Introduction of Scanning

According to a survey conducted by DCC, at the end of March 1991, 100,000 stores had introduced POS scanning and 250,000 POS terminals were in operation. It was estimated that by the end of 1991, this figure would have increased to 150,000 stores and 500,000 POS terminals.

The number of manufacturers registered at DCC has reached 65,000 companies and the number of marketed items is estimated at more than 4,000,000.

During 1991, the use and application of source marking was more widely used in new areas such as DIY, construction and building materials, machinery tools, and other intermediate products and goods.

The main development of the year was that the largest General Merchandise Store in Japan, the DAEI Group, began to use EAN scanning for its apparel goods. Due to this development, the source marking of clothes and apparel goods will spread at an accelerated pace in 1992.

INSTALLATION OF EAN SCANNING STORES IN JAPAN (as of March, 31 1991)

<table>
<thead>
<tr>
<th>STORE CATEGORY</th>
<th>Fixed Total Scanner</th>
<th>Hand-held Scanner</th>
<th>Total</th>
<th>Total Number of Scanning Stores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Department Stores</td>
<td>798</td>
<td>2,100</td>
<td>2,898</td>
<td>180</td>
</tr>
<tr>
<td>2. Gen. Merchandise</td>
<td>30,278</td>
<td>26,933</td>
<td>57,211</td>
<td>4,175</td>
</tr>
<tr>
<td>3. Supermarkets</td>
<td>50,009</td>
<td>10,669</td>
<td>60,678</td>
<td>16,293</td>
</tr>
<tr>
<td>(mini-supermarket)</td>
<td>(5,498)</td>
<td>(2,011)</td>
<td>(7,509)</td>
<td>(3,403)</td>
</tr>
<tr>
<td>4. Convenience Stores</td>
<td>1,091</td>
<td>33,623</td>
<td>34,714</td>
<td>20,110</td>
</tr>
<tr>
<td>5. Agric. Co-op</td>
<td>3,503</td>
<td>358</td>
<td>3,861</td>
<td>1,045</td>
</tr>
<tr>
<td>6. Consumer Co-op.</td>
<td>7,336</td>
<td>1,018</td>
<td>8,354</td>
<td>1,440</td>
</tr>
<tr>
<td>7. Shopping Centers</td>
<td>1,397</td>
<td>1,002</td>
<td>2,399</td>
<td>634</td>
</tr>
<tr>
<td>8. Home Centers</td>
<td>791</td>
<td>1,072</td>
<td>1,773</td>
<td>368</td>
</tr>
<tr>
<td>Clothing (172)</td>
<td>(8,326)</td>
<td>(8,498)</td>
<td>(8,727)</td>
<td>(6,515)</td>
</tr>
<tr>
<td>Foods (1,054)</td>
<td>(1,773)</td>
<td>(2,827)</td>
<td>(2,827)</td>
<td>(2,074)</td>
</tr>
<tr>
<td>Furniture, interior goods (29)</td>
<td>(347)</td>
<td>(376)</td>
<td>(376)</td>
<td>(299)</td>
</tr>
<tr>
<td>Electric. Appl. (87)</td>
<td>(7,438)</td>
<td>(7,528)</td>
<td>(7,528)</td>
<td>(1,516)</td>
</tr>
<tr>
<td>Cameras, prec. metals, glasses (71)</td>
<td>(1,812)</td>
<td>(1,863)</td>
<td>(1,863)</td>
<td>(1,204)</td>
</tr>
<tr>
<td>Books, Stationery (54)</td>
<td>(820)</td>
<td>(874)</td>
<td>(874)</td>
<td>(549)</td>
</tr>
<tr>
<td>Car Goods (4)</td>
<td>(434)</td>
<td>(434)</td>
<td>(434)</td>
<td>(351)</td>
</tr>
<tr>
<td>&quot;Character Goods&quot; (68)</td>
<td>(261)</td>
<td>(337)</td>
<td>(337)</td>
<td>(287)</td>
</tr>
<tr>
<td>Pharmaceuticals, cosmetics (1,355)</td>
<td>(11,431)</td>
<td>(11,966)</td>
<td>(11,966)</td>
<td>(10,204)</td>
</tr>
<tr>
<td>Toys, Hobbies (40)</td>
<td>(1,002)</td>
<td>(1,042)</td>
<td>(1,042)</td>
<td>(627)</td>
</tr>
<tr>
<td>Records, etc. (60)</td>
<td>(650)</td>
<td>(650)</td>
<td>(650)</td>
<td>(529)</td>
</tr>
<tr>
<td>Liquor (269)</td>
<td>(6,532)</td>
<td>(6,801)</td>
<td>(6,801)</td>
<td>(6,268)</td>
</tr>
<tr>
<td>Shoes (3)</td>
<td>(1,415)</td>
<td>(1,418)</td>
<td>(1,418)</td>
<td>(1,209)</td>
</tr>
<tr>
<td>Sports Goods (29)</td>
<td>(1,561)</td>
<td>(1,570)</td>
<td>(1,570)</td>
<td>(795)</td>
</tr>
<tr>
<td>Gardening Goods (3)</td>
<td>(23)</td>
<td>(24)</td>
<td>(24)</td>
<td>(23)</td>
</tr>
<tr>
<td>10. Gen. Retail</td>
<td>1,361</td>
<td>2,340</td>
<td>3,701</td>
<td>2,544</td>
</tr>
<tr>
<td>11. Others</td>
<td>9,297</td>
<td>8,273</td>
<td>17,570</td>
<td>6,466</td>
</tr>
</tbody>
</table>

TOTAL 108,900                     136,354                      245,254                     92,461
**JICFS (EAN 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, standard recommended retail price, etc - to a wide range of retailers including wholesalers, marketing companies, and computer system suppliers. Product information is provided directly by the manufacturers to the database managed by DCC - Japan.
- The JICFS started to provide a service in April 1988.
- As of 30 November 1991, almost 750,000 product items were registered in the JICFS database (JDB) and these were mostly in the areas of food items and sundry goods. Over 1,680 companies use the JICFS system. It is expected that in one year about 1 million items will have been registered.
- The data per item unit registered in the JICFS-DB is provided to user companies through 13 distributors and this is used for POS price look-up files and for the maintenance of the product masters. This facilitates the exchange of order placement and order receiving data between retailers and vendors and the maintenance of product masters for scan data services.

**RDS (Scan Data Service System)**

- RDS system is an abbreviation for ‘Ryusyu Data Service’, (meaning ‘distribution’ in Japanese) and refers to a system for collecting and making effective use of POS-SCAN data which is provided by DCC Japan, retail shops that submit data. (PII: POS Information providers), and 11 data service companies (DBS).
- RDS Started up in 1991 and is being operated as a special program of DCC-Japan.
- From October 1991 the scanning data of 258 shops across Japan has been collected on a weekly or monthly basis, and a DBS company analyzes and processes this data in accordance with the specific needs of users such as wholesalers and retailers.
- The RDS provides, free of charge, reports using comparative data from other stores to those retailers who have participated in the system by providing scanning data.
- At present, the RDS mainly covers food products and sundry goods but a plan to expand the system to include pharmaceuticals, cosmetics, and alcoholic drinks is under examination at present.

**VANs for distribution industry/“BENTHAM”**

In Japan, VANs for the distribution sector can be classified into two groups, district-oriented VANs and unit industry VANs.

District-oriented VANs are built in each region, and serve as a data exchange system for placing orders and receiving orders on an online basis. They are used jointly by a large number of small and medium-sized retailers and wholesalers who have business relations.

More recently, VAN centers have also provided services such as the provision of maintenance data for POS product masters for small- and medium-sized stores.

Unit industry-oriented VANs are use mainly by joint users (manufacturers and wholesalers) from a given industry for the exchange of data i.e., order placement and receipt, shipping and billing information etc. Industry-oriented VANs have so far been developed for the food, confectionery, toys, household/sundry goods and home electrical appliances market.

With regard to district-oriented VANs, DCC Japan has developed the standard system model, and is carrying out efforts to promote standardization of district-oriented VANs in each area. The model system is called “BENTHAM”. It can be said that BENTHAM is the standard EDI for district-oriented VANs. At present, about 40 district-oriented VANs are operating in various parts of Japan. VANs based on BENTHAM started operating in April 1988.

Unit-industry oriented VANs are developed by various industry and trade associations, and they are created on the basis of the standard EDI for each industry concerned. At the present time, about ten VANs for the distribution industry are operating.
With all of these VANs, the standard business protocols are used such as the I-Protocol as the communication protocol, the JAN/EAN code, the standard data exchange format for each industry, uniform vouchers, and JICFS, etc.

Shopping District POS System

In Japan, in many places, shopping districts were initially formed by the regrouping of several medium and small-sized individual retail stores.

A Shopping District POS System is an information system that uses a POS Terminal System or Card Terminal for its individual retail stores. The stores jointly utilize a computer network system to reduce costs and improve store mix. At the same time, the system tries to improve customer service by issuing individual shopping district cards. This also means that these shopping districts can attract more customers.

Shopping District POS have two main advantages:

a. By issuing a Shopping District multifunction standard POS magnetic card, customer interest is aroused because of improved services.

b. By using the EAN barcode, each store in the shopping district is able to carry out better stock management thus ensuring a more effective store mix.

MALAYSIAN ARTICLE NUMBERING COUNCIL (MANC)

C/o Federation of Malaysian Manufacturers
17th Floor, Wisma Sim, Tunby
Jalan Raja Laut
50350 KUALA LUMPUR
Tel.: 60.3.293.12 41
Telex: 32437
Fax: 60.3.293.12 42
60.3.293.12 43

President
Mr. D. JAYA, Chairman of
Malaysian SIEGET GLASS BERHAD

Chief Executive
TAN Keok Yen, Executive Director

Executive staff
AU Soo Keun,
Senior Assistant Director
LIAN Lina, Assistant Director

Newsletter
MPN Newsletter

At the end of 1991, MANC had 227 manufacturer members and 8 other members.

During 1991, several workshops and seminars were held to encourage retailers to adopt scanning, and manufacturers to source mark their products.

As the growth in the use of the EAN System depends to a large extent on the demands of the retail sector, a talk was organised on how the EAN System contributes to retail productivity. The response from the retailers after the session was encouraging and a number of them indicated an interest in adopting scanning.

Four workshops were also held to guide manufacturers on the finer points of source-marking their products and to ensure that the bar codes are scannable.

Information on the EAN System and the quarterly MPN Newsletter were also disseminated widely to all manufacturers and retailers to promote the use of the System in the retail and industrial sectors.
MEXICO

ASOCIACION MEXICANA DEL CODIGO DE PRODUCTO AC (AMECOP)
Av. Hidalgo 109-1101
Col. Polanco
11560 MEXICO D.F.
Tel.: 52.5.545.50.56
Fax: 52.5.545.77.37

President
Mr Henry DAVIS S., CERA

Chief Executive
SANCHEZ ARCOS Gabriela,
Public Relations
SALTO TOLOSA Antonio,
Manufacture Manager

Newsletter
Boletin AMECOP

At the end of 1991, AMECOP had 1,194 manufacturer, 39 distributor, and
60 other members. 152 stores were equipped with scanning installations.

During 1990, AMECOP's principal efforts were focused on implementing
scanning systems and a national model has been developed in different
areas: supermarkets, department stores, etc.

AMECOP has increased the range of services it provides to its members i.e.
symbol testing, special seminars for individual companies and general
seminars dealing with topics such as printing, conditions, scanning systems,
industrial applications, etc.

In 1991, AMECOP organized its third Symposium, inviting retailers,
representatives of department stores, and equipment suppliers. More than
1,000 delegates attended the event.

In July 1991, AMECOP hosted the Latin American Working Party.
Almost all new members are from the clothing industry and general
merchandise. Special efforts have been made to promote the marking of
department units.

The EDI project is in its preliminary stages and a special EDI Committee has
been created.

UCC invited AMECOP to give a conference to the American Market on how
the EAN can work in the United States.

NETHERLANDS

STICHTING UNIFORME ARTIKEL CODERING (UAC)
Tournaiestraat 3
2507 AJ GAGENHEIM
Tel.: 31.70.617.08.14
Fax: 31.70.615.75.09

President
Mr. HENDRIK VAN DUIN,
EDISYS BV NV
Vice President
Mr. JESSE VOS,
GROOP NL NV
Chief Executive
GIETELINK J. Peter, Managing
Director

Executive Staff
GIERTER DE VRIES Henn. Deputy
Manager
MUNSTERMAN Piet J., Secretary,
Manager Market Development
and Technical Matters
Newsletter
* "UAC Perspectuur"
* "UAC/TRANSCOM Nieuwsberichten"

At the end of 1991 UAC had 1,981 members representing a net growth of
12% over the previous year. Membership composition is as follows:

- 80% manufacturers
- 15% wholesalers or retailers and
- 5% others

The members are from more than 20 different sectors.

Scanning
About 45% of the national turnover on food items is obtained through
scanning. The project entitled 'Central Exchange of Scanning Data' (CED),
created in 1986 was delegated to A.C. Nielsen in 1990. No changes were

A special program was initiated to improve the quality of coding and
symbol marking and an Expert Scanning Panel was nominated in
November.

EAN-coding
Expansion of the EAN coding system was discussed with respect to fruit,
vegetables, flowers, plants, trees, building materials, pharmaceuticals,
products. Special attention was given to:
- coding issues relating to tobacco products and excise duty;
- coding of coupons;
- coding of variable weight items;
- coding of non-standard items.

EDI (TRANSCOM)
Message development concentrated in 1991 on the following TRANSCOM-
messages : despatch advice, receipt advice and banking messages.

Pilot projects began for building materials, car parts, office stationery and
fashion products.

The number of TRANSCOM members reached 290 at the end of 1991. The
number of users is approximately 600.
A full scale survey was conducted among TRANSCOM users in November about their views on EDI-use, expectations and the reasons for using TRANSCOM.

**PR and Training**

A fully rewritten EAN-code Manual was issued in November.

At the same time UAC published a new EAN-brochure "The key to logistic improvements" to explain the "whys and hows" of EAN use.

UAC published the quarterly user-driven journal "UAC Perspective" (case stories) and also 4 issues of the "UAC/TRANSCOM Newsletter" as well as a number of limited circulation newsletters for EAN or TRANSCOM users only.

The usual half-day conference (100 attendees, free entrance) was held in June as well as special user and training seminars.

---

**NEW ZEALAND**

**PRODUCT NUMBER ASSOCIATION LTD (NZPNA)**

P.O. Box 11-110
WELLINGTON
Tel.: 64 4 846 669
Fax: 64 4 854 376

President
Mr R.D.J. CUPERT
CENTREPOIN, NEW WORLD

Chief Executive
HOUSTON, David, Executive Director

Executive Staff
DAWSON, navice, Technical Officer
BELLING, Pauline, Executive Assistant

Newsletter
NZPNA News

At the end of 1991, the New Zealand Product Number Association had 2,079 manufacturer, 351 distributor and 52 other members. A total of 872 stores were scanning.

Membership continues to increase as more scanning equipment is installed in hardware and general merchandise stores. These stores in turn are insisting on their suppliers barcoding their goods.

The New Zealand pharmaceutical industry has decided to convert the pharmacy code previously used, to EAN/UPC. There will be a marked increase in scanning in pharmacies. Hospitals are also expressing interest in barcoding and some work has already been done in educating Hospital Boards, pharmaceutical suppliers, etc. Export logs are being barcoded and there has been much activity in New Zealand setting up in house applications. For example, the meat industry, tobacco industry, pulp & paper industry and some large food manufacturers, have instated a complete paperless environment, with barcoding and scanning at every stage of manufacture and distribution.

A large proportion of despatch units have been barcoded and seminars were held throughout the year with an emphasis on despatch unit numbering. As more large manufacturers are incorporating on-line scanning, the interest in despatch unit numbering has become more intense. A video released mid-year dealing with despatch unit numbering has proved very popular.

NZPNA is heavily involved with EDI and electronic data capture. Some pilot schemes have been run and a number of retailers have begun trading electronically with their suppliers.

As well as running seminars throughout New Zealand, NZPNA ran a seminar in Fiji. There has been an upsurge of interest in barcoding and scanning in Fiji with their main retailer installing point of sale scanners. Education still needs to be undertaken in the Pacific region.

A user friendly manual has been written and distributed. This manual called "Product Numbering - Why & How", has been very well received. An updated Code of Practice for retailers scanning at point of sale has also been prepared as well as a poster.
The Norwegian Numbering Organisation (NVO) has no individual members. In all 5 organisations are represented consisting of 50% manufacturers and 50% retailers. At the end of 1991, 1,200 manufacturer numbers had been allocated and of these, 354 were for coding variable weight items. The symbol-marking rate on grocery items is approximately 99%. Source-Marking of general merchandise, such as books, newspapers, cosmetics, toys, shoes, clothes and records has continued to grow rapidly. A total of 250 manufacturer number were allocated in 1991, including 78 for "non-food" items. By the end year, 1,480 stores were scanning comprising 960 food supermarkets and other self-service grocery shops, 55 department stores, 114 book stores and 351 non-food shops.

During the year NVO visited more than 30 companies and held "mini-seminars" on dispatch unit numbering. NVO has also given lectures on EAN-numbering and symbol marking at seminars held by other organisations such as the Norwegian Packaging Association.

NVO has checked nearly 100 symbols following requests from retailers and manufacturers, and given advice regarding print quality and symbol location. The main problem has been truncation.

Two issues of the newsletter "EAN NYTT" were published. The Steering Committees “DPP” and “Communications” and working party “Dispatch Units” have continued their work. The Steering Committee “Communications” has set up projects on the EANCOM messages “Invoice”, “Order” and “Price/Sales Catalogue and Party Information”.

The ASOCIACION PERUANA DE CODIGOS (APC) had a total of 150 members. Of these, 124 were manufacturers, 25 were distributors and there were 4 other members. In all, 104 company identification numbers have been allocated and 8 stores are scanning.
POLAND

BAR CODING CENTRE
OF POLAND (BCC)

C/o Institute of Warehouse
Management
Ul. Estkowskiego 6
61-755 POZNAN
Tel.: 48.61.52.63.76
Telex: 413246
Fax: 48.61.52.63.76

President
Mr Grzegorz SZYNSKI
Institute of WAREHOUSE
MANAGEMENT

Chief Executive
FUCIAITCKI Krysztof, Director

Executive Staff
SWARCEWICZ Romanal,
Technical Adviser
CHOOROWSKA Ania,
Marketing Project Manager
HILLAS Eftihia, EDI Project
Leader

The Bar Coding Centre (BCC) has 216 members (203 manufacturers, 5
distributors and 8 other members). A total of 198 company numbers have
already been allocated and 17 stores (11 supermarkets, 5 general
merchandise and 1 department store) have introduced scanning.

During 1991, the second year of BCC activity, 174 EAN-13 numbers were
allocated to Polish companies (164 to manufacturers, 5 to distributors and
7 to others) and 134 EAN-8 numbers.

Since January 1991, two Polish documents on standardization have been
validated: "Barcode - General Requirements" and "Bar-code - Numbering of
Customer Units".

In 1991, the BCC initiated a co-operation agreement with Polish centers of
ISDS and ISDN and established rules for numbering books and publications.

Work was started on promoting the EANCOM EDI standard. Information
materials were prepared on EDIFACT and EANCOM and two basic EANCOM
messages, "invoice" and "purchase order," in their Polish versions were
prepared for potential users. The BCC cooperated with the national board of
EDIFACT, FOLPRO, in order to prepare Polish commercial documents for
EDI.

The remainder of BCC's activities centered on the promotion of bar coding
in general. This was carried out through the following activities:

- distribution of four information brochures written by BCC;
- initiating co-operation with several institutions of standardization and
  the departments of foreign trade;
- participation in both international and national trade fairs such as
  INFOSYSTEM '91, MODERN OFFICE, TAKOPAK, etc.;
- publication of articles on barcoding in the media including professional
  journals;
- organizing 15 training courses and seminars for Polish manufacturers
  and distributors.

PORTUGAL

ASSOCIACAO
PORTUGUESA DE
IDENTIFICACAO E
CODIFICACAO DE
PRODUCTOS
(CODIPOR)

Largo Grande 286-5°
2004 LISBOA CODIPOR
Tel.: 351.1.758.62.72
Telex: 62357
Fax: 351.1.759.95.08

President
Mr A.R. MELLO CAMPELLO,
NESTLE Portugal

Chief Executive
CARRERIA Maria Luiza, General
Secretary

Executive Staff
GONCALVES Ilda Ramos,
Technical Officer

During 1991, CODIPOR's membership grew by 29%, reaching by the end of
the year, 1,574 members (1,089 manufacturers, 156 distributors and 129
other members).

A total of 621 stores are scanning including 50 Supermarkets and other self-
service grocery stores, 7 Departament stores and 564 General Merchandise
Stores. Nielsen Market Research is conculding a national survey on the
marking of Despatch Units. The source marking of General Merchandise is
increasing, especially on textile and hardware products.

Due to the large number of new members, CODIPOR's activities during the
year were mainly confined to the organization of Barcoding Seminars and
Participation in various Meetings and Conferences.

CODIPOR organized its fifth National Congress in Vilamoura, Algarve, at
which EDI was the main subject. More than 150 delegates from Trade,
Industry and Services attended the event.

Concerning the marking of textile products, CODIPOR had its own stand at
the most important exhibition in Portugal, PORTEXCAR'91.
At the end of 1991, the Automatic Identification Association UNISCAN had 49 manufacturers, 1 distributor and 25 other members. To date, a total of 50 company numbers have been allocated and 2 stores have introduced scanning.

In 1991 a number of seminars were organized in different cities throughout the country to introduce the EAN system. These seminars were attended by 850 representatives from manufacturers, trading companies, printing and pharmacy sectors.

The technical conference and exhibition SCAN MOSCOW 91 was held on December 10-11 and 260 representatives from manufacturers, distributors and other organizations participated. Hardware equipment and software was exhibited. Conference participants showed a strong degree of interest in the EAN system as well as automatic identification technologies.

The UNISCAN Association issued its first bulletin UNISCAN NEWS.

SANC has a total of 534 members (443 manufacturers, 72 distributors and 19 other members). This represents an increase of 274 members over 1990. To date, 515 company numbers have been allocated and 4 stores have introduced scanning.

During 1991, SANC upgraded its symbol verification unit and recruited additional staff in order to provide a better service to its members.

**Appointment of SANC Director**

In April 1991, SANC appointed Mr. Tan Jin Soon as SANC Director. Mr. Tan currently represents SANC in the EAN's new Management Board.

**SANC Symbol Verification Unit**

SANC saw a significant increase in the number of products requiring verification by its members. NTUC Fairprice Co-operation Ltd, the largest supermarket chain in Singapore introduced POS scanning and SANC verified the barcodes on all NTUC Fairprice products. The verification of EAN/UCC Symbol-coded products complete with a written report on the symbols tested is rendered free-of-charge to SANC members.

**POS Scanning for Retailers**

SANC is currently working with government agencies, equipment and software suppliers on special technical and financial packages to assist small and medium-sized retailers with POS scanning. SANC has initiated meetings between supermarket owners and soft drinks manufacturers whose products are sold in multi-packs and will continue with this work on other multi-pack consumer products such as soap, instant noodles, etc. in the future. The objective of this exercise is to get agreement between the supermarket owners and manufacturers on the agreed methods of packaging and agreed formats of source-coding for multi-packs of consumer products, thus facilitating POS scanning of multi-packs.
SANC Seminars and Presentations

During the year, SANC organized the following Seminars and Presentations for its members:

- May, 1991: EAN Bar Code Scanning at Point-of-Sale (conducted by Spectro-Physics, USA and SANC)
- July, 1991: BCI bar code label designating, symbol location, print quality, colour selection, print master quality and symbol site (conducted by Dynarmer Computer Systems Pte Ltd and SANC)
- Sept, 1991: Seminar on “Bar coding the Traded units - Shipping Cartons” (conducted by SANC)

EDI

SANC is working with government agencies on the use of EANCOM as the EDI standard for Singapore. Following SANC’s attendance at the National Computer Board’s Seminar on “The Business Reality of EDI” in June 1991, SANC met with representatives from Medinet (a subset of EDI for pharmaceutical products) and EDI representatives to discuss the use of SANC bar codes for pharmaceutical products. An actual case study from Austria and documents provided by EAN were used during the meeting.

SANC Newsletters

SANC Newsletters are published and circulated on a monthly basis to members. During the year, relevant articles, taken from other EAN Numbering Organizations’ newsletters, were included in the SANC Newsletters with acknowledgements. A Chinese Section was also added to the SANC Newsletter in 1991 as a service to SANC members who are more at home with Chinese Language.

Auto-ID Asia’91

As in the previous year, SANC sponsored the Auto-ID Asia’91 Show, which was held from 10-12 October 1991 at the Singapore World Trade Centre.

More than 65 companies from nine countries displayed their high-tech products and systems. The biggest contingent was from the US followed by Singapore and Japan. Manufacturers, retailers, distributors and IT users had the opportunity to learn more about this technology and equipment, and how it could help improve productivity.

During 1991, membership grew to 2,757 companies; 2,812 in the manufacturing category, 44 in distribution and 101 in other categories. 323 stores were scanning with 6,453 scanning devices.

Seminars

Barcoding seminars were held in Johannesburg, Durban and Cape Town with attendance of about 250 delegates.

An EDI seminar for members was held in Johannesburg with attendance at around 150 delegates.

A paper on SANC EDI Standards was presented at the national EDI ’91 seminar.

Activities

CONSUMER AWARENESS - Despite efforts to improve in-store administration of scanning during 1990, consumer complaints continued to escalate during 1991. Consequently, SANA will be adopting a firmer stance against inefficiency run scanning stores during 1992. Surveys will be conducted by consumer organisations and measured against predetermined criteria. Survey results will be collated by SANA and forwarded to the Chief Executives of the retail chains concerned. Stores will be given 30 days in which to rectify faults indicated by a particular survey. Should corrective action not be taken within this period of time, the results of the survey will be released to the media for publication.
PHARMACEUTICAL EDI - The tasks of this sub-committee were completed during 1991 and the existing SAANA EDI Standards revised to meet their requirements. The sub-committee was disbanded and subsequently reconstituted as the Health Care EDI Committee to cater for the needs of related sectors that fall outside the membership of SAANA, such as medical schemes, hospitals, clinics, doctors and national health institutions. SAANA has been approached to coordinate the activities of this committee and will revert in the new year with the conditions under which it might accept responsibility for this task.

NATIONAL EDI STANDARDS - There has been mounting confusion and ignorance concerning SAANA and EDIFACT standards in South Africa. Market sectors outside the membership of SAANA have been promoting the adoption of EDIFACT SMs, blissfully unaware of the existence of different EDIFACT directories. SAANA's response has been to successfully promote the establishment of a national EDI Sub Committee under the SA Bureau of Standards. Their terms of reference are to develop National EDI Standards based on subsets of EDIFACT SMs and a single status 2 Directory, for use across all market sectors. SAANA members will continue to use the SAANA EDI Standards and will only make use of the National EDI Standards for interchanges with companies in other market sectors.

VAN PROVIDERS - Until now, only one VAN suitable for purposes of EDI has been available, called TRAFEX and based on the IBM networking software. Although recommended for use by SAANA, it will not receive official endorsement until certain shortcomings, such as its inability to recognise KAN location codes, have been rectified. A second VAN will be established early in 1992 called FIRSTNET. It will be using the TRADANET software.

KOREA ARTICLE NUMBERING CENTRE (KANC)

Room 1051, KCCI Building
45, 4-ka, Namdaemun-ro
Chung-ku, #100-743, SEOUL
Tel.: 82.2.755.1616
Fax: 82.2.755.3356

President
Mr. Cha Sang Pil, Executive Vice President of the KCCI.

Chief Executive
LEE Do-Yong, Executive Director

Executive Staff
PARK Tong-Joon, Manager

The Korea Article Numbering Centre has 362 members (301 manufacturers, 8 distributors and 53 others). In all, a total of 309 company numbers have been allocated and 511 stores have introduced scanning. These comprise 239 supermarkets and other self-service grocery stores, 45 department stores and 277 general merchandise stores.

Korea Article Numbering Center (KANC), a non-profit making foundation replacing KDCC (Korea Distribution Code Center), was created under the Civil Law of Republic of Korea on May 1991.

During 1991, KANC provided its members with KAN catalogue service on two occasions. At the end of 1991, the catalogue contained information on about 50,000 KANs and their corresponding item description.

KANC held three seminars on numbering and symbol marking standards, barcode printing technology and EDI.

KANC published the KAN NEWS quarterly and revised the KAN operational manual.
At the end of 1991, the Spanish Numbering Organization, AECOC had 6,912 manufacturers, 246 distributors and 142 other members (mostly distribution companies). More than 7,000 retail stores were using slot scanners or hand held readers. It is estimated that more than 3,000 pharmacies are using bar code reading devices.

**Main Coding and Symbol activities**

**Advice Service**

More than 2,000 telephone queries were received on technical questions and more than 20 personal enquiries per month are dealt with on technical matters.

**Courses**

24 courses were organized throughout Spain including a course for a pharmaceutical lab and another for the printing industries.

**Seminar**

A barcode seminar was held in Barcelona, promoting new experiences.

**Symbol Control**

The items in two stores were checked. 30% of errors detected were rectified. In addition, AECOC provided a symbol testing service to manufacturers to verify printed and film master symbols. 165 companies used this service in 1991.

**Notifications to suppliers**

Approximately 700 letters concerning more than 1,000 products out of specifications were sent to suppliers. More than 200 cards were sent by distributors.

**Supplier Directory**

An updated edition of the supplier Directory was published.

**General Merchandise**

The source marking of general merchandise items such as DIY, sports goods, and textiles showed a significant growth.

**AECOM activities**

- More than 102 users were availing of the AECOM Service by the end of 1991 representing an exchange of more than 10 million characters per month.
- 148 companies attended the AECOM training courses.
- An EDI Seminar was held in Barcelona.
- Activities on standard development were undertaken.
- Work station functions were updated and a help desk began to operate.
- Several meetings were held with Central Government in order to work out the legal and fiscal implications of EDI invoice documents.
- Basic technical documentation was produced to meet user requirements.

**Publications**

CODIGO84, AECOC-Info, AECO-Farma were published on a regular basis.

**Development Activities**

- Pallet quality rules were provided to interested companies.
- Several investigations and studies were undertaken with KDD (U.K.), ISSO, IFM (France) and IMF (USA). The Fruit and Vegetable market within Spain and pallet issues were addressed.
- A new Scanning Survey has been implemented.
- AECOC set up a special committee to look at the concept of merchandising.
- The National EURO-DPP cost-factors study was completed in 1991.

**Annual Congress**

The AECOC Annual Congress was organized in Marbella and was attended by 350 Managers and Chairmen from major Spanish retail and manufacturing companies.
At the end of 1991 EAN Sweden had allocated 2,426 company identification numbers. The yearly growth was thereby 15%. Most of the new users are to be found in the field of general merchandise and hard-ware retailing in particular.

Reporting scanning stores is not compulsory in Sweden. On estimate, there may well be over 3,000 stores. The food sector scans 49% of the total volume in the 2,114 stores that have been reported. In addition, scanning takes place in pharmacies, liquor stores, department stores, gas stations, fashion stores, hardeware stores, etc.

The use of EAN barcoded coupons took off and 147 manufacturers had 36 million coupons scanned.

Although EDI activities and the promotion of EANCOM was emphasized, regular activities around "The core of EAN" were carried out in the form of seminars, technical committees and working party meetings.

The EDI seminars - and one DPP seminar - were well received and well attended. The Swedish version of EANCOM entitled EDIT (for EDI in Trade) was drafted.

A product database for the catering sector was set up. The database aims to meet the needs of hospitals and other public and private restaurants who use computerized systems for planning and buying.

The marketing data project passed its final planning phase and is ready for production (one region, full scale) this year.

Very interesting talks were initiated with the Swedish Ground Transponder Council about the possible use of code 128, ECII in a "transport label". The results of this will be reported to the EAN Technical Systems Committee.

At the end of 1991, the SAGC had 927 manufacturers, 308 distributors and 87 other members. In all, 1,344 company identification numbers have been allocated.

1991 can be considered as the year of the "nEAnders" (national EAN data exchange rules). After the test installation between Dener AG and Knorr-Nähmittel AG in November 1990, two information seminars were held in spring 1991 providing interested parties with details about implementing nEAnders and the corresponding impact on the internal organization. Over 250 companies participated in these information seminars. At the end of these events 28 companies decided to join the "nEAnders-user group", committing their companies to implement nEAnders within the next 18 months.

Several project groups were actively developing the nEAnders system. These groups are:
- nEAnders message design
- nEAnders networking systems
- nEAnders central databases

nEAnders was also the reason for the new applications in the EAN barcoding sector. There is a legal obligation for the government to control the flow of pharmaceutical drugs. Until now this control was made on the basis of paper-copies of the delivery notes with the result that over 250,000 documents had to be processed annually.

In 1991 SAGC elaborated a concept where three goods have to be identified with the EAN-system. The supplier of drugs has to send a nEAnders message (sales data report) to the government where the sender and recipient of the goods are identified with EAN-location codes. Therefore each physician, pharmacy, hospital and supplier using drugs must have an EAN location code. The attribution of these codes will start in 1992 with the aim of realizing the efficient symbiosis of barcoding and EDI by the end of 1992.

Important work was done by major retailers to prepare the implementation of EAN-128 for variable weight items on traded units. The amount of products where the consumer units are sold with variable measures, such as meat, fruit, dairy products, do-it-yourself products, drugs and herbs, etc., has meant that the capacity of the existing EAN-solution will soon be exhausted. In this respect, Migros has taken the first steps in the direction of EAN version D3 for variable weight products.

We expect that 1992 will be an important year for SACG to open new fields of application for the EAN-system.
COMMERCIAL AUTOMATION AND NUMBERING INSTITUTE (CAN)

4th Floor, 10 Lin Shen South Rd, TAPEI
Tel.: 886.2.39.39.145
Fax: 886.2.39.13.171

Chief Executive
LIN Hui, Secretary General

Executive Staff
HU J.S., Director of Promotion Dept.
HUNG Marco, D.P., Centre Manager
HWAANG Adam, Assistant Manager of Commercial EDI Working Group

Newsletter
CAN News, Commercial Automation (monthly magazine)

At the end of 1991, the Commercial Automation and Numbering Institute (CAN) had allocated 1,140 numbers to manufacturers and 453 to distributors. 1,316 stores were scanning, comprising 1,205 supermarkets and other self-service grocery stores, 57 department stores and 105 general merchandise stores and pharmacies.

During the year, CAN helped the Sung Ching Supermarket switch to source marked products in its 9 stores. A barcoding conference aimed at suppliers was held in May informing them that in future only source marked items would be accepted. In addition, CAN helped the Shinung Supermarket and Kao Hong Wholesale World transfer from in-store marking to source marking.

Throughout the year, various activities were undertaken to promote article numbering and commercial automation:

- Conferences were held in Taipei, Taichung and Kaohsiung on "Store Automation", "Barcode Testing" and "The Strategy and Development of Commercial Automation". In addition, seminars on "Barcode Stationary Items" were organized.
- Seminars on barcoding were held for the National Cooperative Federation, Taiwan Gifts & Houseware Exporters Association, Taiwan Chain Store Association and the President Department Store Group.
- CAN participated at an exhibition on "Commercial Automation" organised by the Ministry of Economic Affairs.
- The "Trade EDI Standards Committee" was set up and 300 representatives from industry and academia were invited to participate in this development.
- Informed the Taiwan Tobacco & Wine Monopoly Bureau about barcoding.
- Produced TV programme on "Commercial Automation" including barcoding, store automation, EDI/VAN, distribution systems, etc.
- Published "CAN News" and "Commercial Automation" magazine.

THAI PRODUCT NUMBERING ASSOCIATION LTD (TPNA)

7th Floor, 1027 Phloenchit Rd, BANGKOK 10330
Tel.: 66.2.255.69.55
Fax: 66.2.254.91.30

Chief Executive
LAONACHAISILPA Vichai, General Manager

Executive Staff
CHRATHIVAT Suwanichai
CHRATHIVAT Suwikati
CHRATHIVAT Suchitra

At the end of 1991, TPNA had 55 members (33 manufacturers, 5 distributors and 17 other members.)

During 1991, TPNA organized 2 seminars to promote the importance and necessity of Bar Coding in the retail sector. Target groups for these seminars were suppliers and manufacturers.

TPNA has provided information to its members and answered questions about article numbering and bar coding systems in Thailand and overseas.
At the end of 1991, UCCET had 318 manufacturer members. UCCET circulates a quarterly Newsletter to its members, free of charge, about the activities and development of EAN.

At the end of 1991, the ANA-UK had 7,982 manufacturer, 581 distributor and 206 other members. In all, 10,911 company identification numbers had been allocated and 7,869 stores had introduced scanning.

1991 was another active year for the ANA, with more companies from an increasingly range of sectors applying the standards.

The ANA's EDI Service was relaunched with a commitment to provide comprehensive support to all EDI users.

Standards based on TDI and Edifact syntaxes are provided. By the end of the year there were over 4,000 users of the TDI based TRADECOMS standards and six new messages had been published as drafts for trial. Four of these new messages form the payment set enabling companies to carry out financial transactions using EDI.

In response to members' needs to use EDI internationally, the Association published and promoted EANCOM through the EDI service. In addition it worked with the Simple Trade Procedures Board (SITPRO) and a cross industry group to produce UK orientated EDIFACT message guidelines compatible with EANCOM. These standards were published as the UK EDIFACT Trade Message Convention.

During the year there was growing interest in the use of supplementary code standards and several companies began trials.

A pallet coding group was established to develop approaches to the use of article numbering and supplementary coding on pallet labels.

Work with the British Standards Institute's (BSI) Bar Coding committee continued throughout the year to provide input to the corresponding CEN activity. Secretariat services were provided to the BSI committee and the CEN working Group on quality.

ANA commissioned research into electronic pre-press systems at Keele University. This research, designed to produce practical advice on the creation of bar code symbols in integrated artwork, will provide the groundwork for international specifications perhaps through CEN.
Once again the Association presented its Opportunity for Efficiency awards to companies demonstrating excellence in the application of the standards. Awards were made in three categories: retailers, wholesalers/service providers and manufacturers, and presented at the annual Strategy Conference which was addressed by speakers from the automotive industry, from retailing and from the House of Lords.

Seminars and workshops on all aspects of ANAI's work were held throughout the year. New video presentations were launched and new brochures, including one for the clothing sector, were published. Association representatives were also prominent at external conferences and seminars, including EDI 91.

At the end of 1990, the Article Number Association had 694 manufacturer, 40 distributor and 22 other members. In all, 734 company identification numbers have been allocated and 127 stores are scanning. The use of scanning in non retail sectors such as D.I.Y., Drapery, Pharmaceutical and General Merchandise continued to grow.

**Scanning Standards Committee**

This committee launched a "Code of Practice Sticker" for stores involved in scanning, which all scanning stores in Ireland agreed to display indicating their adherence to the provisions of the Code of Practice. It was launched by the Irish Director of Consumer Affairs and given its approval. It is the first prepared for the launching of the ANAI Newsletter in early 1992.

**EDI Committee**

The EDI Committee encourages all EDI users in the Retail Grocery Trade to use the EANCOM Standards. Discussions were held with VAN'S to promote interconnection between networks. The committee had successful discussions with the Revenue Tax Authorities concerning EDI and invoicing and new regulations on the use of EDI and invoicing in Ireland are expected shortly. A conference on EDI was organised at which all the major retailers, suppliers and VAN'S involved in EDI attended. Each ANAI member involved in EDI receives a location code and EDI Implementation Guide from the ANAI which is updated regularly. It was estimated that there were 40 signed up EDI users at the end of 1991. This number is expected to more than double in 1992.

At the end of 1991, CLINA had 39 members (35 manufacturers and 4 others). Although there are no EAN scanning stores in Uruguay yet, many important manufacturers are barcoding their products.

During 1991, CLINA made a special effort to inform the Printing Industry about the EAN System.

Several articles on the EAN System and its uses were published both in newspapers and in specialized magazines. In November, CLINA participated at the Second Conference of the Latin American Information Federation (FLAI) which was held in Punta del Este.
YUGOSLAVIE

YUGOSLAVIARTICLE
NUMBERING
ASSOCIATION (YANA)

Tetarje 23/1, soba 531
11000 BEograd
Tel.: 38.11.399.461
Telex: 11638
Fax: 38.11.631.928

President
Dr. Josip STANITIC,
AGROSUBOTICA

Chief Executive
MITIC Bozidar, Secretary

Executive Staff
BOROJEVIC Vladimir, President,
YANA Assembly, JAMBO, SKOPJE
STANITIC Dr. Josip, President
YANA Board, AGRO D,
SUBOTICA

MILovan Filipovic, Vice-President
YANA, ROSNE KUCE, Beograd

At the end of 1991, YANA had a membership of 982, comprising 928 manufacturers, 51 distributors and 3 other members. 1,242 company identification numbers had been allocated and 88 stores were scanning.

Since its foundation, until the middle of 1991, YANA was a part of the Yugoslav Chamber of Commerce. According to the agreement of its members, and based on the decision of the Assembly of YANA on 24 March 1991, YANA seceded from the Chamber of Commerce on 14 June 1991 and became an independent Association for all the Republics of Yugoslavia with the same rights and obligations to its members as before.

Since becoming independent, YANA has improved its capability and efficiency.

During 1991, YANA acquired 251 new members.

Because of major changes in the Yugoslav economy due to civil unrest in the country, 262 members lost their YANA membership in 1991. Because of this, YANA had 982 members at the end of 1991. Some of the members are still in possession of EAN numbers, and some of the members got several numbers, so it happens that there are 1,242 EAN numbers in use. Of those 1,242 EAN numbers, 922 have a regular capacity for 100,000 articles and the remaining 320 have a capacity of 100 articles.

By the end of 1991, around 90,000 articles, or 80% of consumer units were marked with an EAN number.

Preparations have been made for implementation of ITF and additional codes.

The Yugoslav Government Committee for Development has undertaken a study on the implementation and development of EDI in Yugoslavia.

"Mihajlo Pupin" Institute from Belgrade has developed prototype equipment for application of EDI in various businesses.
<table>
<thead>
<tr>
<th>Name / Organization</th>
<th>Manufactures</th>
<th>Distributors</th>
<th>Others</th>
<th>To manufacturers</th>
<th>To distributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABAC (Brazil)</td>
<td>880</td>
<td>65</td>
<td>87</td>
<td>878</td>
<td>30</td>
</tr>
<tr>
<td>AECOC (Spain)</td>
<td>6,632</td>
<td>246</td>
<td>142</td>
<td>6,152</td>
<td>246</td>
</tr>
<tr>
<td>AMECOP (Mexico)</td>
<td>1,194</td>
<td>39</td>
<td>60</td>
<td>1,638</td>
<td>5</td>
</tr>
<tr>
<td>ANA (UK)</td>
<td>7,982</td>
<td>581</td>
<td>206</td>
<td>10,911</td>
<td></td>
</tr>
<tr>
<td>ANA (Ireland)</td>
<td>694</td>
<td>40</td>
<td>22</td>
<td>694</td>
<td>40</td>
</tr>
<tr>
<td>ANC (China)</td>
<td>646</td>
<td>57</td>
<td>21</td>
<td>648</td>
<td></td>
</tr>
<tr>
<td>APC (Peru)</td>
<td>126</td>
<td>25</td>
<td>4</td>
<td>98</td>
<td>6</td>
</tr>
<tr>
<td>APNA (Australia)</td>
<td>3,535</td>
<td>40</td>
<td>826</td>
<td>6,052</td>
<td></td>
</tr>
<tr>
<td>BCC (Poland)</td>
<td>203</td>
<td>5</td>
<td>8</td>
<td>193</td>
<td>5</td>
</tr>
<tr>
<td>CAX (Taiwan, China)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,440</td>
<td>453</td>
</tr>
<tr>
<td>CC de Cuba (Cuba)</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>CCC of Finland</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CSS EAN</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CSS EAN</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CSG (Germany)</td>
<td>12,065</td>
<td>7,585</td>
<td>-</td>
<td>12,065</td>
<td>7,585</td>
</tr>
<tr>
<td>CF [Venezuela]</td>
<td>65*</td>
<td>5*</td>
<td>9*</td>
<td>66*</td>
<td>4*</td>
</tr>
<tr>
<td>CNC-DEPCO (China)</td>
<td>290</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CORDPOR (Portugal)</td>
<td>1,289</td>
<td>155</td>
<td>129</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CUBA (Uruguay)</td>
<td>35</td>
<td>-</td>
<td>4</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>CYPRUS CCI</td>
<td>151</td>
<td>11</td>
<td>2</td>
<td>188</td>
<td>11</td>
</tr>
<tr>
<td>DCC (Japan)</td>
<td>47,692</td>
<td>17,169</td>
<td>-</td>
<td>48,029</td>
<td>17,216</td>
</tr>
<tr>
<td>DVA (Denmark)</td>
<td>2,246</td>
<td>344</td>
<td>231</td>
<td>2,061</td>
<td></td>
</tr>
<tr>
<td>EAN-AUSTRIA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GENCOD (France)</td>
<td>12,470</td>
<td>530</td>
<td>8</td>
<td>25,000</td>
<td>1,530</td>
</tr>
<tr>
<td>HCC (Hungary)</td>
<td>710</td>
<td>3</td>
<td>-</td>
<td>710</td>
<td>3</td>
</tr>
<tr>
<td>HOLLAN (Netherlands)</td>
<td>365</td>
<td>1</td>
<td>1</td>
<td>365</td>
<td>1</td>
</tr>
<tr>
<td>HKANA (Hong Kong)</td>
<td>308</td>
<td>275</td>
<td>23</td>
<td>307</td>
<td>280</td>
</tr>
<tr>
<td>IAC (Columbus)</td>
<td>115</td>
<td>17</td>
<td>33</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>ICA (Israel)</td>
<td>1,147</td>
<td>-</td>
<td>-</td>
<td>1,956</td>
<td>-</td>
</tr>
<tr>
<td>ICELAND EAN CMT</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[Iceland]</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ICCEI [Central America]</td>
<td>14</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>IODEP (Belgium)</td>
<td>1,532</td>
<td>198</td>
<td>7</td>
<td>1,532</td>
<td>190</td>
</tr>
<tr>
<td>ICOFIE</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[G. D. of Luxembourg]</td>
<td>76</td>
<td>4</td>
<td>-</td>
<td>76</td>
<td>4</td>
</tr>
<tr>
<td>INDCOD (Italy)</td>
<td>12,545</td>
<td>45</td>
<td>295</td>
<td>17,538</td>
<td></td>
</tr>
<tr>
<td>JANA (Kosova)</td>
<td>928</td>
<td>51</td>
<td>3</td>
<td>1,191</td>
<td>51</td>
</tr>
<tr>
<td>KDCD (South Korea)</td>
<td>301</td>
<td>8</td>
<td>53</td>
<td>301</td>
<td>8</td>
</tr>
<tr>
<td>MANCI (Malaysia)</td>
<td>227</td>
<td>-</td>
<td>8</td>
<td>231</td>
<td></td>
</tr>
<tr>
<td>NORSK VAREK. FOR.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[Norway]</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NZAIA (New Zealand)</td>
<td>2,074</td>
<td>251</td>
<td>52</td>
<td>2,755</td>
<td>213</td>
</tr>
<tr>
<td>SPAHA (South Africa)</td>
<td>2,812</td>
<td>49</td>
<td>101</td>
<td>2,812</td>
<td>44</td>
</tr>
<tr>
<td>SACV (Switzerland)</td>
<td>927</td>
<td>308</td>
<td>82</td>
<td>1,021</td>
<td>323</td>
</tr>
<tr>
<td>SWEDISH EAN CMT</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SANC (Singapore)</td>
<td>443</td>
<td>72</td>
<td>19</td>
<td>443</td>
<td>72</td>
</tr>
<tr>
<td>STICHING UAC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>[The Netherlands]</td>
<td>1,585</td>
<td>297</td>
<td>59</td>
<td>1,652</td>
<td>291</td>
</tr>
<tr>
<td>THAI AFA (Thailand)</td>
<td>33</td>
<td>5</td>
<td>17</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>UKCEI (Turkey)</td>
<td>318</td>
<td>1</td>
<td>24</td>
<td>46</td>
<td>1</td>
</tr>
<tr>
<td>UNISCE (Russia)</td>
<td>49</td>
<td>1</td>
<td>24</td>
<td>46</td>
<td>1</td>
</tr>
<tr>
<td>Country</td>
<td>Supermarkets</td>
<td>Other retail sector stores</td>
<td>Department stores</td>
<td>General merchandise plus specialty stores</td>
<td>Total number of scanning stores</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>----------------------------</td>
<td>-------------------</td>
<td>----------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Argentina</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td>153</td>
</tr>
<tr>
<td>Australia</td>
<td>1,927</td>
<td></td>
<td>565</td>
<td></td>
<td>2,487</td>
</tr>
<tr>
<td>Austria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,672</td>
</tr>
<tr>
<td>Belgium</td>
<td>1,146</td>
<td></td>
<td></td>
<td></td>
<td>1,651</td>
</tr>
<tr>
<td>G. D. Luxembourg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Brazil</td>
<td>1,8</td>
<td></td>
<td>7</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>Central America</td>
<td>38</td>
<td></td>
<td>3</td>
<td></td>
<td>41</td>
</tr>
<tr>
<td>Chile</td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>China</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Colombia</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Cuba</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td>2</td>
<td></td>
<td>5</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>5</td>
<td></td>
<td>1</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,500</td>
</tr>
<tr>
<td>Finland</td>
<td>1,917</td>
<td></td>
<td>203</td>
<td></td>
<td>2,240</td>
</tr>
<tr>
<td>France</td>
<td>4,900</td>
<td></td>
<td>180</td>
<td></td>
<td>2,170</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,750</td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,238</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>133</td>
<td></td>
<td></td>
<td></td>
<td>133</td>
</tr>
<tr>
<td>Hungary</td>
<td>40</td>
<td></td>
<td>5</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>Iceland</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Israel</td>
<td>88</td>
<td></td>
<td>2</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Italy</td>
<td>3,790</td>
<td></td>
<td>160</td>
<td></td>
<td>3,950</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>92,461**</td>
</tr>
<tr>
<td>Malaysia</td>
<td>5</td>
<td></td>
<td>1</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Mexico</td>
<td>51</td>
<td></td>
<td>54</td>
<td></td>
<td>152</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>1,160</td>
<td></td>
<td>60</td>
<td></td>
<td>1,520</td>
</tr>
<tr>
<td>New Zealand</td>
<td>480</td>
<td></td>
<td>158</td>
<td></td>
<td>872</td>
</tr>
<tr>
<td>Norway</td>
<td>960</td>
<td></td>
<td>55</td>
<td></td>
<td>1,480</td>
</tr>
<tr>
<td>Peru</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Poland</td>
<td>11</td>
<td></td>
<td>1</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Portugal</td>
<td>50</td>
<td></td>
<td>7</td>
<td></td>
<td>621</td>
</tr>
<tr>
<td>Russian Federation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Singapore</td>
<td>73</td>
<td></td>
<td>5</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>South Africa</td>
<td>273</td>
<td></td>
<td></td>
<td></td>
<td>323</td>
</tr>
<tr>
<td>South Korea</td>
<td>279</td>
<td></td>
<td>46</td>
<td></td>
<td>511</td>
</tr>
<tr>
<td>Spain (estimates)</td>
<td>4,653</td>
<td></td>
<td></td>
<td></td>
<td>7,653</td>
</tr>
<tr>
<td>Sweden (estimates)</td>
<td>2,114</td>
<td></td>
<td>57</td>
<td></td>
<td>3,171</td>
</tr>
<tr>
<td>Switzerland</td>
<td>198*</td>
<td></td>
<td>5*</td>
<td></td>
<td>638*</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1,205</td>
<td></td>
<td>57</td>
<td></td>
<td>1,367</td>
</tr>
<tr>
<td>Trinidad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.K.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,869</td>
</tr>
<tr>
<td>Ireland</td>
<td>124</td>
<td></td>
<td>2</td>
<td></td>
<td>127</td>
</tr>
<tr>
<td>Uruguay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>2*</td>
<td></td>
<td>5*</td>
<td></td>
<td>7*</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>37</td>
<td></td>
<td>46</td>
<td></td>
<td>86</td>
</tr>
</tbody>
</table>

**TOTAL** |                           |                           |                   |                                        | **148,243**                  |

*As of 31st December 1990
**As of March 1991
## USE of EDI in EAN Organisations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>SEDAS</td>
<td>200</td>
<td>300</td>
<td>IBM</td>
</tr>
<tr>
<td>EAN Austria</td>
<td>EANCOM</td>
<td>-</td>
<td>15</td>
<td>(ECODER)</td>
</tr>
<tr>
<td>Belgium &amp; Luxembourg</td>
<td>ICOM</td>
<td>73</td>
<td>95</td>
<td>IBM</td>
</tr>
<tr>
<td>ICODIF</td>
<td>EANCOM</td>
<td>15</td>
<td>30</td>
<td>GEIS</td>
</tr>
<tr>
<td>Columbia</td>
<td>EANCOM</td>
<td>-</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Denmark</td>
<td>EANCOM</td>
<td>50</td>
<td>200</td>
<td>-</td>
</tr>
<tr>
<td>DVA</td>
<td>(EANCOM)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>+OVI/EDI</td>
<td>800</td>
<td>1,200</td>
<td>-</td>
</tr>
<tr>
<td>OCC</td>
<td>EANCOM</td>
<td>1</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>France</td>
<td>GENCOD</td>
<td>400</td>
<td>800</td>
<td>BULL</td>
</tr>
<tr>
<td>GENCOD</td>
<td>EANCOM</td>
<td>15</td>
<td>30</td>
<td>[Allergo]</td>
</tr>
<tr>
<td>Germany</td>
<td>+SEDAS</td>
<td>695</td>
<td>795</td>
<td>GEIS</td>
</tr>
<tr>
<td>CCG</td>
<td>EANCOM</td>
<td>6</td>
<td>20</td>
<td>IBM</td>
</tr>
<tr>
<td>Iceland</td>
<td>EANCOM</td>
<td>4</td>
<td>20</td>
<td>PTT</td>
</tr>
<tr>
<td>EAN Iceland</td>
<td>(ISEDI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>EANCOM</td>
<td>30</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>ANAI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>EANCOM</td>
<td>40</td>
<td>150</td>
<td>GEIS</td>
</tr>
<tr>
<td>INDICO</td>
<td></td>
<td></td>
<td></td>
<td>INTESA</td>
</tr>
<tr>
<td>Netherlands</td>
<td>+TRANS.COM</td>
<td>500</td>
<td>1,000</td>
<td>PTT</td>
</tr>
<tr>
<td>LIAC</td>
<td>EANCOM</td>
<td>10</td>
<td>150</td>
<td>JSM</td>
</tr>
<tr>
<td>Norway</td>
<td>&quot;Standard&quot; Records *</td>
<td>2,000</td>
<td>2,050</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>EANCOM</td>
<td>21</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>CODIPOR</td>
<td>(CODIPOR)*</td>
<td>-</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>South Africa</td>
<td>SAMAX</td>
<td>15</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>SAMAX</td>
<td>EANCOM</td>
<td>3</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Spain</td>
<td>AECOC</td>
<td>102</td>
<td>300</td>
<td>TSI</td>
</tr>
<tr>
<td>Sweden</td>
<td>+DAXCOM</td>
<td>150</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>EAN-Sweden</td>
<td>EANCOM</td>
<td>-</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Switzerland</td>
<td>EANCOM</td>
<td>10</td>
<td>35</td>
<td>IBM</td>
</tr>
<tr>
<td>ASC1/SACV</td>
<td>[SANDCOM]*</td>
<td></td>
<td></td>
<td>SWISSCONS</td>
</tr>
<tr>
<td>U.K.</td>
<td>+TRADCOM</td>
<td>4,000+</td>
<td>8,000</td>
<td>INS</td>
</tr>
<tr>
<td>AhA</td>
<td>EANCOM</td>
<td>100</td>
<td>300</td>
<td>[Tradecom]</td>
</tr>
</tbody>
</table>

### Notes

1. * The plus sign indicates projects reporting number of users exchanging standard data formats via telecommunications and/or magnetic support.
2. * The asterisk following the parenthesis in the EDI standard column denotes the name given to the national EDI project based on EANCOM.
3. The names in parenthesis in the VAN column refer to the name of the network operated by the VAN indicated.