

Electronic Commerce in Newspaper Advertising

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why should publishers care ?



25 rue d'Astorg, 75008 Paris, France
Tel: 33 1 47 42 85 00 Fax: 33 1 47 42 49 48
e-mail: contact_us@wan.asso.fr
<http://www.fiej.org>


World Association of Newspapers

ELECTRONIC COMMERCE IN NEWSPAPER ADVERTISING

WHY SHOULD PUBLISHERS CARE?

One of the main objectives of the READY 2000 initiative of the World Association of Newspapers is to address various aspects of competitiveness, innovation, productivity and technology to help newspapers increase their readership, market position and advertising revenue.

In this guide, a joint project with one of our READY 2000 Partners, Publigroupe, we hope to bring to your attention the advantages of introducing Electronic Commerce. This guide does not pretend to be an exhaustive discussion on redesigning your business practices; it simply presents a case for facilitating easier transactions between newspapers and their clients.

What do we mean by Electronic Commerce? Electronic Commerce is defined as the communication between computers to manage business transactions. The press frequently uses this expression to mean electronic shopping and electronic retailing. For example, purchasing a book on-line is considered Electronic Commerce. While on-line newspapers are increasingly concerned with this aspect of Electronic Commerce to raise revenue, our focus is on the business to business relationship between newspapers and their advertising clients. The area where both business partners can benefit the most from introducing Electronic Commerce is the reserving, ordering and billing process of an advertising order. With the implementation of Electronic Commerce, heaps of paperwork and communication costs accompanying each advertising order can be reduced to one stroke on the computer keyboard. Advertising information is transmitted electronically from computer to computer. This process of information flow between two parties' computers is called Electronic Data Interchange.

The discussion is mainly on the electronic transfer of commercial documents since newspapers are already transmitting their advertising artwork electronically. Also, we have limited our discussion to print advertising as on-line advertising on the WWW would require a separate report all by itself.

Why?

A Win-Win Situation

Business today is characterised by ever-increasing supply capabilities, ever increasing global competition and greater expectations. All industries that have adopted Electronic Commerce have undertaken reengineering tasks to make themselves more attractive to their clients. Banks, for example, have made our relationships with them easier by allowing us to withdraw money from ATM machines anywhere in the world in any currency possible. A retail chain such as Wikes, a DIY store in UK, is able to reduce the cost of operations and offer competitive prices to their customers because they have replaced warehouses with innovative Electronic Data Interchange distribution solutions. While most industries are redesigning their practices to meet the expectations of their customers and to work closer with their suppliers, the newspaper industry has been slow in taking advantage of Electronic Commerce as a technology for serving their clients better and for increasing productivity.

In the newsroom, a paperless environment is taken for granted today. In the advertising department, however, the traditional business process and the paper-based workflow between trading partners have seen little change. Newspapers continue to fill out advertisement requests manually. Sales personnel are required to make photocopies of the confirmation order which is sent by mail or via fax by the advertising client. The order makes its way in the labyrinth to the accounts department which then keys the information into the accounting software for invoicing purposes. It is easy to spot inefficiencies in this traditional business process. There is too much paper involved, there is a duplication of work, too many personnel are involved and the cost of communications is too high.



According to a recent report, the postage time to send an invoice or an order takes one to three days in Germany and costs one deutschmark (US\$0.55, ECU0.51). It takes only 13 seconds and costs less than 20 pfennigs (US\$ 0.11, ECU 0.10) to transfer an electronic document between newspapers and advertisers who are capable of doing business electronically. With the introduction of Electronic Commerce and Electronic Data Interchange, newspapers can tackle these inefficiencies. Once the client's computer and the newspaper's computer are set up to communicate in the same language and able to exchange information in a standardised format, both business partners become more cost effective and productive.

Benefits

• *Benefits in Brief*

<u>General</u>	<u>Newspaper Specific</u>
* Improvement of competitive position	- newspapers will be easier to buy
* Reduction of the cost of doing business	- personnel and equipment will decrease
* Strengthening of business relationships	- perception as client's media partner is enhanced
* Reengineering of the business process	- paperless invoices, no more storage rooms
* New products and services	- client can plan and transact at the same time and at the same place; shorter ad closing time
* Reduction of errors	- the audit trail improves, meaning less compensation
* Improvement of cash flow	- payment is faster

Industry surveys show that a reduction of 30% of the administrative cost of doing business can be expected once an organisation benefits from the full effect of EDI usage.



Illustration : Neue Westfälische Zeitung

If the sum of the benefits that one can expect is 100%, the five most important improvements are:

- Administrative cost reductions 40%
- Improvement of trading relationship 25%
- Improved marketing competitiveness 15%
- Better quality control 10%
- Reduction of cycle time 10%

• *Increase productivity and reduce operational cost*

In a newspaper scenario, the level of productivity and cost savings begin when the newspaper is able to receive the electronically sent advertising order from his computer, to store it until the advertisement runs and to send out invoices and tearsheets (physical proof of the ad) to the client electronically after the advertising campaign is over. Before the advertisement runs, clients can change their orders and have the newspaper capable of handling the last minute changes effectively and efficiently. Besides communication savings in the long run, newspaper can decrease the receiving personnel and equipment. The data entry personnel and the personnel to stuff invoices into envelopes are no longer needed. Neither is the storage space to store invoices. The advertising personnel spends more time on selling advertisements and offering their clients more attention and later order closing opportunities are possible. The audit trail improves with information being located more easily and quickly. There are less disputes over poor data entry and free compensation advertisements ("make goods"). With invoices and tearsheets being sent electronically in a much shorter time, newspapers will be able to demand faster payment and improve cash flow.

- **Provide better service**

Perhaps one of the most important reasons why newspapers should care about introducing Electronic Commerce and Electronic Data Interchange is to serve their customers better. The newspaper industry has one thing in common with industries like manufacturing, healthcare, transportation and financial services: our business relationship with the agencies and advertisers is often characterised as being difficult. Advertising agencies and media buying houses often have to deal with numerous newspapers with varied rate structures and production requirements for a single media campaign. Besides the mountains of paperwork involved in the order process, the logistics nightmare and the extensive cost involved in forwarding artwork by courier service lessens the appeal of a newspaper as a must-buy.

Efforts have been made by newspapers all around the world to make themselves an easier buy by offering a one-order, one bill network. These efforts, although worth applauding, portray the newspaper industry as a fragmented one; different advertising networks offer different newspapers. The advertising networks are formed based on the newspapers deciding on which network they want to be in instead of the client choosing the newspapers they want in a one-order, one-bill package. The newspaper industry can best serve its advertising clients if it is viewed as a homogenous entity. Mr John lobst, Director/Advanced Computer Science of the Newspaper Association of America, says "Our advertising clients want to receive and send information in the same form with all their newspaper partners. Considerable back shop resources are required to manage a paper-based operation where each newspaper supplier has its unique processes. Advertisers want to minimise overhead that is not directly associated with buying or selling their product". The newspaper industry has to look at lessening its clients' workload in a more complete approach instead of offering a patchwork of solutions.

In implementing Electronic Commerce and Electronic Data Interchange with the client, newspapers can lessen their clients' workload, their costs and still provide better service.

Better service includes:

* extensive advertising information on newspapers in a single electronic database.	- cuts down their time and effort
* added feature in the database to allow financial calculations and sending media plans directly to the newspaper	- allows planning and ordering at the same place at the same time
* quick transfer of advertising documents to several newspapers at one time	- offers one order, one bill service - allows them to take advantage of late closing advertising opportunities
* receiving invoices and processing payment electronically	- cuts down their communication courier service and postage cost

The whole business process is paperless and made faster.

Cost

Cost can be summarized as:

- **Software Costs** - communication software, translation software
- **Training Costs** - lost work hours, training materials, training environment
- **Communication Costs** - Installation, monthly service, communication equipment

How ?

Critical Success factors

As mentioned, this business process is a computer-to-computer exchange of advertising information. Obviously, in order for it to work both advertising clients and the newspapers have to be committed. Also, the entire process of planning, ordering, electronic transfer of advertising materials and invoicing must be automated. Technological solutions exist but the key to successful Electronic Commerce implementation is management commitment.

Introducing EDI is a management task. It has been confirmed over and over again that the successful introduction of EDI and EC in an organisation requires 80% management involvement and 20% application of tools and technology.



Eight barriers to success:

Security problems	2.5%
Lack of system improvements	11.0%
Duration of project	2.5%
Trading partners too small	11.0%
Important business practice changes	15.0%
Budget problems	8.0%
Lack of knowledge	20.0%
Lack of management commitment	30.0%

Without management commitment from both business partners, Electronic Commerce cannot take place. Other critical factors for success are inclusion of important trading partners, following a professional project methodology, choosing a cost-effective and open solution and providing customer service support (appendix I gives more information on professional project methodology).

Approaches

If you are convinced of the benefits of implementing Electronic Commerce, let us look at how we can provide better service to our clients and improved productivity by adopting EDI.

Three Approaches:

- 1) **Open EDI** - get computers from both ends to communicate with each other. In order to do this, participating partners need to install software and agree on a standard language and standard messages to be sent.
- 2) **Lite EDI** - It uses the Internet as a carrier. Both parties receive and send all documents through the WWW using a standard form.
- 3) **The Electronic Clearing House** - Going through a service bureau to process all advertising information including advertising art material. Newspapers which do not want to implement Electronic Commerce in their business process can appear to be EDI-ready to their customers who are. Along the same lines, advertising clients who are not Electronic Commerce capable can forward the advertising information to this Clearing House and have the orders processed to newspapers which have redesigned their business process.

Let us look more closely at the different approaches that newspapers can take:

• **Open EDI**

Computers at both ends are programmed to communicate with each other using the same standards and are able to process advertising information automatically. Management support is crucial in taking this approach as initial financial investments are significant. An Open EDI project typically starts with a newspaper and a big advertising client (one of the 20% client base that provides 80% of the business) which want to process certain data electronically.

Once the initial partners succeed in doing business electronically, new partners will join till a critical mass is reached and all begin to benefit from a greater economy of scale.

Cebuco, the Dutch newspaper industry marketing association, is a good example of a Open EDI project. It has succeeded in implementing Open EDI standards at all newspapers. The pilot project includes the whole electronic process of reservation, order and invoice for advertisements between two big media houses, Kobalt and Media Centre, and several newspaper publishers. According to Mr Fred Kuhlman, all partners of the pilot project will be ready to transfer advertising documents electronically as early as the summer of 1998. All newspapers in the Netherlands and the two newly committed media buying houses, Universal Media and Media Exposure, will be EDI-ready by the end of 1998. Besides the electronic transfer of advertising documents, Cebuco is also introducing the electronic transmission of advertising art materials in a separate project (see appendix II for more technical information).

Medibel+, another Open EDI project, is a more ambitious EDI project in that it includes all media in Belgium. Mr Roeland Godefroit, the Managing Director of TMP/Omnimedia and the president of Medibel+, heard about the newspaper industry's idea to send advertising documents electronically. It dawned upon Mr Godefroit that while EDI makes good sense, it should not be limited to the newspaper industry. It should be a media product involving all media. Mr Godefroit holds the view that full economy of scale can only be reached if all partners are involved. With this in mind, a pilot project involving two media buying houses, one magazine, one newspaper, one TV and one radio was launched in mid 1997. It adopts the same Open EDI approach as Cebuco but this all-encompassing media project is unique in many ways. It seeks not only to include all media but also intends to integrate both the exchange of commercial documents and the exchange of 'artwork' while setting up the link between those two data streams into one system (for more information on other newspaper efforts in sending advertising artwork digitally, see appendix III.).

A non-profit association, Medibel+, has been set-up to propel the project along and oversee the implementation of EDI across the media sector. 30% of all media and agencies partner will be EDI-ready in late 1998 and the number of EDI-ready partners will be increased to include 80% of all media and agencies by the year 2000.

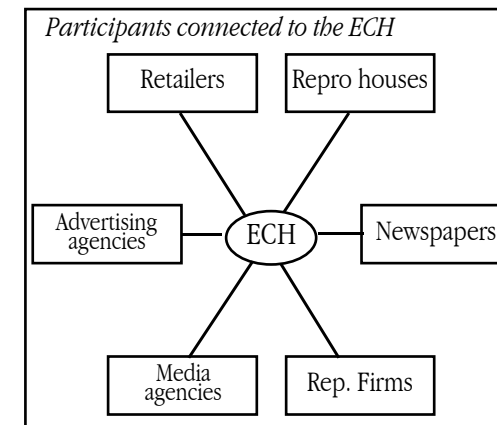
• **Lite EDI**

This is the use of electronic forms (E-forms) on the Internet as a substitute for paper in the transaction process with trading partners. In other words, all advertisement documents and advertising artwork are sent and received through the WWW. Both parties pick up the advertising document and artwork either from a dedicated website or from their e-mail. The relevant content is then filtered out from the form and processed in the respective administrative application. Although Lite EDI is ideal for order, acknowledgement, despatch advice and invoice cycle, it can only support limited information. Furthermore, the lack of security in sending or receiving important documents on the Internet has caused some publishers, who were looking into this option, to be hesitant in using it.

• **The Electronic Clearing House**

This service bureau appears as an Electronic Commerce-ready entity to both trading partners. If one of them cannot handle electronic transmission, advertising information will be provided in the appropriate paper format. For example, an EDI-capable advertiser will transmit EDI-coded files to the Electronic Clearing House. The Clearing House will process the information in the files and forward the advertising information to the newspapers in an electronic form or in a paper form depending on whether the newspaper is Electronic Commerce capable or not. Besides the advertising commercial documents, the Clearing House will also take care of the delivery of the advertising artwork. This entity charges the newspapers for each transaction or newspapers become members and pay membership fees to cover the cost of operations.

The entity can be an independent service provider or one that works in co-operation with a newspaper association. The banks have adopted this concept to effectively execute the one-to-many payment orders they receive from their commercial and private clients. This is what a Electronic Clearing House would look like in an illustrated diagram (for more information on the list of services of an Electronic Clearing House, see appendix IV).



Media planners and advertisers can plan the advertising schedule from the complete updated media database that the Electronic Clearing House maintains. With this concept, newspapers provide a value added service to the advertising clients by allowing them to do business with several newspapers and other media with one electronic message to the Clearing House. The Clearing House will distribute the order, deliver artwork, consolidate invoices and tearsheets in whatever form the newspaper and its clients are capable of handling. Besides these services, the Electronic Clearing House can execute fund transfer on behalf of the clients and issue reports and statistics. This approach provides the clients the impression that the newspaper industry is an easy-to-use homogenous media and the cost of doing business with it is less than other media.



Illustration : Neue Westfälische Zeitung

When?

Now more than ever.

Challenges faced by newspapers

With the advent of interactive media, the competitive challenge has once again grown. At a recent conference, Mike Gingell, European Media Manager for Unilevers' home and personal care division, said that advertising dollars spent in traditional media could become less than 50% of communication spend in the future. This is being said when some newspapers are just beginning to get a share of the fmcg (fast-moving consumer goods) advertisers' traditional media dollars by offering consolidated and innovative packages. A traditional newspaper advertising client like Mr Bob Bridge of Bob Bridge Toyota in Washington, USA, is planning to move 50% of his one million dollar advertising budget to the Internet in 3 years' time. Currently, he spends 80% of his advertising budget on newspapers and 20% on the Internet. Added to this challenge is the trend indicating decreasing newspaper readership in many countries. Newspapers cannot afford to rest on their laurels and remain stationary in this era of technological change.

Our advertising clients' perspective

Our retail advertisers are using Electronic Commerce in dealing with their customers and suppliers. Why should newspapers be the only suppliers with whom they cannot do business electronically? Although advertising and buying agencies have been resilient in the past to any Electronic Commerce initiatives, the globalisation of their clients' market and the Internet are forcing them to redesign their traditional practices. Procter and Gamble recently announced it wanted to reduce commissions to agencies. If it succeeds, agencies will be further pressured to reduce operational costs in order to maintain or increase profit margin. EDI implementation can reduce their operational costs in the long run.

IBM is consolidating all its media buy into a group of selected agencies that have an international presence. This trend of consolidation of media buying is not limited to IBM. Agencies have to compete with fewer but bigger accounts while globalising their advertising network. Their energies are further stretched to include on-line advertising and below-the-line marketing activities. Any efforts to facilitate easier business transactions will be viewed differently this time round. According to a survey conducted by the European Advertising Agencies among its members, advertising agency members from Belgium, Switzerland, Spain, Greece, Ireland, Italy and Netherlands have no reservations about implementing EDI and believe implementation will lead to greater savings.

As we have illustrated, the technology now exists for the implementation of Electronic Commerce. Competitive challenges for newspaper are growing, our clients' expectations for more value added services are rising and the cost of doing business is increasing. Should the newspaper industry not adopt and implement the concepts of Electronic Commerce and Electronic Data Interchange to gain productivity, speed up the advertising process, offer better services to our clients and thus improve our position in an increasingly competitive environment?



Illustration : Neue Westfälische Zeitung

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Appendix

Professional project methodology

A typical project is split into three phases:

• Phase 1

Develop and approve business plan
Identify the objectives of the project
Take strategic EDI decisions

• Phase 2

Select important project partners and identify mutual benefits
Appoint an EDI project champion
Concept planning and solution design (including changes in business practice)
Standards choice and decision
Platform choice and decision
Software translator choice and decision
Network/communication choice and decision

• Phase 3

Internal implementation to get EDI ready
Conduct EDI pilot with important and close business partner(s)
Educate trading partners on EDI
Provide assistance to enable partners
Adopt a professional project organisation
Involve the users and the trading partners
Provide for decision and control power at the right corporate level

Open EDI:

To start the process, both parties have to agree on a standard digital language for the message and the kind of advertising information to be included in the message such as logo, price, number of colour, position, number of insertions and whatever information considered important for inclusion. Once that is done, both parties purchase necessary software to integrate EDI capabilities into their existing system or to set up a separate system. This software is basically a telecommunication software that will translate the digital language of the advertising message into a language that the in-house computing system understands. The software installed into the computer system comes with a mailbox similar to an e-mail where the newspaper or the client can pick up or deliver advertisement orders. In Cebuco's case, the EDI message devised by the joint committee of media buying houses and newspapers are based on EDIFACT, while the infrastructure is based on X.400 mailboxes from Unisource. The software includes an EDI gateway, MS Dos, WIN 95 and WIN - NT. The EDI workstation is a standalone solution.

APPENDIX III

Digital transmission of advertising artwork

Besides Medibel+, which is integrating both commercial documents and artwork into one system using EDIFACT, other case studies have developed a separate standard for advertisement transmission. The pioneers that developed such a standard and software are Associated Newspapers (Great Britain) and 4-sight. IFRA reports that "the software is dedicated to enable sending digital files from computer to computer by using ISDN (Integrated Services Digital Network)".

According to the EAAA survey, advertising agencies from nine countries are transferring advertisements digitally to newspapers on a large scale. In these nine countries, agencies claim that advertisements are being sent to newspapers via ISDN, SyQuest or floppy disc.

Mr Svend Aage Linde, the Marketing Director of the Danish Newspaper Publishers' Association, says that as many as 95% of the newspapers in Denmark are able to receive advertisements digitally.

Depending on the amount of advertisements they receive, the newspapers have invested between US\$10,000 to US\$ 30,000 (ECU 9,345 to ECU 28,307) in their preparation to receive advertisements digitally. As explained by Mr Linde, this ADS software includes a colour management system with no font restrictions. The problem, however, lies with the agency. Agencies are not ready and are not willing to transmit the advertisements digitally. The good news on this situation is that the reproduction companies are pro-digital transmission. In fact, five of the biggest reproduction companies in Denmark are now able to send the materials via the ADS system. Denmark is one of the 10 countries in Europe where advertisements are transferred digitally via repro-houses.

Cebuco faces a similar problem with advertising agencies in Netherlands. Fred Kuhlman confided, "We decided to take the lead and not continue the discussion on who should take the lead - newspapers or agencies". All plans were finalised at the end of 1997 and all newspapers will be ready for digital advertisement transmission by summer of 1998. Mr Kuhlman hopes that with the newspapers in place to receive advertisements, the advertising agencies will follow suit and be fully operational by the year 2000. This standard is only for black and one colour advertisements and designed for transmitting EPS files over ISDN telephone lines. Future plans include full colour, PDF files transmission.

APPENDIX IV

The Electronic Clearing House offerings

List of services of an ECH:

- Project management for the introduction of EDI in the industry
- Document translation services in the transition phase: paper documents to digital and vice versa
- Dealing with systems providers and interface issues
- Provide standardised interfaces
- Participate in standardisation organisations on behalf of the industry
- Manage the network
- Control traffic security and verify message content
- Distribute orders and consolidate invoices
- Execute funds transfer
- Issue reports and statistics
- Maintain an accurate, consistent and complete media data base to allow media planning

Terms and acronyms

ANSI
American National Standards Institute

EDI
The Electronic Data Interchange in structured form between computers via telephone lines

EDI translator software
A software that translates the internal data structure into the standardized message formats applicable in an industry

Electronic Commerce (EC)
Doing business electronically by using EDI, e-mail, data base access over telephone lines

EFT
Electronic Funds Transfer

EPS
Encapsulated Post Script

Extranet
A community of trading partner using a controlled business network of an ISP for their transactions

Internet
A global network of networks providing access to computers for information retrieval and data exchange

Intranet
An internal information network using Internet technology

IP
Internet Protocol

ISD
Integrated Services Digital Network

ISO
International Standards Organization

ISP
Internet Service Provider

Odette
Organization for Data Exchange through Teletransmission

PDF
Portable Document File

UN/EDIFACT
United Nations Data Interchange for Administration, Commerce and Transportation

UN/GTDI
United Nations Guidelines for Trade Data Interchange

VAI
Value Added Network using the Internet

VAN
Value Added Network

Open EDI industry standards
(examples)

DISH
Data Interchange for Shipping

Odette
Organization for Data Interchange by Telecommunication in Europe

SWIFT
Society for Worldwide Interbank Financial Telecommunication

EDIFRA
Proposed Order Message for Advertising

Generic Open EDI Standards

ANSI X.12
American National Standards Institute EDI message formats, called X.12 standard

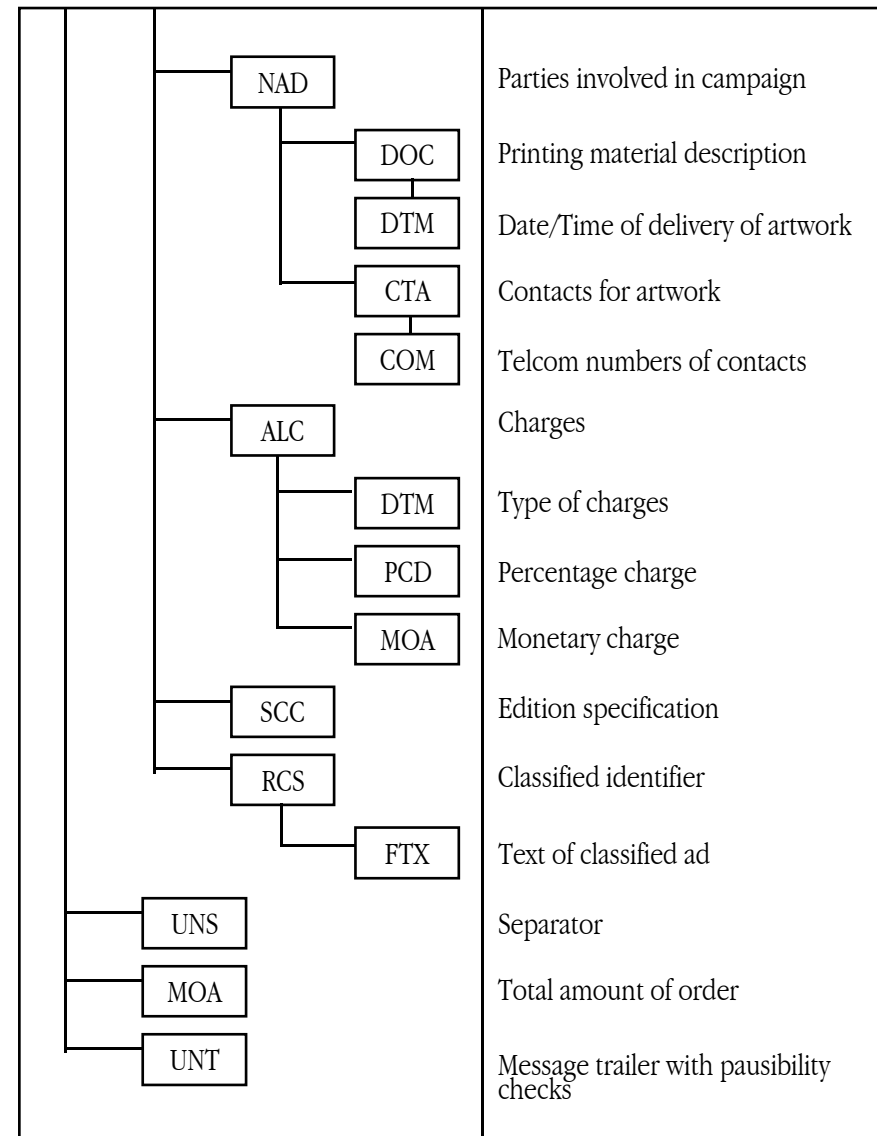
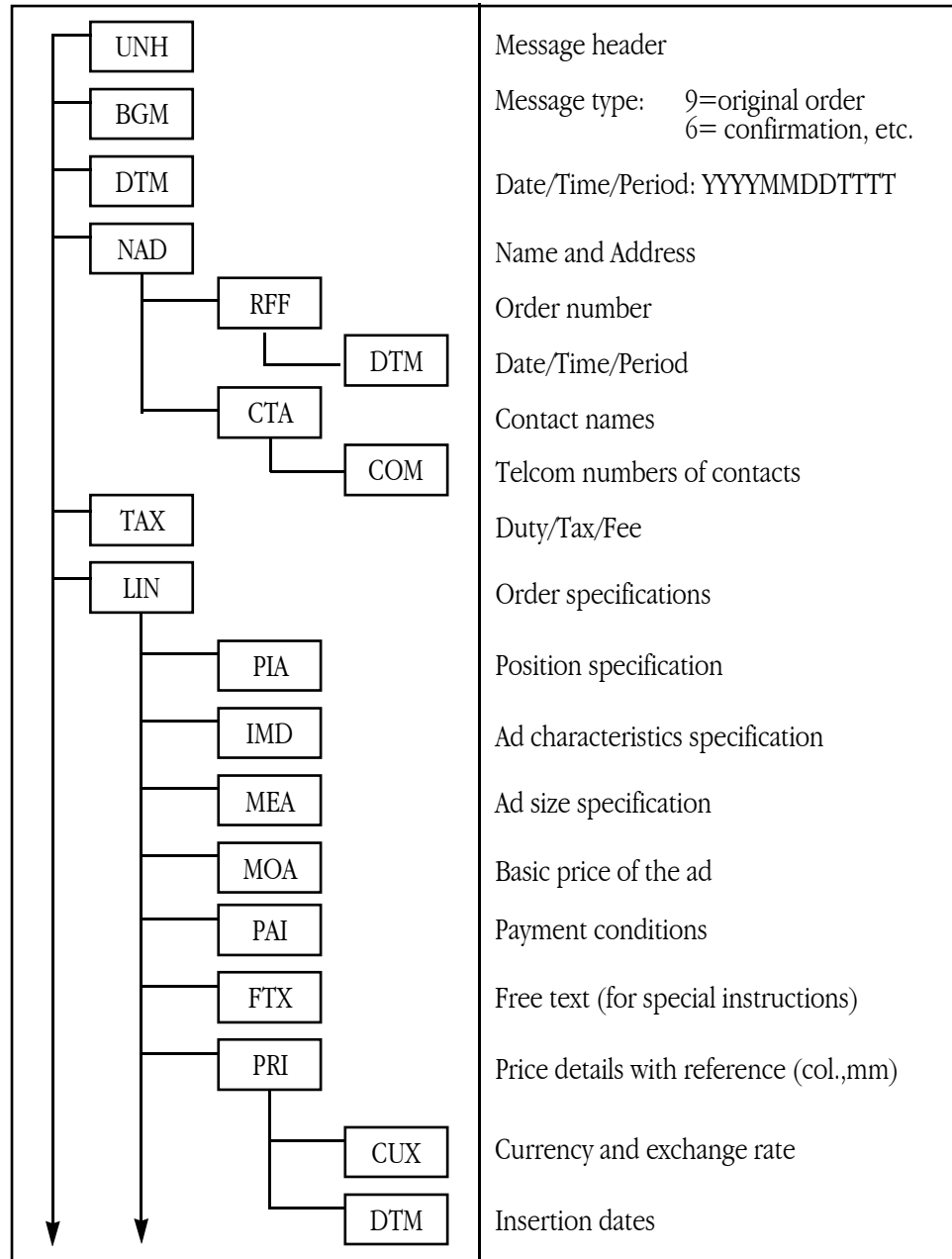
EDIFACT
Electronic Data Interchange for Administration, Commerce and Transport, developed under the auspices of the United Nations Commission for Europe and supported by the European Union

program TEDIS (Trade Electronic Data Interchange System)

Generic transaction formats in EDIFACT

PAYORD Payment order
ORDERS Purchase order
INVOIC Invoice
RESMSG Reservation
REMADV Remittance Advice

Structure of the proposed ORDERS message for newspaper advertising (EDIFRA92.1)



United Nations EDIFACT Organisation Structure

