Union Internationale des Architectes · International Union of Architects

Professional Practice Information Notes

Note 1: Computer Practice: Aspects of Automated Information Management

This document has been prepared by the Professional Practice Commission of the International Union of Architects for the use and reference of UIA member sections in enhancing the practice of architecture.

It is intended to serve as an informational supplement to the policy issue, "Practice of Architecture", found in the UIA Accord on Recommended International Standards of Professionalism in Architectural Practice.

This Professional Practice Information Note was prepared by a Commission Drafting Panel chaired by Dr. Tillman Prinz of Germany.

Adopted by the
Professional Practice Commission
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Preamble

For a long time electronic commerce, such as the Internet and e-mail, has made its way into every-day office work. Information procurement and data exchange, correspondence and the use of advertising means, as well as offer and demand of any kind of goods and services are hardly feasible anymore without electronic media. Although these days computer technology with its specific programmes for designing (computer aided design), establishing sample contracts, compiling service lists, calculating fees and costs and pay-checks for collaborators etc. help the architect to cope with the day to day work load, the application of the new media has as yet not substantially become part in every architectural office life. However, it is essentially that architects, who are suffering under the tight economic situation, are to a certain extent dependent on the opening-up of new fields of activities and the utilization of highly efficient working methods, in order to withstand the increasing competition pressure from within and outside the country. For doing so, the new media possess key functions.

I. Professional Organisations and Computer Practice[1]

UIA Member Sections need to ensure that the use of commercial communications among architects is permitted subject to compliance with the professional rules regarding, in particular, the independence, dignity and honour of the profession, professional secrecy and fairness towards clients and other members of the profession.

The following measures are recommended to be taken by UIA Member Sections:

1) To increase the education of members in new technologies and applications;
2) To intensify the relationships with commercial software producers in terms on long-term planning for products, technical up-dates and group contracts that benefit members;
3) To define the role of professional bodies in evaluating available software programs;
4) To further the development of domestic and international standards; and
5) To support the opportunity for the UIA to become engaged with emerging international computer organizations such as the Organization for International Operability.

II. Electronic Commerce and Project Elaboration

1. Data protection

The quick technical development of electronic commerce and the economic significance connected therewith; have as yet left little time for the easy-going creation of legally secured frame conditions. It goes without saying that the economically necessary application of electronic media implies, from the legal point of view, considerable dangers especially for architects.

[1] Attachment, Chart 1: Overview on impact of computer practice

Each architect knows that contracts, fee agreements, plans and the submission of construction plans need to be signed personally. The personal signature serves to identify the issuing person, a fact that is of considerable importance from the liability and copyright viewpoints. In addition, the signature functions as proof for example, to distinguish original plans from those altered unlawfully. Other legal protective mechanisms are e.g. the mailing of closed envelops (protecting the confidential character of the mail) or addressing and delivering the mail (thus securing the delivery to the right addressee). With further international co-operations between architects or architects and clients, this issue becomes increasingly important.

UIA Member Sections are encouraged to inform their members regularly about the developments in computer technology regarding data protection and electronic signatures[2].

2. Standardisation

The International Standardisation Organisation publishes various Standards on security of data transfer, encompassing the use of the Internet, the use of intra-net among and between internal systems and use of extra-net between external terminals (see list below[3]).

UIA Member Sections are encouraged to follow the developments of the International Standard Organisation and inform their members accordingly.

III. Electronic Commerce and Public Procurement

Several publications and procedures on public procurement are going to be replaced by electronic media[4]. In this context, procedures have been developed which, besides the publication, also aim at electronically handling the application process of those bidding.[5] As regards the construction service sector, calls for tender procedures have jointly been developed by those bidding and the public clients: fully electronic procedures make it possible to identify adequate tenders, to check and complete the list of services to be rendered, and to hand in the tenders. These services, which are subject to fees, are being offered by various tenderers.

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[2] Attachment, Chart 2: Presentation of a typical system of electronic signature
[3] http://www.iso.org/iso/en/CatalogueListPage.CatalogueList?ICS1=01&ICS2=040&ICS3=35

[4] Examples:
- United States' Commerce Business Daily Net; FedCenter Virtual Shopping Mall;
- Singapore: Singapore's GITIS (Government Tendering Information System);
- Poland's Public Procurement Bulletin;
- Canada's MERX Electronic Tendering System;
- Mexico's COMPRANET Electronic System for Government Procurement;
- European Communities' SIMAP (Système d'Information pour les Marchés Publics);
- Norway's DOFFIN (Database on Official Information on Public Procurement);
- Japan's Government Procurement Database System.

[5] Attachment, Chart 3: Overview electronic tendering

UIA Member Sections are encouraged to inform their members about relevant procurement procedures in electronic form while at the same time take the necessary lobbying measures to ensure quality based selection based on the economical most advantageous offer and not on the lowest price only.

IV. Electronic Commerce and Architectural Contracts

1. General Information to be Provided

It is recommended that UIA Member Sections ensure that service providers should render easily, directly and permanently accessible to the recipients of the service and competent authorities, at least the following information[6]:

- The name of the service provider;
- The geographic address at which the service provider is established;
- The details of the service provider, including his electronic mail address, which allow him to be contacted rapidly and communicated with in a direct and effective manner;
- Where the service provider is registered in a trade or similar public register, the trade register in which the service provider is entered and his registration number, or equivalent means of identification in that register;
- Where the activity is subject to an authorisation scheme, the particulars of the relevant supervisory authority;
- Any professional body or similar institution with which the service provider is registered:
- The professional title and the Member State where it has been granted;
- A reference to the applicable professional rules in the Member State of establishment and the means to access; and
- Where the service provider undertakes an activity that is subject to the Value Added Tax (VAT), the relevant identification number.

In addition to other information requirements established in the relevant jurisdiction of a UIA Member Section, it must at least be ensured that, where information society services refer to prices, these are to be indicated clearly and unambiguously and, in particular, must indicate whether they are inclusive of tax.

2. International Contract Law

The signing of architectural contracts by electronic means does not entail any specific problems with regard to the applicable law as long as the parties to the contract are based in the same country. However, it is the Internet that offers particularly simple methods to conclude contracts with international partners all over the world. At this point, the question is under which jurisdiction the contract will fall. This can have a considerable significance particularly because of different regulations governing the terms of limitation, guarantees and payments.

According to international contract law the parties to the contract themselves can determine the law to be applied. This must be done expressly and should always be

[6] As derived from the DIRECTIVE 2000/31/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce)

included in the contract in writing. In case the law to be applied has not been determined, the contract is subject to the law of the State which it is most closely connected to. According to legal assumptions, a contract has the closest connection with that State in which the contracting party, who shall render the characteristic services, is normally based at the time of signing the contract. The characteristic service of an architectural contract is the planning service so that the residence of the architect is principally decisive. However, in the case of drawing offices being commissioned by an architect in a foreign Nation, the legal situation is different. In this case, the characteristic service is the drawing of plans which means that in the absence of a legal choice, the law of the respective foreign State will have to be applied.

It is recommended that UIA Member Sections inform their members about the implications of international contract law as regard to electronic commerce.

V. Electronic Commerce and Advertising

The importance of representing architectural offices in the Internet will increase. Yet, due to different advertising regulations in force, widespread uncertainty prevails with regard to the legal admissibility of such Internet appearances. Using the Internet for advertising purposes cannot be prohibited as such. Instrumental will be the contents and the form of the advertising notice. On the one hand, the advertising architectural office must observe the laws governing unfair competition, which ask for correct advertisements; on the other hand advertisements must not contain any self-evident facts or unlawful circumstances. On top of this, freelance advertising principles need partly be observed according to which information advertising is admissible provided it is neither importunate nor unfair.

The architect continues to advertise for himself by means of his/her performances, i.e. advertising notices must refer to certain services. The publicity-like boasting does not comply with the professional principles in most Nations - and this applies to Internet advertising just as well. The principles of the UIA Accord Guidelines on Ethics and Conduct should be respected appropriately.

CHART 1: Impact of Computer Practice

As already mentioned, the classical working methods using drawing table, ink and blue print continue to lose their significance as compared with computer screen, keyboard, mouse and plotter. Webbing several computer working places within an office allows for electronic data transfer, thus facilitating continuous or simultaneous elaboration of plans and other papers.

It is becoming increasingly necessary to transfer data also to places outside the office. This applies to both larger offices with several branches but also to partnerships formed for setting up comprehensive projects or sub-planning offices. This situation is particularly applicable where general contractors are co-operating with clients and/or planning-responsible designing-offices abroad. For cost and time reasons such functions are no longer efficient without utilizing electronic media.

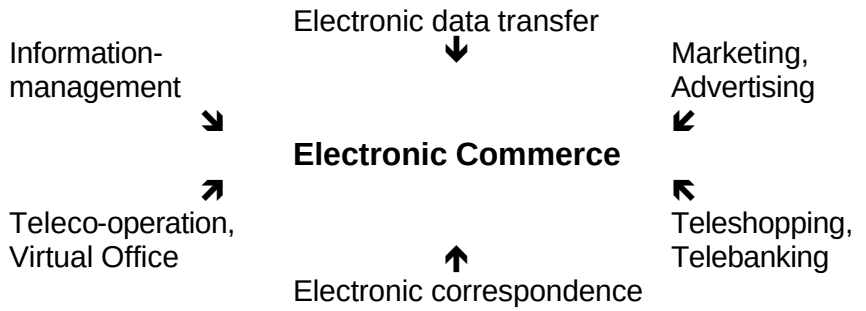
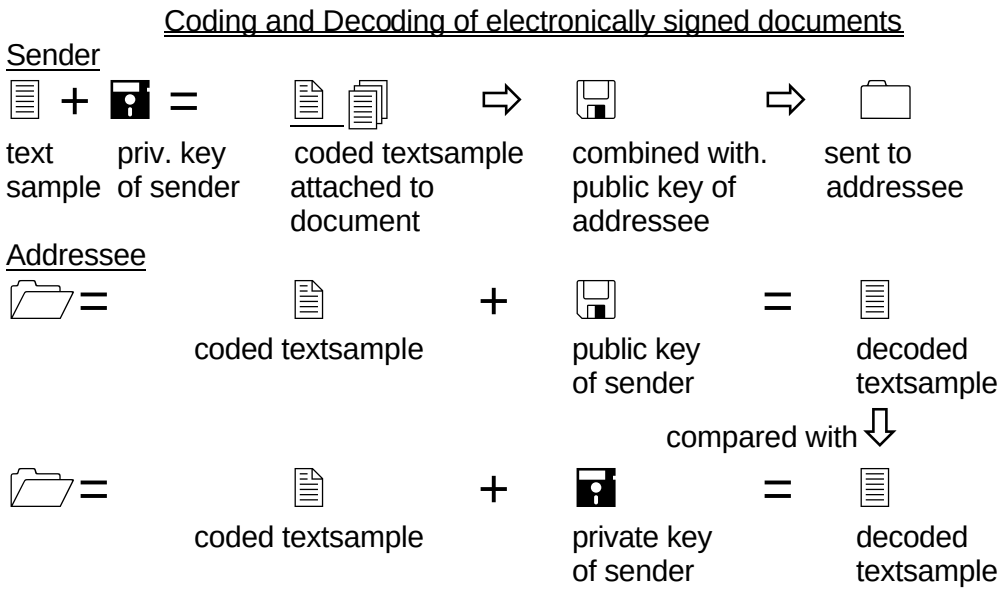


CHART 2: Data Protection

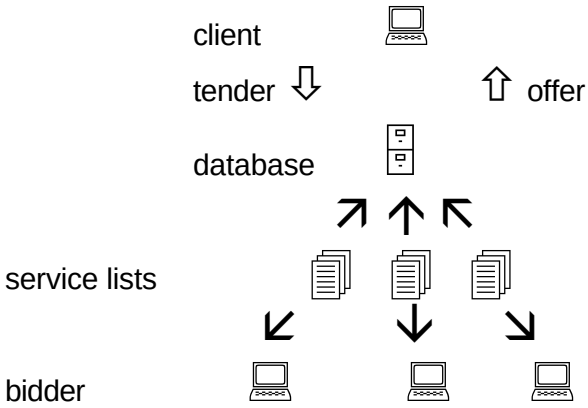
In order to guarantee the necessary legal security for electronic data transfer, the digital signature was developed. It consists of a public key (that can be traced in a book similar to telephone books) and a private key. The private key is stored on a chip-card and is loaded into the computer by means of a chip-card-reader. In order to digitally sign a document or a plan, an encrypted abstract of the document will be attached to same. The encryption of the abstract is rendered possible by means of the private key. Thereafter, the encrypted abstract can be connected with the public key of the addressee. Jointly with the public key of the sender, these data will be transferred to the addressee. The addressee in turn can decode the document by means of the sender's public key. Thereafter, he/she compares this result with the document which he/she has received encrypted and which can now be decoded by means of the private key transferred to him/her. This procedure is carried out electronically and automatically within seconds. If both data copies correspond to each other, it can be assumed that the transferred document originates from the required sender and has not been altered (not even by a comma or cipher).

This technique is of considerable significance for purpose such as static plans. A number of providers have already developed adequate technical prerequisites. It is recommended that adequate means be provided in all UIA Member Sections.



Only in case that the two decoded text samples are identical, the attached document could be regarded as authentic and has not been modified in the transaction!

CHART 3: Electronic Tendering

In this context, procedures have been developed which, besides the publication, also aim at electronically handling the application process of those bidding. As regards the construction service sector, calls for tender procedures have jointly been developed by those bidding and the public clients: fully electronic procedures make it possible to identify adequate tenders, to check and complete the list of services to be rendered, and to hand in the tenders. These services, which are subject to fees, are being offered by various tenderers.

Electronic tendering