Abstract: This paper summarizes the results and findings of two consecutive legal research projects and launches a third legal research project. The first, Victori@ was developed under the ADAPT initiative, and the second, the eLPS project (eLegal Problems Survey) is a joint initiative of the Universidade Moderna in Setubal and the University of Salford, in the UK. The first project produced a legal guide for the e-Worker, eEmployer and e-Businessman in Portugal and the second project aims to deepen some of the basic concepts introduced in the Victory@ project and to analyse some of its findings in specific contexts. The findings of both projects are the basis for a new legal research project the eLegal-China, aiming to survey the Chinese legal framework for e-Work and e-Business.

Keywords: e-Work; e-Business; legal; contractual; EU-China.

1. INTRODUCTION

The e-Work and the e-Business raise some complex legal and contractual issues, most of them related with some inadequacy of the existing legal framework, especially in a jurisdiction where Labour contracts have a strong statutory regulation. Legal research in Portugal lead to the awareness of the insufficient and inadequate legal framework and concluded with the need to solve the problems contractually. This legal research was developed under the Victori@ project, an ADAPT initiative, and delivered a legal guide for the e-Worker, eEmployer and e-Businessman in Portugal. The guide was produced and is, today, the first and only comprehensive legal and contractual guide for the New Methods of Work existing in Portugal and, as far as we know, one of the few in the EU. The Legal Guide highlighted some practical and conceptual problems requiring further research. The Universidade Moderna Law School and the University of Salford committed to this research and joined in the eLPS project (eLegal Problems Survey). This project is now running and will deliver its conclusions and
recommendations by the end of the first quarter of 2002. The first objective of this paper is to share the methodology, conclusions and recommendations of this research process and to introduce a new legal research project, the e-LegalChina. The e-LegalChina project is an intention of three academic institutions, the Universidade Moderna in Portugal, the Andersen Legal group and one industry association, the Beijing Software Industry Association – BSIA, who are now seeking for partners. The e-LegalChina project aims to survey the Chinese legal framework for e-Work and e-Business. It will deliver an extensive legal analysis and will create a bilingual Legal Portal including the relevant Legal statutes, both in Chinese and in English.

The first problem one find when researching about e-Work and e-Business is its definition. What is e-Work, what is e-Business. Apparently, the expression e-Work succeeded to the expression telework, and if one tries to get any help from the telework definitions, the enormous amount of definitions found makes it hard to decide what is the correct one (Gomes, J. 2000). Cristina Gomes (2000) summarized various definitions, including the Nilles (1994) definition, the Irish Ministry of Science, Technology and Commerce and the one from the European Commission later accepted in the ADAPT initiative (1997). As this project started precisely within the ADAPT initiative we accepted that definition: is work carried out by the use of computers and telecommunications, in order to overcome restraints in place or time of work. When getting into the different species of telework, or now e-Work, there are an even bigger number of choices. Again, Cristina Gomes, (2000) has summarized some of the classifications presented.

“Law is needed to manage the transformation of work” (Sapiot 1996). Legal research requires clear and unequivocal concepts, established in the light of a legal paradigm. That is why none of the proposed categories of e-Work could be accepted and thus, one had to be found so research could start.

2. RESEARCH APPROACH AND CONCEPTUAL PARADIGM

2.1 Research Epistemology

Before the definition of the research methodology, it must be set the Philosophical Perspective of the study. Epistemology attempts to answer the basic question of what distinguishes true knowledge from false and any project must rely on assumptions about what is valid research. These assumptions constitute the research epistemology.

There are various paradigms for the research epistemology. Orlikowski and Baroudi (1991) refer three: positivist, interpretative and critical. The philosophical base of interpretative research is hermeneutics and phenomenology (Boland 1991). Legal research, in an epistemological sense, is hermeneutic (Neves 1995), and thus interpretative. That was the adopted epistemology.

2.2 Research methodology

Qualitative research methodology, in its variance of the grounded theory approach, (Corbin 1990) was applied to this project. The theoretical framework obtained grounded an advanced legal research composed of two different proceedings. The first is the search for the relevant legal provisions within the given legal system and the second is the interpretation of those provisions. Both proceedings are necessary in any legal research project (Neves 1993).

2.3 The conceptual paradigm

The conceptual paradigm is the simplest possible. An economic activity implies that one delivers to someone else something in return for a payment. This exchange is, in any legal order, framed by a formal or informal contract. Looking to the contract, from the doer point of
view, the something to be delivered may be work (measured either in time or result), goods or services and in return, a payment will be charged. From the receiver point of view, it will always imply a payment in return of the something received.

Focusing within the legal and contractual powers of the receiver that affect the way the doer performs the contract, the activity is either done in the benefit and under the direction of the receiver, or the work is done in the benefit and under the direction of the doer himself. That is to say, work and economic activities may be performed under a labour law contract or as a freelance activity (Gomes, J. 2001).

E-economic activity is thus divided in two big categories: the e-employee and the e-self-employed. This is a classification that is useful for legal research, as it uses a criterion that is familiar to law: the specie of the contract. If within the contract, by means of a clause or by means of its legal regime, there is what Bettencourt (2001) called subordination, this will be a labour contract. If there is no subordination, then the contract binding the worker (in the sense of the person or company delivering something other than payment in a contract) will surely be included in some sort of business venture. Where subordination exists we consider to be e-Work, where no subordination exist we consider to be e-Business.

![Figure 1 - E-economic activities basic legal concepts](image1)

The two categories include subcategories. Amongst the several presented by Cristina Gomes (2000), we choose the one that uses the location where the work is performed. E-Work can be home work, mixed work, telecentre work and nomadic work. As to the other specie normally acknowledge, the satellite office, is of no relevance for this research. Working at a satellite office is, as far as the labour law is concerned, the same as working at the head office.

![Figure 2 - E-work (subordination)](image2)

The four different species of employed e-work we selected have in common some issues requiring detailed attention at the contractual level. The main reason for this is that, by means of the contracts content, a labour law contract may transform itself into a services providing contract. This, in countries where there is a specific legal framework for the labour contract, giving special and reinforced protection to workers, may be harmful for the e-worker.

As to the second e-activity category, the self-employed, we decided to use the legal nature of the activity performer. Two species were naturally found: the individual and the company. This
classification was completed with one using the criterion activity and the self-employed category was structured as follow:

![Diagram of e-Activity categories]

- **e-Business**
  - Self-employed

- **Legal nature**
  - Free-lancer
  - Company

- **Activities**
  - Services
  - Commerce

![Figure 3 - E-Business (self-employed)](image)

Amado (2002) and Guilherme (2002) demonstrated that this conceptual paradigm may apply to the analysis of the legal implications of the NMW in any legal order, and Chambino et al. (2002), tested it in several professional activities.

### 3. COMMON LEGAL IMPLICATIONS

We found that both e-activity categories may have common legal implications within the framework of the given legal order. The first set relates to the possible internationalisation of the e-activity relation. This raises the question of knowing what legal order shall rule the relation. The problem is complicated, as some of the Private International law traditional criterion cannot apply, or are of difficult application, to electronically completed or performed contracts (Farto and Cabaço 2002).

In addition, common to both categories are issues related to the e-workplace. Property law, lease law and urban use law may constrain and limit the use of real estate both owned or leased. This is a major issue to address when setting up the e-workplace. Other aspects related to economic activities legal framework are also important. The first is the Health and Safety at the workplace regulations and the rules about the personal labour injury insurance. As to the first, Carvalho (2002) has surveyed the Portuguese, European and International regulations and recommendations in the field and concluded that the existing framework is, if complied with, sufficient to accommodate the needs of the e-Work. Teixeira and Silva (2002) reached the same conclusion testing the framework and contractual offer as to the second aspect.

### 4. E-WORK LEGAL AND CONTRACTUAL IMPLICATIONS

Some legal orders, such as the Portuguese one, are very restrictive and clearly assume that Labour law exist to defend the employee, considered the week part in a labour relation. This means that often, employees are not allowed to accept contractual terms, even if they want to, if those terms fall in the category of those prohibited or not accepted by law. Mirador (2002) has analysed the adequacy of the existing Portuguese legal labour contract regime and concluded that some of its aspects are not adequate to the e-work. Talhadas (2002) tried to overcome these limitations by the analysis of the possible solution through collective contraction and concluded that this could help solving some of the outstanding issues. The major obstacle to this possibility appears to be the little awareness that trade unions show about the e-work (Azenha 2002).

Silva (2002) has searched for national e-work legal regimes and concluded that little has been done around the world in this matter. Nevertheless, some propositions are now under appreciation in different legal orders and some common aspects could be found. The first is the
need of a clear legal definition of e-work and e-worker, followed by the jurisdictional issues, the volunteer nature of the situation, career progression, workplace, health and safety, social issues, rights protection and collective representation, disciplinary and directive power, schedule and holidays. These aspects are also present in the ILO Convention on homework – ILO Convention n. 177 and in the ILO Recommendation n. 184.

5. E-BUSINESS

The first problem the potential self-employed e-worker must solve is the one of how to set up his business. The answer for this question, what legal nature, how to do it, is no different of the traditional solution (Caramelo-Gomes 2000). Problems arise when looking at the contracting within the activity, as any business relation will be conformed by contract (Nunes 2002). Some contracts are formal contracts and require some sort of formality, either a private one, i. e., the parts signature in a written document, or a public formality, i. e., the intervention of a public official. As to the simplest form of authentication, the signature, the UNCITRAL (United Nations Commission On International Trade Law) has produced a Model Law, adopted in 2001, aiming to bring additional legal certainty regarding the use of electronic signatures. This model law builds on the flexible principle contained in the UNCITRAL model law on Electronic Commerce, that establishes a number of rules and definitions. The underlying concept is that of the equivalence between the EDI (Electronic Data Interchange) and a written document and the equivalence of the electronic signature to the written signature. Legislation based on the UNCITRAL Model Law on Electronic Commerce has been adopted in Australia, Bermuda, Colombia, France, Hong Kong Special Administrative Region of China, Ireland, Philippines, Republic of Korea, Singapore, Slovenia, the States of Jersey (Crown Dependency of the United Kingdom of Great Britain and Northern Ireland) and, within the United States of America, Illinois. This Model law also influenced legislation in Canada (Uniform Electronic Commerce Act, adopted in 1999 by the Uniform Law Conference of Canada) and in the United States (Uniform Electronic Transactions Act, adopted in 1999 by the National Conference of Commissioners on Uniform State Law) (Sousa 2002). The EU adopted the Directive 2000/31/CE, aiming to harmonize national legislation about some aspects of the e-commerce. Though many aspects remain excluded, namely the applicable law to electronically completed contracts, there are guidelines as to the validity and effectiveness of the electronically completed contracts. This directive is completed with the regulation included in the Directive about the electronic signature. These aspects of the EU legislation are not very dissimilar of the framework determined by the Model Laws of UNCITRAL (Lopes 2002).

Nonetheless, some contracts may explicitly be excluded from the scope of the directive: contracts that create or transfer rights in real estate, contracts requiring by law the involvement of courts, public authorities or professions exercising public authority and contracts of suretyship granted and on collateral securities furnished by persons acting for purposes outside their trade, business or profession (Lopes 2002).

As to the applicable law and jurisdiction much is yet to be done. This aspect is a major concern for the Hague Conference on International Private Law, as it was present in the drafting of the model law on Electronic Commerce and in the works of the European Commission (Farto and Cabaço 2002).

6. FINDINGS

Due to its novelty and to the enormous theoretical discussion, it is not easy to research the legal implications of the e-Work and e-Business. This task is even harder as legislation is far behind reality making it necessary for the legal researcher to focus in two different directions: to accommodate the reality within the existing framework and to find direction for new legislation.
In practice, the fact that legislation is inadequate and incomplete makes it necessary to deal with e-work legal issues in a contractual manner. The eLPS project has produced until now over thirty working papers, covering many of the conceivable issues regarding the legal and contractual implications of the e-activities. Based in this research we foresee that a conceptual model for legal orders assessment will be delivered. This model will possibly be somewhere near the following diagram:

7. FUTURE WORK: THE E-LEGALCHINA PROJECT

The E-legalChina project is at an intention stage. Intended partners are the Andersen Legal Group, the Universidade Moderna and the BSIA – Beijing Software Industry Association. This project aims produce a bilingual legal and contractual guide for e-work and e-business in China, as well as a set of recommendations for national or international legislative measures. This project will essentially use legal research to find the existing Chinese legal framework. The relevant acts shall be translated into English and analysed in a legal comparative study, using the eLPS project legal paradigm and conceptual model. Additionally, the Chinese law will be included in a WEB bilingual portal.

The need for a project such as this is undeniable. According to the ILO (2002) “up to 5 per cent of all service-sector jobs in industrialized countries could be "contestable" by developing countries. This would amount to about 12 million jobs in which relocation to developing countries could occur.” China is one of the countries the ILO considers to be in a prime position to receive a significant part of this relocation: “For macroeconomic gains to occur requires a range of commercial, trade, investment, telecommunications and other infrastructure policies to
be brought to bear on the development potential of ICT. China's strategy is particularly promising in this regard. It has combined previously separate ministries into the Ministry of Information Industries, and established economic zones particularly devoted to the growth of start-up ICT ventures”.

8. CONCLUSIONS

The research and its outcome has shown that much has to be done about the legal implications of the e-Work. The first step further is probably to act together with the law-making power, trade unions and employers associations so a better legal framework can be achieved. A field where further research is required is the possible EU legislation harmonization, as well as the possible ILO recommendation production.

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